

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	1	1	57	138	138	25
Mindanao	2024	1	1	2	53	138	138	25
Mindanao	2024	1	1	3	50	138	138	25
Mindanao	2024	1	1	4	48	138	138	25
Mindanao	2024	1	1	5	49	138	138	25
Mindanao	2024	1	1	6	49	138	138	25
Mindanao	2024	1	1	7	48	138	138	25
Mindanao	2024	1	1	8	47	138	138	25
Mindanao	2024	1	1	9	47	138	138	25
Mindanao	2024	1	1	10	48	138	138	25
Mindanao	2024	1	1	11	49	138	138	25
Mindanao	2024	1	1	12	50	138	138	25
Mindanao	2024	1	1	13	52	138	138	25
Mindanao	2024	1	1	14	54	138	138	25
Mindanao	2024	1	1	15	54	138	138	25
Mindanao	2024	1	1	16	55	138	138	25
Mindanao	2024	1	1	17	56	138	138	25
Mindanao	2024	1	1	18	68	138	138	25
Mindanao	2024	1	1	19	67	138	138	25
Mindanao	2024	1	1	20	65	138	138	25
Mindanao	2024	1	1	21	62	138	138	25
Mindanao	2024	1	1	22	59	138	138	25
Mindanao	2024	1	1	23	55	138	138	25
Mindanao	2024	1	1	24	52	138	138	25
Mindanao	2024	1	2	1	59	138	138	25
Mindanao	2024	1	2	2	57	138	138	25
Mindanao	2024	1	2	3	56	138	138	25
Mindanao	2024	1	2	4	54	138	138	25
Mindanao	2024	1	2	5	57	138	138	25
Mindanao	2024	1	2	6	60	138	138	25
Mindanao	2024	1	2	7	58	138	138	25
Mindanao	2024	1	2	8	61	138	138	25
Mindanao	2024	1	2	9	71	138	138	25
Mindanao	2024	1	2	10	74	138	138	25
Mindanao	2024	1	2	11	85	138	138	25
Mindanao	2024	1	2	12	81	138	138	25
Mindanao	2024	1	2	13	83	138	138	25
Mindanao	2024	1	2	14	88	138	138	25
Mindanao	2024	1	2	15	89	138	138	25
Mindanao	2024	1	2	16	86	138	138	25
Mindanao	2024	1	2	17	80	138	138	25
Mindanao	2024	1	2	18	86	138	138	25
Mindanao	2024	1	2	19	84	138	138	25
Mindanao	2024	1	2	20	80	138	138	25
Mindanao	2024	1	2	21	78	138	138	25
Mindanao	2024	1	2	22	72	138	138	25
Mindanao	2024	1	2	23	66	138	138	25
Mindanao	2024	1	2	24	62	138	138	25
Mindanao	2024	1	3	1	58	138	138	25
Mindanao	2024	1	3	2	56	138	138	25
Mindanao	2024	1	3	3	54	138	138	25
Mindanao	2024	1	3	4	53	138	138	25
Mindanao	2024	1	3	5	55	138	138	25
Mindanao	2024	1	3	6	61	138	138	25
Mindanao	2024	1	3	7	58	138	138	25
Mindanao	2024	1	3	8	65	138	138	25
Mindanao	2024	1	3	9	74	138	138	25
Mindanao	2024	1	3	10	80	138	138	25
Mindanao	2024	1	3	11	84	138	138	25
Mindanao	2024	1	3	12	84	138	138	25
Mindanao	2024	1	3	13	86	138	138	25
Mindanao	2024	1	3	14	90	138	138	25
Mindanao	2024	1	3	15	87	138	138	25
Mindanao	2024	1	3	16	85	138	138	25
Mindanao	2024	1	3	17	79	138	138	25
Mindanao	2024	1	3	18	85	138	138	25
Mindanao	2024	1	3	19	83	138	138	25
Mindanao	2024	1	3	20	80	138	138	25
Mindanao	2024	1	3	21	76	138	138	25
Mindanao	2024	1	3	22	70	138	138	25
Mindanao	2024	1	3	23	66	138	138	25
Mindanao	2024	1	3	24	61	138	138	25
Mindanao	2024	1	4	1	59	138	138	25
Mindanao	2024	1	4	2	56	138	138	25
Mindanao	2024	1	4	3	55	138	138	25
Mindanao	2024	1	4	4	53	138	138	25
Mindanao	2024	1	4	5	55	138	138	25
Mindanao	2024	1	4	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	4	7	59	138	138	25
Mindanao	2024	1	4	8	64	138	138	25
Mindanao	2024	1	4	9	75	138	138	25
Mindanao	2024	1	4	10	81	138	138	25
Mindanao	2024	1	4	11	85	138	138	25
Mindanao	2024	1	4	12	83	138	138	25
Mindanao	2024	1	4	13	86	138	138	25
Mindanao	2024	1	4	14	91	138	138	25
Mindanao	2024	1	4	15	90	138	138	25
Mindanao	2024	1	4	16	89	138	138	25
Mindanao	2024	1	4	17	81	138	138	25
Mindanao	2024	1	4	18	87	138	138	25
Mindanao	2024	1	4	19	84	138	138	25
Mindanao	2024	1	4	20	81	138	138	25
Mindanao	2024	1	4	21	78	138	138	25
Mindanao	2024	1	4	22	72	138	138	25
Mindanao	2024	1	4	23	69	138	138	25
Mindanao	2024	1	4	24	64	138	138	25
Mindanao	2024	1	5	1	61	138	138	25
Mindanao	2024	1	5	2	57	138	138	25
Mindanao	2024	1	5	3	55	138	138	25
Mindanao	2024	1	5	4	54	138	138	25
Mindanao	2024	1	5	5	57	138	138	25
Mindanao	2024	1	5	6	60	138	138	25
Mindanao	2024	1	5	7	59	138	138	25
Mindanao	2024	1	5	8	65	138	138	25
Mindanao	2024	1	5	9	73	138	138	25
Mindanao	2024	1	5	10	80	138	138	25
Mindanao	2024	1	5	11	86	138	138	25
Mindanao	2024	1	5	12	82	138	138	25
Mindanao	2024	1	5	13	86	138	138	25
Mindanao	2024	1	5	14	93	138	138	25
Mindanao	2024	1	5	15	90	138	138	25
Mindanao	2024	1	5	16	84	138	138	25
Mindanao	2024	1	5	17	81	138	138	25
Mindanao	2024	1	5	18	85	138	138	25
Mindanao	2024	1	5	19	84	138	138	25
Mindanao	2024	1	5	20	82	138	138	25
Mindanao	2024	1	5	21	80	138	138	25
Mindanao	2024	1	5	22	73	138	138	25
Mindanao	2024	1	5	23	69	138	138	25
Mindanao	2024	1	5	24	63	138	138	25
Mindanao	2024	1	6	1	60	138	138	25
Mindanao	2024	1	6	2	57	138	138	25
Mindanao	2024	1	6	3	55	138	138	25
Mindanao	2024	1	6	4	54	138	138	25
Mindanao	2024	1	6	5	56	138	138	25
Mindanao	2024	1	6	6	59	138	138	25
Mindanao	2024	1	6	7	57	138	138	25
Mindanao	2024	1	6	8	59	138	138	25
Mindanao	2024	1	6	9	67	138	138	25
Mindanao	2024	1	6	10	73	138	138	25
Mindanao	2024	1	6	11	76	138	138	25
Mindanao	2024	1	6	12	77	138	138	25
Mindanao	2024	1	6	13	78	138	138	25
Mindanao	2024	1	6	14	83	138	138	25
Mindanao	2024	1	6	15	81	138	138	25
Mindanao	2024	1	6	16	80	138	138	25
Mindanao	2024	1	6	17	76	138	138	25
Mindanao	2024	1	6	18	84	138	138	25
Mindanao	2024	1	6	19	83	138	138	25
Mindanao	2024	1	6	20	81	138	138	25
Mindanao	2024	1	6	21	78	138	138	25
Mindanao	2024	1	6	22	72	138	138	25
Mindanao	2024	1	6	23	68	138	138	25
Mindanao	2024	1	6	24	62	138	138	25
Mindanao	2024	1	7	1	59	138	138	25
Mindanao	2024	1	7	2	56	138	138	25
Mindanao	2024	1	7	3	54	138	138	25
Mindanao	2024	1	7	4	52	138	138	25
Mindanao	2024	1	7	5	54	138	138	25
Mindanao	2024	1	7	6	54	138	138	25
Mindanao	2024	1	7	7	54	138	138	25
Mindanao	2024	1	7	8	53	138	138	25
Mindanao	2024	1	7	9	58	138	138	25
Mindanao	2024	1	7	10	64	138	138	25
Mindanao	2024	1	7	11	68	138	138	25
Mindanao	2024	1	7	12	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	7	13	70	138	138	25
Mindanao	2024	1	7	14	72	138	138	25
Mindanao	2024	1	7	15	72	138	138	25
Mindanao	2024	1	7	16	71	138	138	25
Mindanao	2024	1	7	17	70	138	138	25
Mindanao	2024	1	7	18	80	138	138	25
Mindanao	2024	1	7	19	80	138	138	25
Mindanao	2024	1	7	20	78	138	138	25
Mindanao	2024	1	7	21	76	138	138	25
Mindanao	2024	1	7	22	72	138	138	25
Mindanao	2024	1	7	23	66	138	138	25
Mindanao	2024	1	7	24	63	138	138	25
Mindanao	2024	1	8	1	59	138	138	25
Mindanao	2024	1	8	2	56	138	138	25
Mindanao	2024	1	8	3	54	138	138	25
Mindanao	2024	1	8	4	54	138	138	25
Mindanao	2024	1	8	5	56	138	138	25
Mindanao	2024	1	8	6	60	138	138	25
Mindanao	2024	1	8	7	59	138	138	25
Mindanao	2024	1	8	8	65	138	138	25
Mindanao	2024	1	8	9	75	138	138	25
Mindanao	2024	1	8	10	83	138	138	25
Mindanao	2024	1	8	11	87	138	138	25
Mindanao	2024	1	8	12	87	138	138	25
Mindanao	2024	1	8	13	90	138	138	25
Mindanao	2024	1	8	14	94	138	138	25
Mindanao	2024	1	8	15	94	138	138	25
Mindanao	2024	1	8	16	92	138	138	25
Mindanao	2024	1	8	17	84	138	138	25
Mindanao	2024	1	8	18	89	138	138	25
Mindanao	2024	1	8	19	88	138	138	25
Mindanao	2024	1	8	20	84	138	138	25
Mindanao	2024	1	8	21	82	138	138	25
Mindanao	2024	1	8	22	76	138	138	25
Mindanao	2024	1	8	23	70	138	138	25
Mindanao	2024	1	8	24	66	138	138	25
Mindanao	2024	1	9	1	62	138	138	25
Mindanao	2024	1	9	2	60	138	138	25
Mindanao	2024	1	9	3	57	138	138	25
Mindanao	2024	1	9	4	56	138	138	25
Mindanao	2024	1	9	5	58	138	138	25
Mindanao	2024	1	9	6	62	138	138	25
Mindanao	2024	1	9	7	62	138	138	25
Mindanao	2024	1	9	8	67	138	138	25
Mindanao	2024	1	9	9	78	138	138	25
Mindanao	2024	1	9	10	89	138	138	25
Mindanao	2024	1	9	11	92	138	138	25
Mindanao	2024	1	9	12	92	138	138	25
Mindanao	2024	1	9	13	93	138	138	25
Mindanao	2024	1	9	14	99	138	138	25
Mindanao	2024	1	9	15	95	138	138	25
Mindanao	2024	1	9	16	94	138	138	25
Mindanao	2024	1	9	17	87	138	138	25
Mindanao	2024	1	9	18	91	138	138	25
Mindanao	2024	1	9	19	88	138	138	25
Mindanao	2024	1	9	20	86	138	138	25
Mindanao	2024	1	9	21	83	138	138	25
Mindanao	2024	1	9	22	78	138	138	25
Mindanao	2024	1	9	23	73	138	138	25
Mindanao	2024	1	9	24	69	138	138	25
Mindanao	2024	1	10	1	65	138	138	25
Mindanao	2024	1	10	2	62	138	138	25
Mindanao	2024	1	10	3	60	138	138	25
Mindanao	2024	1	10	4	58	138	138	25
Mindanao	2024	1	10	5	61	138	138	25
Mindanao	2024	1	10	6	65	138	138	25
Mindanao	2024	1	10	7	64	138	138	25
Mindanao	2024	1	10	8	68	138	138	25
Mindanao	2024	1	10	9	77	138	138	25
Mindanao	2024	1	10	10	84	138	138	25
Mindanao	2024	1	10	11	88	138	138	25
Mindanao	2024	1	10	12	88	138	138	25
Mindanao	2024	1	10	13	93	138	138	25
Mindanao	2024	1	10	14	95	138	138	25
Mindanao	2024	1	10	15	96	138	138	25
Mindanao	2024	1	10	16	94	138	138	25
Mindanao	2024	1	10	17	86	138	138	25
Mindanao	2024	1	10	18	90	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	10	19	88	138	138	25
Mindanao	2024	1	10	20	85	138	138	25
Mindanao	2024	1	10	21	81	138	138	25
Mindanao	2024	1	10	22	76	138	138	25
Mindanao	2024	1	10	23	71	138	138	25
Mindanao	2024	1	10	24	66	138	138	25
Mindanao	2024	1	11	1	63	138	138	25
Mindanao	2024	1	11	2	60	138	138	25
Mindanao	2024	1	11	3	57	138	138	25
Mindanao	2024	1	11	4	56	138	138	25
Mindanao	2024	1	11	5	59	138	138	25
Mindanao	2024	1	11	6	63	138	138	25
Mindanao	2024	1	11	7	64	138	138	25
Mindanao	2024	1	11	8	67	138	138	25
Mindanao	2024	1	11	9	76	138	138	25
Mindanao	2024	1	11	10	81	138	138	25
Mindanao	2024	1	11	11	85	138	138	25
Mindanao	2024	1	11	12	83	138	138	25
Mindanao	2024	1	11	13	83	138	138	25
Mindanao	2024	1	11	14	87	138	138	25
Mindanao	2024	1	11	15	87	138	138	25
Mindanao	2024	1	11	16	84	138	138	25
Mindanao	2024	1	11	17	80	138	138	25
Mindanao	2024	1	11	18	84	138	138	25
Mindanao	2024	1	11	19	82	138	138	25
Mindanao	2024	1	11	20	78	138	138	25
Mindanao	2024	1	11	21	74	138	138	25
Mindanao	2024	1	11	22	68	138	138	25
Mindanao	2024	1	11	23	64	138	138	25
Mindanao	2024	1	11	24	60	138	138	25
Mindanao	2024	1	12	1	56	138	138	25
Mindanao	2024	1	12	2	53	138	138	25
Mindanao	2024	1	12	3	51	138	138	25
Mindanao	2024	1	12	4	51	138	138	25
Mindanao	2024	1	12	5	53	138	138	25
Mindanao	2024	1	12	6	56	138	138	25
Mindanao	2024	1	12	7	57	138	138	25
Mindanao	2024	1	12	8	62	138	138	25
Mindanao	2024	1	12	9	70	138	138	25
Mindanao	2024	1	12	10	75	138	138	25
Mindanao	2024	1	12	11	78	138	138	25
Mindanao	2024	1	12	12	77	138	138	25
Mindanao	2024	1	12	13	77	138	138	25
Mindanao	2024	1	12	14	79	138	138	25
Mindanao	2024	1	12	15	79	138	138	25
Mindanao	2024	1	12	16	78	138	138	25
Mindanao	2024	1	12	17	75	138	138	25
Mindanao	2024	1	12	18	81	138	138	25
Mindanao	2024	1	12	19	79	138	138	25
Mindanao	2024	1	12	20	75	138	138	25
Mindanao	2024	1	12	21	71	138	138	25
Mindanao	2024	1	12	22	64	138	138	25
Mindanao	2024	1	12	23	60	138	138	25
Mindanao	2024	1	12	24	56	138	138	25
Mindanao	2024	1	13	1	54	138	138	25
Mindanao	2024	1	13	2	53	138	138	25
Mindanao	2024	1	13	3	51	138	138	25
Mindanao	2024	1	13	4	50	138	138	25
Mindanao	2024	1	13	5	52	138	138	25
Mindanao	2024	1	13	6	56	138	138	25
Mindanao	2024	1	13	7	56	138	138	25
Mindanao	2024	1	13	8	58	138	138	25
Mindanao	2024	1	13	9	64	138	138	25
Mindanao	2024	1	13	10	67	138	138	25
Mindanao	2024	1	13	11	71	138	138	25
Mindanao	2024	1	13	12	69	138	138	25
Mindanao	2024	1	13	13	70	138	138	25
Mindanao	2024	1	13	14	70	138	138	25
Mindanao	2024	1	13	15	72	138	138	25
Mindanao	2024	1	13	16	72	138	138	25
Mindanao	2024	1	13	17	71	138	138	25
Mindanao	2024	1	13	18	78	138	138	25
Mindanao	2024	1	13	19	76	138	138	25
Mindanao	2024	1	13	20	73	138	138	25
Mindanao	2024	1	13	21	69	138	138	25
Mindanao	2024	1	13	22	64	138	138	25
Mindanao	2024	1	13	23	60	138	138	25
Mindanao	2024	1	13	24	57	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	14	1	54	138	138	25
Mindanao	2024	1	14	2	52	138	138	25
Mindanao	2024	1	14	3	50	138	138	25
Mindanao	2024	1	14	4	51	138	138	25
Mindanao	2024	1	14	5	52	138	138	25
Mindanao	2024	1	14	6	54	138	138	25
Mindanao	2024	1	14	7	54	138	138	25
Mindanao	2024	1	14	8	54	138	138	25
Mindanao	2024	1	14	9	56	138	138	25
Mindanao	2024	1	14	10	59	138	138	25
Mindanao	2024	1	14	11	62	138	138	25
Mindanao	2024	1	14	12	59	138	138	25
Mindanao	2024	1	14	13	56	138	138	25
Mindanao	2024	1	14	14	59	138	138	25
Mindanao	2024	1	14	15	59	138	138	25
Mindanao	2024	1	14	16	59	138	138	25
Mindanao	2024	1	14	17	64	138	138	25
Mindanao	2024	1	14	18	70	138	138	25
Mindanao	2024	1	14	19	68	138	138	25
Mindanao	2024	1	14	20	65	138	138	25
Mindanao	2024	1	14	21	61	138	138	25
Mindanao	2024	1	14	22	56	138	138	25
Mindanao	2024	1	14	23	54	138	138	25
Mindanao	2024	1	14	24	51	138	138	25
Mindanao	2024	1	15	1	49	138	138	25
Mindanao	2024	1	15	2	49	138	138	25
Mindanao	2024	1	15	3	48	138	138	25
Mindanao	2024	1	15	4	48	138	138	25
Mindanao	2024	1	15	5	50	138	138	25
Mindanao	2024	1	15	6	56	138	138	25
Mindanao	2024	1	15	7	58	138	138	25
Mindanao	2024	1	15	8	63	138	138	25
Mindanao	2024	1	15	9	70	138	138	25
Mindanao	2024	1	15	10	75	138	138	25
Mindanao	2024	1	15	11	78	138	138	25
Mindanao	2024	1	15	12	76	138	138	25
Mindanao	2024	1	15	13	76	138	138	25
Mindanao	2024	1	15	14	78	138	138	25
Mindanao	2024	1	15	15	78	138	138	25
Mindanao	2024	1	15	16	76	138	138	25
Mindanao	2024	1	15	17	76	138	138	25
Mindanao	2024	1	15	18	81	138	138	25
Mindanao	2024	1	15	19	76	138	138	25
Mindanao	2024	1	15	20	72	138	138	25
Mindanao	2024	1	15	21	69	138	138	25
Mindanao	2024	1	15	22	62	138	138	25
Mindanao	2024	1	15	23	59	138	138	25
Mindanao	2024	1	15	24	55	138	138	25
Mindanao	2024	1	16	1	54	138	138	25
Mindanao	2024	1	16	2	51	138	138	25
Mindanao	2024	1	16	3	51	138	138	25
Mindanao	2024	1	16	4	50	138	138	25
Mindanao	2024	1	16	5	52	138	138	25
Mindanao	2024	1	16	6	58	138	138	25
Mindanao	2024	1	16	7	60	138	138	25
Mindanao	2024	1	16	8	62	138	138	25
Mindanao	2024	1	16	9	69	138	138	25
Mindanao	2024	1	16	10	74	138	138	25
Mindanao	2024	1	16	11	76	138	138	25
Mindanao	2024	1	16	12	76	138	138	25
Mindanao	2024	1	16	13	78	138	138	25
Mindanao	2024	1	16	14	84	138	138	25
Mindanao	2024	1	16	15	83	138	138	25
Mindanao	2024	1	16	16	81	138	138	25
Mindanao	2024	1	16	17	78	138	138	25
Mindanao	2024	1	16	18	82	138	138	25
Mindanao	2024	1	16	19	78	138	138	25
Mindanao	2024	1	16	20	75	138	138	25
Mindanao	2024	1	16	21	72	138	138	25
Mindanao	2024	1	16	22	68	138	138	25
Mindanao	2024	1	16	23	64	138	138	25
Mindanao	2024	1	16	24	58	138	138	25
Mindanao	2024	1	17	1	57	138	138	25
Mindanao	2024	1	17	2	56	138	138	25
Mindanao	2024	1	17	3	54	138	138	25
Mindanao	2024	1	17	4	53	138	138	25
Mindanao	2024	1	17	5	56	138	138	25
Mindanao	2024	1	17	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	17	7	60	138	138	25
Mindanao	2024	1	17	8	63	138	138	25
Mindanao	2024	1	17	9	71	138	138	25
Mindanao	2024	1	17	10	75	138	138	25
Mindanao	2024	1	17	11	80	138	138	25
Mindanao	2024	1	17	12	78	138	138	25
Mindanao	2024	1	17	13	79	138	138	25
Mindanao	2024	1	17	14	84	138	138	25
Mindanao	2024	1	17	15	83	138	138	25
Mindanao	2024	1	17	16	82	138	138	25
Mindanao	2024	1	17	17	76	138	138	25
Mindanao	2024	1	17	18	80	138	138	25
Mindanao	2024	1	17	19	79	138	138	25
Mindanao	2024	1	17	20	76	138	138	25
Mindanao	2024	1	17	21	73	138	138	25
Mindanao	2024	1	17	22	68	138	138	25
Mindanao	2024	1	17	23	64	138	138	25
Mindanao	2024	1	17	24	59	138	138	25
Mindanao	2024	1	18	1	57	138	138	25
Mindanao	2024	1	18	2	56	138	138	25
Mindanao	2024	1	18	3	53	138	138	25
Mindanao	2024	1	18	4	53	138	138	25
Mindanao	2024	1	18	5	54	138	138	25
Mindanao	2024	1	18	6	58	138	138	25
Mindanao	2024	1	18	7	59	138	138	25
Mindanao	2024	1	18	8	63	138	138	25
Mindanao	2024	1	18	9	70	138	138	25
Mindanao	2024	1	18	10	78	138	138	25
Mindanao	2024	1	18	11	83	138	138	25
Mindanao	2024	1	18	12	83	138	138	25
Mindanao	2024	1	18	13	86	138	138	25
Mindanao	2024	1	18	14	90	138	138	25
Mindanao	2024	1	18	15	89	138	138	25
Mindanao	2024	1	18	16	84	138	138	25
Mindanao	2024	1	18	17	80	138	138	25
Mindanao	2024	1	18	18	85	138	138	25
Mindanao	2024	1	18	19	83	138	138	25
Mindanao	2024	1	18	20	78	138	138	25
Mindanao	2024	1	18	21	76	138	138	25
Mindanao	2024	1	18	22	70	138	138	25
Mindanao	2024	1	18	23	63	138	138	25
Mindanao	2024	1	18	24	59	138	138	25
Mindanao	2024	1	19	1	56	138	138	25
Mindanao	2024	1	19	2	53	138	138	25
Mindanao	2024	1	19	3	52	138	138	25
Mindanao	2024	1	19	4	51	138	138	25
Mindanao	2024	1	19	5	54	138	138	25
Mindanao	2024	1	19	6	57	138	138	25
Mindanao	2024	1	19	7	57	138	138	25
Mindanao	2024	1	19	8	60	138	138	25
Mindanao	2024	1	19	9	69	138	138	25
Mindanao	2024	1	19	10	74	138	138	25
Mindanao	2024	1	19	11	78	138	138	25
Mindanao	2024	1	19	12	78	138	138	25
Mindanao	2024	1	19	13	79	138	138	25
Mindanao	2024	1	19	14	84	138	138	25
Mindanao	2024	1	19	15	84	138	138	25
Mindanao	2024	1	19	16	82	138	138	25
Mindanao	2024	1	19	17	75	138	138	25
Mindanao	2024	1	19	18	79	138	138	25
Mindanao	2024	1	19	19	79	138	138	25
Mindanao	2024	1	19	20	75	138	138	25
Mindanao	2024	1	19	21	75	138	138	25
Mindanao	2024	1	19	22	69	138	138	25
Mindanao	2024	1	19	23	65	138	138	25
Mindanao	2024	1	19	24	61	138	138	25
Mindanao	2024	1	20	1	59	138	138	25
Mindanao	2024	1	20	2	56	138	138	25
Mindanao	2024	1	20	3	53	138	138	25
Mindanao	2024	1	20	4	53	138	138	25
Mindanao	2024	1	20	5	56	138	138	25
Mindanao	2024	1	20	6	58	138	138	25
Mindanao	2024	1	20	7	56	138	138	25
Mindanao	2024	1	20	8	58	138	138	25
Mindanao	2024	1	20	9	64	138	138	25
Mindanao	2024	1	20	10	69	138	138	25
Mindanao	2024	1	20	11	71	138	138	25
Mindanao	2024	1	20	12	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	20	13	72	138	138	25
Mindanao	2024	1	20	14	75	138	138	25
Mindanao	2024	1	20	15	74	138	138	25
Mindanao	2024	1	20	16	73	138	138	25
Mindanao	2024	1	20	17	71	138	138	25
Mindanao	2024	1	20	18	76	138	138	25
Mindanao	2024	1	20	19	77	138	138	25
Mindanao	2024	1	20	20	75	138	138	25
Mindanao	2024	1	20	21	73	138	138	25
Mindanao	2024	1	20	22	69	138	138	25
Mindanao	2024	1	20	23	63	138	138	25
Mindanao	2024	1	20	24	60	138	138	25
Mindanao	2024	1	21	1	57	138	138	25
Mindanao	2024	1	21	2	54	138	138	25
Mindanao	2024	1	21	3	52	138	138	25
Mindanao	2024	1	21	4	51	138	138	25
Mindanao	2024	1	21	5	52	138	138	25
Mindanao	2024	1	21	6	54	138	138	25
Mindanao	2024	1	21	7	54	138	138	25
Mindanao	2024	1	21	8	54	138	138	25
Mindanao	2024	1	21	9	55	138	138	25
Mindanao	2024	1	21	10	59	138	138	25
Mindanao	2024	1	21	11	63	138	138	25
Mindanao	2024	1	21	12	64	138	138	25
Mindanao	2024	1	21	13	66	138	138	25
Mindanao	2024	1	21	14	67	138	138	25
Mindanao	2024	1	21	15	67	138	138	25
Mindanao	2024	1	21	16	65	138	138	25
Mindanao	2024	1	21	17	68	138	138	25
Mindanao	2024	1	21	18	74	138	138	25
Mindanao	2024	1	21	19	75	138	138	25
Mindanao	2024	1	21	20	73	138	138	25
Mindanao	2024	1	21	21	71	138	138	25
Mindanao	2024	1	21	22	66	138	138	25
Mindanao	2024	1	21	23	62	138	138	25
Mindanao	2024	1	21	24	59	138	138	25
Mindanao	2024	1	22	1	55	138	138	25
Mindanao	2024	1	22	2	54	138	138	25
Mindanao	2024	1	22	3	53	138	138	25
Mindanao	2024	1	22	4	51	138	138	25
Mindanao	2024	1	22	5	55	138	138	25
Mindanao	2024	1	22	6	57	138	138	25
Mindanao	2024	1	22	7	60	138	138	25
Mindanao	2024	1	22	8	63	138	138	25
Mindanao	2024	1	22	9	73	138	138	25
Mindanao	2024	1	22	10	76	138	138	25
Mindanao	2024	1	22	11	82	138	138	25
Mindanao	2024	1	22	12	81	138	138	25
Mindanao	2024	1	22	13	80	138	138	25
Mindanao	2024	1	22	14	85	138	138	25
Mindanao	2024	1	22	15	83	138	138	25
Mindanao	2024	1	22	16	83	138	138	25
Mindanao	2024	1	22	17	78	138	138	25
Mindanao	2024	1	22	18	84	138	138	25
Mindanao	2024	1	22	19	83	138	138	25
Mindanao	2024	1	22	20	76	138	138	25
Mindanao	2024	1	22	21	72	138	138	25
Mindanao	2024	1	22	22	67	138	138	25
Mindanao	2024	1	22	23	63	138	138	25
Mindanao	2024	1	22	24	59	138	138	25
Mindanao	2024	1	23	1	55	138	138	25
Mindanao	2024	1	23	2	53	138	138	25
Mindanao	2024	1	23	3	52	138	138	25
Mindanao	2024	1	23	4	51	138	138	25
Mindanao	2024	1	23	5	53	138	138	25
Mindanao	2024	1	23	6	56	138	138	25
Mindanao	2024	1	23	7	59	138	138	25
Mindanao	2024	1	23	8	62	138	138	25
Mindanao	2024	1	23	9	71	138	138	25
Mindanao	2024	1	23	10	74	138	138	25
Mindanao	2024	1	23	11	79	138	138	25
Mindanao	2024	1	23	12	76	138	138	25
Mindanao	2024	1	23	13	80	138	138	25
Mindanao	2024	1	23	14	84	138	138	25
Mindanao	2024	1	23	15	80	138	138	25
Mindanao	2024	1	23	16	79	138	138	25
Mindanao	2024	1	23	17	74	138	138	25
Mindanao	2024	1	23	18	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	23	19	77	138	138	25
Mindanao	2024	1	23	20	75	138	138	25
Mindanao	2024	1	23	21	71	138	138	25
Mindanao	2024	1	23	22	66	138	138	25
Mindanao	2024	1	23	23	63	138	138	25
Mindanao	2024	1	23	24	58	138	138	25
Mindanao	2024	1	24	1	55	138	138	25
Mindanao	2024	1	24	2	54	138	138	25
Mindanao	2024	1	24	3	52	138	138	25
Mindanao	2024	1	24	4	52	138	138	25
Mindanao	2024	1	24	5	54	138	138	25
Mindanao	2024	1	24	6	57	138	138	25
Mindanao	2024	1	24	7	60	138	138	25
Mindanao	2024	1	24	8	63	138	138	25
Mindanao	2024	1	24	9	73	138	138	25
Mindanao	2024	1	24	10	78	138	138	25
Mindanao	2024	1	24	11	80	138	138	25
Mindanao	2024	1	24	12	84	138	138	25
Mindanao	2024	1	24	13	85	138	138	25
Mindanao	2024	1	24	14	89	138	138	25
Mindanao	2024	1	24	15	89	138	138	25
Mindanao	2024	1	24	16	86	138	138	25
Mindanao	2024	1	24	17	80	138	138	25
Mindanao	2024	1	24	18	84	138	138	25
Mindanao	2024	1	24	19	84	138	138	25
Mindanao	2024	1	24	20	83	138	138	25
Mindanao	2024	1	24	21	78	138	138	25
Mindanao	2024	1	24	22	73	138	138	25
Mindanao	2024	1	24	23	68	138	138	25
Mindanao	2024	1	24	24	64	138	138	25
Mindanao	2024	1	25	1	62	138	138	25
Mindanao	2024	1	25	2	58	138	138	25
Mindanao	2024	1	25	3	57	138	138	25
Mindanao	2024	1	25	4	55	138	138	25
Mindanao	2024	1	25	5	58	138	138	25
Mindanao	2024	1	25	6	62	138	138	25
Mindanao	2024	1	25	7	62	138	138	25
Mindanao	2024	1	25	8	66	138	138	25
Mindanao	2024	1	25	9	76	138	138	25
Mindanao	2024	1	25	10	83	138	138	25
Mindanao	2024	1	25	11	88	138	138	25
Mindanao	2024	1	25	12	86	138	138	25
Mindanao	2024	1	25	13	85	138	138	25
Mindanao	2024	1	25	14	86	138	138	25
Mindanao	2024	1	25	15	85	138	138	25
Mindanao	2024	1	25	16	80	138	138	25
Mindanao	2024	1	25	17	78	138	138	25
Mindanao	2024	1	25	18	81	138	138	25
Mindanao	2024	1	25	19	80	138	138	25
Mindanao	2024	1	25	20	77	138	138	25
Mindanao	2024	1	25	21	73	138	138	25
Mindanao	2024	1	25	22	67	138	138	25
Mindanao	2024	1	25	23	63	138	138	25
Mindanao	2024	1	25	24	59	138	138	25
Mindanao	2024	1	26	1	56	138	138	25
Mindanao	2024	1	26	2	54	138	138	25
Mindanao	2024	1	26	3	53	138	138	25
Mindanao	2024	1	26	4	53	138	138	25
Mindanao	2024	1	26	5	55	138	138	25
Mindanao	2024	1	26	6	60	138	138	25
Mindanao	2024	1	26	7	59	138	138	25
Mindanao	2024	1	26	8	63	138	138	25
Mindanao	2024	1	26	9	73	138	138	25
Mindanao	2024	1	26	10	80	138	138	25
Mindanao	2024	1	26	11	84	138	138	25
Mindanao	2024	1	26	12	82	138	138	25
Mindanao	2024	1	26	13	84	138	138	25
Mindanao	2024	1	26	14	91	138	138	25
Mindanao	2024	1	26	15	89	138	138	25
Mindanao	2024	1	26	16	88	138	138	25
Mindanao	2024	1	26	17	80	138	138	25
Mindanao	2024	1	26	18	82	138	138	25
Mindanao	2024	1	26	19	81	138	138	25
Mindanao	2024	1	26	20	78	138	138	25
Mindanao	2024	1	26	21	76	138	138	25
Mindanao	2024	1	26	22	70	138	138	25
Mindanao	2024	1	26	23	66	138	138	25
Mindanao	2024	1	26	24	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	27	1	58	138	138	25
Mindanao	2024	1	27	2	58	138	138	25
Mindanao	2024	1	27	3	56	138	138	25
Mindanao	2024	1	27	4	55	138	138	25
Mindanao	2024	1	27	5	57	138	138	25
Mindanao	2024	1	27	6	59	138	138	25
Mindanao	2024	1	27	7	59	138	138	25
Mindanao	2024	1	27	8	61	138	138	25
Mindanao	2024	1	27	9	64	138	138	25
Mindanao	2024	1	27	10	70	138	138	25
Mindanao	2024	1	27	11	74	138	138	25
Mindanao	2024	1	27	12	74	138	138	25
Mindanao	2024	1	27	13	77	138	138	25
Mindanao	2024	1	27	14	81	138	138	25
Mindanao	2024	1	27	15	81	138	138	25
Mindanao	2024	1	27	16	76	138	138	25
Mindanao	2024	1	27	17	72	138	138	25
Mindanao	2024	1	27	18	78	138	138	25
Mindanao	2024	1	27	19	82	138	138	25
Mindanao	2024	1	27	20	79	138	138	25
Mindanao	2024	1	27	21	78	138	138	25
Mindanao	2024	1	27	22	72	138	138	25
Mindanao	2024	1	27	23	68	138	138	25
Mindanao	2024	1	27	24	64	138	138	25
Mindanao	2024	1	28	1	60	138	138	25
Mindanao	2024	1	28	2	57	138	138	25
Mindanao	2024	1	28	3	55	138	138	25
Mindanao	2024	1	28	4	55	138	138	25
Mindanao	2024	1	28	5	54	138	138	25
Mindanao	2024	1	28	6	54	138	138	25
Mindanao	2024	1	28	7	54	138	138	25
Mindanao	2024	1	28	8	55	138	138	25
Mindanao	2024	1	28	9	58	138	138	25
Mindanao	2024	1	28	10	61	138	138	25
Mindanao	2024	1	28	11	64	138	138	25
Mindanao	2024	1	28	12	67	138	138	25
Mindanao	2024	1	28	13	69	138	138	25
Mindanao	2024	1	28	14	71	138	138	25
Mindanao	2024	1	28	15	71	138	138	25
Mindanao	2024	1	28	16	69	138	138	25
Mindanao	2024	1	28	17	68	138	138	25
Mindanao	2024	1	28	18	76	138	138	25
Mindanao	2024	1	28	19	79	138	138	25
Mindanao	2024	1	28	20	76	138	138	25
Mindanao	2024	1	28	21	76	138	138	25
Mindanao	2024	1	28	22	72	138	138	25
Mindanao	2024	1	28	23	68	138	138	25
Mindanao	2024	1	28	24	63	138	138	25
Mindanao	2024	1	29	1	59	138	138	25
Mindanao	2024	1	29	2	56	138	138	25
Mindanao	2024	1	29	3	55	138	138	25
Mindanao	2024	1	29	4	54	138	138	25
Mindanao	2024	1	29	5	55	138	138	25
Mindanao	2024	1	29	6	57	138	138	25
Mindanao	2024	1	29	7	58	138	138	25
Mindanao	2024	1	29	8	63	138	138	25
Mindanao	2024	1	29	9	75	138	138	25
Mindanao	2024	1	29	10	83	138	138	25
Mindanao	2024	1	29	11	88	138	138	25
Mindanao	2024	1	29	12	88	138	138	25
Mindanao	2024	1	29	13	88	138	138	25
Mindanao	2024	1	29	14	93	138	138	25
Mindanao	2024	1	29	15	93	138	138	25
Mindanao	2024	1	29	16	90	138	138	25
Mindanao	2024	1	29	17	81	138	138	25
Mindanao	2024	1	29	18	83	138	138	25
Mindanao	2024	1	29	19	83	138	138	25
Mindanao	2024	1	29	20	80	138	138	25
Mindanao	2024	1	29	21	76	138	138	25
Mindanao	2024	1	29	22	72	138	138	25
Mindanao	2024	1	29	23	68	138	138	25
Mindanao	2024	1	29	24	63	138	138	25
Mindanao	2024	1	30	1	59	138	138	25
Mindanao	2024	1	30	2	57	138	138	25
Mindanao	2024	1	30	3	55	138	138	25
Mindanao	2024	1	30	4	53	138	138	25
Mindanao	2024	1	30	5	56	138	138	25
Mindanao	2024	1	30	6	57	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	1	30	7	57	138	138	25
Mindanao	2024	1	30	8	59	138	138	25
Mindanao	2024	1	30	9	67	138	138	25
Mindanao	2024	1	30	10	71	138	138	25
Mindanao	2024	1	30	11	76	138	138	25
Mindanao	2024	1	30	12	75	138	138	25
Mindanao	2024	1	30	13	75	138	138	25
Mindanao	2024	1	30	14	78	138	138	25
Mindanao	2024	1	30	15	76	138	138	25
Mindanao	2024	1	30	16	74	138	138	25
Mindanao	2024	1	30	17	72	138	138	25
Mindanao	2024	1	30	18	77	138	138	25
Mindanao	2024	1	30	19	78	138	138	25
Mindanao	2024	1	30	20	74	138	138	25
Mindanao	2024	1	30	21	72	138	138	25
Mindanao	2024	1	30	22	67	138	138	25
Mindanao	2024	1	30	23	63	138	138	25
Mindanao	2024	1	30	24	58	138	138	25
Mindanao	2024	1	31	1	55	138	138	25
Mindanao	2024	1	31	2	53	138	138	25
Mindanao	2024	1	31	3	51	138	138	25
Mindanao	2024	1	31	4	51	138	138	25
Mindanao	2024	1	31	5	53	138	138	25
Mindanao	2024	1	31	6	57	138	138	25
Mindanao	2024	1	31	7	58	138	138	25
Mindanao	2024	1	31	8	65	138	138	25
Mindanao	2024	1	31	9	74	138	138	25
Mindanao	2024	1	31	10	80	138	138	25
Mindanao	2024	1	31	11	83	138	138	25
Mindanao	2024	1	31	12	80	138	138	25
Mindanao	2024	1	31	13	83	138	138	25
Mindanao	2024	1	31	14	85	138	138	25
Mindanao	2024	1	31	15	86	138	138	25
Mindanao	2024	1	31	16	84	138	138	25
Mindanao	2024	1	31	17	80	138	138	25
Mindanao	2024	1	31	18	83	138	138	25
Mindanao	2024	1	31	19	82	138	138	25
Mindanao	2024	1	31	20	80	138	138	25
Mindanao	2024	1	31	21	75	138	138	25
Mindanao	2024	1	31	22	71	138	138	25
Mindanao	2024	1	31	23	67	138	138	25
Mindanao	2024	1	31	24	63	138	138	25
Mindanao	2024	2	1	1	58	138	138	25
Mindanao	2024	2	1	2	56	138	138	25
Mindanao	2024	2	1	3	55	138	138	25
Mindanao	2024	2	1	4	54	138	138	25
Mindanao	2024	2	1	5	57	138	138	25
Mindanao	2024	2	1	6	60	138	138	25
Mindanao	2024	2	1	7	62	138	138	25
Mindanao	2024	2	1	8	66	138	138	25
Mindanao	2024	2	1	9	74	138	138	25
Mindanao	2024	2	1	10	79	138	138	25
Mindanao	2024	2	1	11	83	138	138	25
Mindanao	2024	2	1	12	80	138	138	25
Mindanao	2024	2	1	13	82	138	138	25
Mindanao	2024	2	1	14	86	138	138	25
Mindanao	2024	2	1	15	84	138	138	25
Mindanao	2024	2	1	16	85	138	138	25
Mindanao	2024	2	1	17	79	138	138	25
Mindanao	2024	2	1	18	81	138	138	25
Mindanao	2024	2	1	19	80	138	138	25
Mindanao	2024	2	1	20	77	138	138	25
Mindanao	2024	2	1	21	74	138	138	25
Mindanao	2024	2	1	22	69	138	138	25
Mindanao	2024	2	1	23	64	138	138	25
Mindanao	2024	2	1	24	60	138	138	25
Mindanao	2024	2	2	1	57	138	138	25
Mindanao	2024	2	2	2	55	138	138	25
Mindanao	2024	2	2	3	53	138	138	25
Mindanao	2024	2	2	4	53	138	138	25
Mindanao	2024	2	2	5	54	138	138	25
Mindanao	2024	2	2	6	59	138	138	25
Mindanao	2024	2	2	7	61	138	138	25
Mindanao	2024	2	2	8	64	138	138	25
Mindanao	2024	2	2	9	70	138	138	25
Mindanao	2024	2	2	10	75	138	138	25
Mindanao	2024	2	2	11	78	138	138	25
Mindanao	2024	2	2	12	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	2	13	75	138	138	25
Mindanao	2024	2	2	14	78	138	138	25
Mindanao	2024	2	2	15	78	138	138	25
Mindanao	2024	2	2	16	76	138	138	25
Mindanao	2024	2	2	17	76	138	138	25
Mindanao	2024	2	2	18	79	138	138	25
Mindanao	2024	2	2	19	78	138	138	25
Mindanao	2024	2	2	20	74	138	138	25
Mindanao	2024	2	2	21	70	138	138	25
Mindanao	2024	2	2	22	66	138	138	25
Mindanao	2024	2	2	23	62	138	138	25
Mindanao	2024	2	2	24	56	138	138	25
Mindanao	2024	2	3	1	53	138	138	25
Mindanao	2024	2	3	2	52	138	138	25
Mindanao	2024	2	3	3	52	138	138	25
Mindanao	2024	2	3	4	51	138	138	25
Mindanao	2024	2	3	5	53	138	138	25
Mindanao	2024	2	3	6	54	138	138	25
Mindanao	2024	2	3	7	55	138	138	25
Mindanao	2024	2	3	8	59	138	138	25
Mindanao	2024	2	3	9	64	138	138	25
Mindanao	2024	2	3	10	68	138	138	25
Mindanao	2024	2	3	11	71	138	138	25
Mindanao	2024	2	3	12	70	138	138	25
Mindanao	2024	2	3	13	72	138	138	25
Mindanao	2024	2	3	14	77	138	138	25
Mindanao	2024	2	3	15	76	138	138	25
Mindanao	2024	2	3	16	75	138	138	25
Mindanao	2024	2	3	17	73	138	138	25
Mindanao	2024	2	3	18	80	138	138	25
Mindanao	2024	2	3	19	82	138	138	25
Mindanao	2024	2	3	20	77	138	138	25
Mindanao	2024	2	3	21	75	138	138	25
Mindanao	2024	2	3	22	70	138	138	25
Mindanao	2024	2	3	23	66	138	138	25
Mindanao	2024	2	3	24	62	138	138	25
Mindanao	2024	2	4	1	59	138	138	25
Mindanao	2024	2	4	2	55	138	138	25
Mindanao	2024	2	4	3	53	138	138	25
Mindanao	2024	2	4	4	53	138	138	25
Mindanao	2024	2	4	5	54	138	138	25
Mindanao	2024	2	4	6	56	138	138	25
Mindanao	2024	2	4	7	55	138	138	25
Mindanao	2024	2	4	8	54	138	138	25
Mindanao	2024	2	4	9	55	138	138	25
Mindanao	2024	2	4	10	62	138	138	25
Mindanao	2024	2	4	11	64	138	138	25
Mindanao	2024	2	4	12	64	138	138	25
Mindanao	2024	2	4	13	66	138	138	25
Mindanao	2024	2	4	14	68	138	138	25
Mindanao	2024	2	4	15	65	138	138	25
Mindanao	2024	2	4	16	67	138	138	25
Mindanao	2024	2	4	17	67	138	138	25
Mindanao	2024	2	4	18	75	138	138	25
Mindanao	2024	2	4	19	77	138	138	25
Mindanao	2024	2	4	20	75	138	138	25
Mindanao	2024	2	4	21	74	138	138	25
Mindanao	2024	2	4	22	69	138	138	25
Mindanao	2024	2	4	23	65	138	138	25
Mindanao	2024	2	4	24	58	138	138	25
Mindanao	2024	2	5	1	56	138	138	25
Mindanao	2024	2	5	2	53	138	138	25
Mindanao	2024	2	5	3	51	138	138	25
Mindanao	2024	2	5	4	51	138	138	25
Mindanao	2024	2	5	5	53	138	138	25
Mindanao	2024	2	5	6	58	138	138	25
Mindanao	2024	2	5	7	57	138	138	25
Mindanao	2024	2	5	8	64	138	138	25
Mindanao	2024	2	5	9	74	138	138	25
Mindanao	2024	2	5	10	80	138	138	25
Mindanao	2024	2	5	11	85	138	138	25
Mindanao	2024	2	5	12	85	138	138	25
Mindanao	2024	2	5	13	86	138	138	25
Mindanao	2024	2	5	14	90	138	138	25
Mindanao	2024	2	5	15	89	138	138	25
Mindanao	2024	2	5	16	85	138	138	25
Mindanao	2024	2	5	17	82	138	138	25
Mindanao	2024	2	5	18	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	5	19	85	138	138	25
Mindanao	2024	2	5	20	82	138	138	25
Mindanao	2024	2	5	21	79	138	138	25
Mindanao	2024	2	5	22	74	138	138	25
Mindanao	2024	2	5	23	70	138	138	25
Mindanao	2024	2	5	24	65	138	138	25
Mindanao	2024	2	6	1	61	138	138	25
Mindanao	2024	2	6	2	59	138	138	25
Mindanao	2024	2	6	3	57	138	138	25
Mindanao	2024	2	6	4	56	138	138	25
Mindanao	2024	2	6	5	56	138	138	25
Mindanao	2024	2	6	6	61	138	138	25
Mindanao	2024	2	6	7	61	138	138	25
Mindanao	2024	2	6	8	66	138	138	25
Mindanao	2024	2	6	9	75	138	138	25
Mindanao	2024	2	6	10	81	138	138	25
Mindanao	2024	2	6	11	85	138	138	25
Mindanao	2024	2	6	12	82	138	138	25
Mindanao	2024	2	6	13	84	138	138	25
Mindanao	2024	2	6	14	87	138	138	25
Mindanao	2024	2	6	15	88	138	138	25
Mindanao	2024	2	6	16	86	138	138	25
Mindanao	2024	2	6	17	82	138	138	25
Mindanao	2024	2	6	18	84	138	138	25
Mindanao	2024	2	6	19	85	138	138	25
Mindanao	2024	2	6	20	81	138	138	25
Mindanao	2024	2	6	21	78	138	138	25
Mindanao	2024	2	6	22	73	138	138	25
Mindanao	2024	2	6	23	68	138	138	25
Mindanao	2024	2	6	24	64	138	138	25
Mindanao	2024	2	7	1	59	138	138	25
Mindanao	2024	2	7	2	58	138	138	25
Mindanao	2024	2	7	3	56	138	138	25
Mindanao	2024	2	7	4	55	138	138	25
Mindanao	2024	2	7	5	56	138	138	25
Mindanao	2024	2	7	6	61	138	138	25
Mindanao	2024	2	7	7	61	138	138	25
Mindanao	2024	2	7	8	66	138	138	25
Mindanao	2024	2	7	9	74	138	138	25
Mindanao	2024	2	7	10	79	138	138	25
Mindanao	2024	2	7	11	86	138	138	25
Mindanao	2024	2	7	12	85	138	138	25
Mindanao	2024	2	7	13	83	138	138	25
Mindanao	2024	2	7	14	89	138	138	25
Mindanao	2024	2	7	15	87	138	138	25
Mindanao	2024	2	7	16	83	138	138	25
Mindanao	2024	2	7	17	81	138	138	25
Mindanao	2024	2	7	18	84	138	138	25
Mindanao	2024	2	7	19	83	138	138	25
Mindanao	2024	2	7	20	78	138	138	25
Mindanao	2024	2	7	21	75	138	138	25
Mindanao	2024	2	7	22	69	138	138	25
Mindanao	2024	2	7	23	66	138	138	25
Mindanao	2024	2	7	24	60	138	138	25
Mindanao	2024	2	8	1	58	138	138	25
Mindanao	2024	2	8	2	56	138	138	25
Mindanao	2024	2	8	3	54	138	138	25
Mindanao	2024	2	8	4	54	138	138	25
Mindanao	2024	2	8	5	56	138	138	25
Mindanao	2024	2	8	6	59	138	138	25
Mindanao	2024	2	8	7	61	138	138	25
Mindanao	2024	2	8	8	65	138	138	25
Mindanao	2024	2	8	9	74	138	138	25
Mindanao	2024	2	8	10	80	138	138	25
Mindanao	2024	2	8	11	84	138	138	25
Mindanao	2024	2	8	12	83	138	138	25
Mindanao	2024	2	8	13	82	138	138	25
Mindanao	2024	2	8	14	88	138	138	25
Mindanao	2024	2	8	15	87	138	138	25
Mindanao	2024	2	8	16	84	138	138	25
Mindanao	2024	2	8	17	81	138	138	25
Mindanao	2024	2	8	18	83	138	138	25
Mindanao	2024	2	8	19	83	138	138	25
Mindanao	2024	2	8	20	80	138	138	25
Mindanao	2024	2	8	21	77	138	138	25
Mindanao	2024	2	8	22	72	138	138	25
Mindanao	2024	2	8	23	68	138	138	25
Mindanao	2024	2	8	24	63	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	9	1	60	138	138	25
Mindanao	2024	2	9	2	58	138	138	25
Mindanao	2024	2	9	3	56	138	138	25
Mindanao	2024	2	9	4	56	138	138	25
Mindanao	2024	2	9	5	57	138	138	25
Mindanao	2024	2	9	6	61	138	138	25
Mindanao	2024	2	9	7	62	138	138	25
Mindanao	2024	2	9	8	67	138	138	25
Mindanao	2024	2	9	9	76	138	138	25
Mindanao	2024	2	9	10	83	138	138	25
Mindanao	2024	2	9	11	89	138	138	25
Mindanao	2024	2	9	12	86	138	138	25
Mindanao	2024	2	9	13	87	138	138	25
Mindanao	2024	2	9	14	89	138	138	25
Mindanao	2024	2	9	15	91	138	138	25
Mindanao	2024	2	9	16	88	138	138	25
Mindanao	2024	2	9	17	83	138	138	25
Mindanao	2024	2	9	18	85	138	138	25
Mindanao	2024	2	9	19	84	138	138	25
Mindanao	2024	2	9	20	81	138	138	25
Mindanao	2024	2	9	21	79	138	138	25
Mindanao	2024	2	9	22	74	138	138	25
Mindanao	2024	2	9	23	68	138	138	25
Mindanao	2024	2	9	24	65	138	138	25
Mindanao	2024	2	10	1	61	138	138	25
Mindanao	2024	2	10	2	59	138	138	25
Mindanao	2024	2	10	3	57	138	138	25
Mindanao	2024	2	10	4	57	138	138	25
Mindanao	2024	2	10	5	57	138	138	25
Mindanao	2024	2	10	6	60	138	138	25
Mindanao	2024	2	10	7	60	138	138	25
Mindanao	2024	2	10	8	61	138	138	25
Mindanao	2024	2	10	9	67	138	138	25
Mindanao	2024	2	10	10	71	138	138	25
Mindanao	2024	2	10	11	74	138	138	25
Mindanao	2024	2	10	12	73	138	138	25
Mindanao	2024	2	10	13	75	138	138	25
Mindanao	2024	2	10	14	77	138	138	25
Mindanao	2024	2	10	15	77	138	138	25
Mindanao	2024	2	10	16	75	138	138	25
Mindanao	2024	2	10	17	75	138	138	25
Mindanao	2024	2	10	18	80	138	138	25
Mindanao	2024	2	10	19	81	138	138	25
Mindanao	2024	2	10	20	78	138	138	25
Mindanao	2024	2	10	21	76	138	138	25
Mindanao	2024	2	10	22	71	138	138	25
Mindanao	2024	2	10	23	65	138	138	25
Mindanao	2024	2	10	24	60	138	138	25
Mindanao	2024	2	11	1	57	138	138	25
Mindanao	2024	2	11	2	55	138	138	25
Mindanao	2024	2	11	3	52	138	138	25
Mindanao	2024	2	11	4	52	138	138	25
Mindanao	2024	2	11	5	52	138	138	25
Mindanao	2024	2	11	6	56	138	138	25
Mindanao	2024	2	11	7	55	138	138	25
Mindanao	2024	2	11	8	53	138	138	25
Mindanao	2024	2	11	9	55	138	138	25
Mindanao	2024	2	11	10	56	138	138	25
Mindanao	2024	2	11	11	61	138	138	25
Mindanao	2024	2	11	12	60	138	138	25
Mindanao	2024	2	11	13	62	138	138	25
Mindanao	2024	2	11	14	64	138	138	25
Mindanao	2024	2	11	15	64	138	138	25
Mindanao	2024	2	11	16	65	138	138	25
Mindanao	2024	2	11	17	64	138	138	25
Mindanao	2024	2	11	18	72	138	138	25
Mindanao	2024	2	11	19	76	138	138	25
Mindanao	2024	2	11	20	73	138	138	25
Mindanao	2024	2	11	21	70	138	138	25
Mindanao	2024	2	11	22	67	138	138	25
Mindanao	2024	2	11	23	63	138	138	25
Mindanao	2024	2	11	24	57	138	138	25
Mindanao	2024	2	12	1	55	138	138	25
Mindanao	2024	2	12	2	54	138	138	25
Mindanao	2024	2	12	3	53	138	138	25
Mindanao	2024	2	12	4	51	138	138	25
Mindanao	2024	2	12	5	53	138	138	25
Mindanao	2024	2	12	6	57	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	12	7	57	138	138	25
Mindanao	2024	2	12	8	63	138	138	25
Mindanao	2024	2	12	9	74	138	138	25
Mindanao	2024	2	12	10	81	138	138	25
Mindanao	2024	2	12	11	87	138	138	25
Mindanao	2024	2	12	12	86	138	138	25
Mindanao	2024	2	12	13	89	138	138	25
Mindanao	2024	2	12	14	94	138	138	25
Mindanao	2024	2	12	15	92	138	138	25
Mindanao	2024	2	12	16	89	138	138	25
Mindanao	2024	2	12	17	83	138	138	25
Mindanao	2024	2	12	18	84	138	138	25
Mindanao	2024	2	12	19	84	138	138	25
Mindanao	2024	2	12	20	81	138	138	25
Mindanao	2024	2	12	21	78	138	138	25
Mindanao	2024	2	12	22	75	138	138	25
Mindanao	2024	2	12	23	69	138	138	25
Mindanao	2024	2	12	24	66	138	138	25
Mindanao	2024	2	13	1	62	138	138	25
Mindanao	2024	2	13	2	58	138	138	25
Mindanao	2024	2	13	3	57	138	138	25
Mindanao	2024	2	13	4	57	138	138	25
Mindanao	2024	2	13	5	58	138	138	25
Mindanao	2024	2	13	6	63	138	138	25
Mindanao	2024	2	13	7	62	138	138	25
Mindanao	2024	2	13	8	67	138	138	25
Mindanao	2024	2	13	9	77	138	138	25
Mindanao	2024	2	13	10	84	138	138	25
Mindanao	2024	2	13	11	87	138	138	25
Mindanao	2024	2	13	12	86	138	138	25
Mindanao	2024	2	13	13	86	138	138	25
Mindanao	2024	2	13	14	91	138	138	25
Mindanao	2024	2	13	15	89	138	138	25
Mindanao	2024	2	13	16	86	138	138	25
Mindanao	2024	2	13	17	81	138	138	25
Mindanao	2024	2	13	18	83	138	138	25
Mindanao	2024	2	13	19	83	138	138	25
Mindanao	2024	2	13	20	79	138	138	25
Mindanao	2024	2	13	21	76	138	138	25
Mindanao	2024	2	13	22	71	138	138	25
Mindanao	2024	2	13	23	67	138	138	25
Mindanao	2024	2	13	24	63	138	138	25
Mindanao	2024	2	14	1	60	138	138	25
Mindanao	2024	2	14	2	58	138	138	25
Mindanao	2024	2	14	3	56	138	138	25
Mindanao	2024	2	14	4	55	138	138	25
Mindanao	2024	2	14	5	57	138	138	25
Mindanao	2024	2	14	6	62	138	138	25
Mindanao	2024	2	14	7	63	138	138	25
Mindanao	2024	2	14	8	66	138	138	25
Mindanao	2024	2	14	9	76	138	138	25
Mindanao	2024	2	14	10	84	138	138	25
Mindanao	2024	2	14	11	89	138	138	25
Mindanao	2024	2	14	12	89	138	138	25
Mindanao	2024	2	14	13	89	138	138	25
Mindanao	2024	2	14	14	95	138	138	25
Mindanao	2024	2	14	15	95	138	138	25
Mindanao	2024	2	14	16	94	138	138	25
Mindanao	2024	2	14	17	86	138	138	25
Mindanao	2024	2	14	18	86	138	138	25
Mindanao	2024	2	14	19	89	138	138	25
Mindanao	2024	2	14	20	83	138	138	25
Mindanao	2024	2	14	21	81	138	138	25
Mindanao	2024	2	14	22	76	138	138	25
Mindanao	2024	2	14	23	71	138	138	25
Mindanao	2024	2	14	24	65	138	138	25
Mindanao	2024	2	15	1	62	138	138	25
Mindanao	2024	2	15	2	60	138	138	25
Mindanao	2024	2	15	3	58	138	138	25
Mindanao	2024	2	15	4	56	138	138	25
Mindanao	2024	2	15	5	59	138	138	25
Mindanao	2024	2	15	6	62	138	138	25
Mindanao	2024	2	15	7	61	138	138	25
Mindanao	2024	2	15	8	67	138	138	25
Mindanao	2024	2	15	9	76	138	138	25
Mindanao	2024	2	15	10	82	138	138	25
Mindanao	2024	2	15	11	88	138	138	25
Mindanao	2024	2	15	12	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	15	13	87	138	138	25
Mindanao	2024	2	15	14	92	138	138	25
Mindanao	2024	2	15	15	88	138	138	25
Mindanao	2024	2	15	16	88	138	138	25
Mindanao	2024	2	15	17	81	138	138	25
Mindanao	2024	2	15	18	82	138	138	25
Mindanao	2024	2	15	19	85	138	138	25
Mindanao	2024	2	15	20	82	138	138	25
Mindanao	2024	2	15	21	79	138	138	25
Mindanao	2024	2	15	22	74	138	138	25
Mindanao	2024	2	15	23	69	138	138	25
Mindanao	2024	2	15	24	64	138	138	25
Mindanao	2024	2	16	1	60	138	138	25
Mindanao	2024	2	16	2	59	138	138	25
Mindanao	2024	2	16	3	55	138	138	25
Mindanao	2024	2	16	4	54	138	138	25
Mindanao	2024	2	16	5	56	138	138	25
Mindanao	2024	2	16	6	62	138	138	25
Mindanao	2024	2	16	7	62	138	138	25
Mindanao	2024	2	16	8	66	138	138	25
Mindanao	2024	2	16	9	77	138	138	25
Mindanao	2024	2	16	10	83	138	138	25
Mindanao	2024	2	16	11	86	138	138	25
Mindanao	2024	2	16	12	82	138	138	25
Mindanao	2024	2	16	13	84	138	138	25
Mindanao	2024	2	16	14	89	138	138	25
Mindanao	2024	2	16	15	87	138	138	25
Mindanao	2024	2	16	16	84	138	138	25
Mindanao	2024	2	16	17	80	138	138	25
Mindanao	2024	2	16	18	83	138	138	25
Mindanao	2024	2	16	19	84	138	138	25
Mindanao	2024	2	16	20	81	138	138	25
Mindanao	2024	2	16	21	78	138	138	25
Mindanao	2024	2	16	22	73	138	138	25
Mindanao	2024	2	16	23	69	138	138	25
Mindanao	2024	2	16	24	65	138	138	25
Mindanao	2024	2	17	1	62	138	138	25
Mindanao	2024	2	17	2	58	138	138	25
Mindanao	2024	2	17	3	57	138	138	25
Mindanao	2024	2	17	4	56	138	138	25
Mindanao	2024	2	17	5	57	138	138	25
Mindanao	2024	2	17	6	60	138	138	25
Mindanao	2024	2	17	7	56	138	138	25
Mindanao	2024	2	17	8	59	138	138	25
Mindanao	2024	2	17	9	64	138	138	25
Mindanao	2024	2	17	10	68	138	138	25
Mindanao	2024	2	17	11	71	138	138	25
Mindanao	2024	2	17	12	70	138	138	25
Mindanao	2024	2	17	13	68	138	138	25
Mindanao	2024	2	17	14	69	138	138	25
Mindanao	2024	2	17	15	70	138	138	25
Mindanao	2024	2	17	16	69	138	138	25
Mindanao	2024	2	17	17	69	138	138	25
Mindanao	2024	2	17	18	72	138	138	25
Mindanao	2024	2	17	19	78	138	138	25
Mindanao	2024	2	17	20	73	138	138	25
Mindanao	2024	2	17	21	70	138	138	25
Mindanao	2024	2	17	22	66	138	138	25
Mindanao	2024	2	17	23	61	138	138	25
Mindanao	2024	2	17	24	58	138	138	25
Mindanao	2024	2	18	1	54	138	138	25
Mindanao	2024	2	18	2	53	138	138	25
Mindanao	2024	2	18	3	52	138	138	25
Mindanao	2024	2	18	4	51	138	138	25
Mindanao	2024	2	18	5	52	138	138	25
Mindanao	2024	2	18	6	55	138	138	25
Mindanao	2024	2	18	7	55	138	138	25
Mindanao	2024	2	18	8	53	138	138	25
Mindanao	2024	2	18	9	52	138	138	25
Mindanao	2024	2	18	10	56	138	138	25
Mindanao	2024	2	18	11	61	138	138	25
Mindanao	2024	2	18	12	59	138	138	25
Mindanao	2024	2	18	13	59	138	138	25
Mindanao	2024	2	18	14	59	138	138	25
Mindanao	2024	2	18	15	59	138	138	25
Mindanao	2024	2	18	16	59	138	138	25
Mindanao	2024	2	18	17	63	138	138	25
Mindanao	2024	2	18	18	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	18	19	70	138	138	25
Mindanao	2024	2	18	20	67	138	138	25
Mindanao	2024	2	18	21	63	138	138	25
Mindanao	2024	2	18	22	59	138	138	25
Mindanao	2024	2	18	23	53	138	138	25
Mindanao	2024	2	18	24	51	138	138	25
Mindanao	2024	2	19	1	49	138	138	25
Mindanao	2024	2	19	2	48	138	138	25
Mindanao	2024	2	19	3	47	138	138	25
Mindanao	2024	2	19	4	47	138	138	25
Mindanao	2024	2	19	5	49	138	138	25
Mindanao	2024	2	19	6	55	138	138	25
Mindanao	2024	2	19	7	54	138	138	25
Mindanao	2024	2	19	8	60	138	138	25
Mindanao	2024	2	19	9	69	138	138	25
Mindanao	2024	2	19	10	76	138	138	25
Mindanao	2024	2	19	11	80	138	138	25
Mindanao	2024	2	19	12	79	138	138	25
Mindanao	2024	2	19	13	79	138	138	25
Mindanao	2024	2	19	14	84	138	138	25
Mindanao	2024	2	19	15	82	138	138	25
Mindanao	2024	2	19	16	81	138	138	25
Mindanao	2024	2	19	17	77	138	138	25
Mindanao	2024	2	19	18	80	138	138	25
Mindanao	2024	2	19	19	81	138	138	25
Mindanao	2024	2	19	20	76	138	138	25
Mindanao	2024	2	19	21	73	138	138	25
Mindanao	2024	2	19	22	67	138	138	25
Mindanao	2024	2	19	23	62	138	138	25
Mindanao	2024	2	19	24	58	138	138	25
Mindanao	2024	2	20	1	55	138	138	25
Mindanao	2024	2	20	2	53	138	138	25
Mindanao	2024	2	20	3	51	138	138	25
Mindanao	2024	2	20	4	51	138	138	25
Mindanao	2024	2	20	5	54	138	138	25
Mindanao	2024	2	20	6	58	138	138	25
Mindanao	2024	2	20	7	58	138	138	25
Mindanao	2024	2	20	8	64	138	138	25
Mindanao	2024	2	20	9	72	138	138	25
Mindanao	2024	2	20	10	78	138	138	25
Mindanao	2024	2	20	11	81	138	138	25
Mindanao	2024	2	20	12	80	138	138	25
Mindanao	2024	2	20	13	80	138	138	25
Mindanao	2024	2	20	14	86	138	138	25
Mindanao	2024	2	20	15	86	138	138	25
Mindanao	2024	2	20	16	84	138	138	25
Mindanao	2024	2	20	17	79	138	138	25
Mindanao	2024	2	20	18	83	138	138	25
Mindanao	2024	2	20	19	82	138	138	25
Mindanao	2024	2	20	20	80	138	138	25
Mindanao	2024	2	20	21	75	138	138	25
Mindanao	2024	2	20	22	70	138	138	25
Mindanao	2024	2	20	23	64	138	138	25
Mindanao	2024	2	20	24	59	138	138	25
Mindanao	2024	2	21	1	57	138	138	25
Mindanao	2024	2	21	2	55	138	138	25
Mindanao	2024	2	21	3	53	138	138	25
Mindanao	2024	2	21	4	53	138	138	25
Mindanao	2024	2	21	5	55	138	138	25
Mindanao	2024	2	21	6	60	138	138	25
Mindanao	2024	2	21	7	60	138	138	25
Mindanao	2024	2	21	8	63	138	138	25
Mindanao	2024	2	21	9	71	138	138	25
Mindanao	2024	2	21	10	76	138	138	25
Mindanao	2024	2	21	11	80	138	138	25
Mindanao	2024	2	21	12	79	138	138	25
Mindanao	2024	2	21	13	80	138	138	25
Mindanao	2024	2	21	14	85	138	138	25
Mindanao	2024	2	21	15	86	138	138	25
Mindanao	2024	2	21	16	84	138	138	25
Mindanao	2024	2	21	17	78	138	138	25
Mindanao	2024	2	21	18	82	138	138	25
Mindanao	2024	2	21	19	82	138	138	25
Mindanao	2024	2	21	20	79	138	138	25
Mindanao	2024	2	21	21	75	138	138	25
Mindanao	2024	2	21	22	70	138	138	25
Mindanao	2024	2	21	23	66	138	138	25
Mindanao	2024	2	21	24	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	22	1	57	138	138	25
Mindanao	2024	2	22	2	56	138	138	25
Mindanao	2024	2	22	3	54	138	138	25
Mindanao	2024	2	22	4	52	138	138	25
Mindanao	2024	2	22	5	55	138	138	25
Mindanao	2024	2	22	6	60	138	138	25
Mindanao	2024	2	22	7	60	138	138	25
Mindanao	2024	2	22	8	64	138	138	25
Mindanao	2024	2	22	9	74	138	138	25
Mindanao	2024	2	22	10	80	138	138	25
Mindanao	2024	2	22	11	86	138	138	25
Mindanao	2024	2	22	12	82	138	138	25
Mindanao	2024	2	22	13	83	138	138	25
Mindanao	2024	2	22	14	90	138	138	25
Mindanao	2024	2	22	15	87	138	138	25
Mindanao	2024	2	22	16	86	138	138	25
Mindanao	2024	2	22	17	80	138	138	25
Mindanao	2024	2	22	18	82	138	138	25
Mindanao	2024	2	22	19	76	138	138	25
Mindanao	2024	2	22	20	71	138	138	25
Mindanao	2024	2	22	21	71	138	138	25
Mindanao	2024	2	22	22	67	138	138	25
Mindanao	2024	2	22	23	64	138	138	25
Mindanao	2024	2	22	24	58	138	138	25
Mindanao	2024	2	23	1	60	138	138	25
Mindanao	2024	2	23	2	59	138	138	25
Mindanao	2024	2	23	3	55	138	138	25
Mindanao	2024	2	23	4	54	138	138	25
Mindanao	2024	2	23	5	56	138	138	25
Mindanao	2024	2	23	6	62	138	138	25
Mindanao	2024	2	23	7	62	138	138	25
Mindanao	2024	2	23	8	66	138	138	25
Mindanao	2024	2	23	9	77	138	138	25
Mindanao	2024	2	23	10	83	138	138	25
Mindanao	2024	2	23	11	86	138	138	25
Mindanao	2024	2	23	12	82	138	138	25
Mindanao	2024	2	23	13	84	138	138	25
Mindanao	2024	2	23	14	89	138	138	25
Mindanao	2024	2	23	15	87	138	138	25
Mindanao	2024	2	23	16	84	138	138	25
Mindanao	2024	2	23	17	80	138	138	25
Mindanao	2024	2	23	18	83	138	138	25
Mindanao	2024	2	23	19	84	138	138	25
Mindanao	2024	2	23	20	81	138	138	25
Mindanao	2024	2	23	21	78	138	138	25
Mindanao	2024	2	23	22	73	138	138	25
Mindanao	2024	2	23	23	69	138	138	25
Mindanao	2024	2	23	24	65	138	138	25
Mindanao	2024	2	24	1	53	138	138	25
Mindanao	2024	2	24	2	52	138	138	25
Mindanao	2024	2	24	3	50	138	138	25
Mindanao	2024	2	24	4	51	138	138	25
Mindanao	2024	2	24	5	53	138	138	25
Mindanao	2024	2	24	6	56	138	138	25
Mindanao	2024	2	24	7	56	138	138	25
Mindanao	2024	2	24	8	57	138	138	25
Mindanao	2024	2	24	9	63	138	138	25
Mindanao	2024	2	24	10	69	138	138	25
Mindanao	2024	2	24	11	72	138	138	25
Mindanao	2024	2	24	12	71	138	138	25
Mindanao	2024	2	24	13	71	138	138	25
Mindanao	2024	2	24	14	76	138	138	25
Mindanao	2024	2	24	15	74	138	138	25
Mindanao	2024	2	24	16	72	138	138	25
Mindanao	2024	2	24	17	72	138	138	25
Mindanao	2024	2	24	18	78	138	138	25
Mindanao	2024	2	24	19	77	138	138	25
Mindanao	2024	2	24	20	74	138	138	25
Mindanao	2024	2	24	21	70	138	138	25
Mindanao	2024	2	24	22	67	138	138	25
Mindanao	2024	2	24	23	64	138	138	25
Mindanao	2024	2	24	24	59	138	138	25
Mindanao	2024	2	25	1	55	138	138	25
Mindanao	2024	2	25	2	53	138	138	25
Mindanao	2024	2	25	3	51	138	138	25
Mindanao	2024	2	25	4	51	138	138	25
Mindanao	2024	2	25	5	53	138	138	25
Mindanao	2024	2	25	6	55	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	25	7	55	138	138	25
Mindanao	2024	2	25	8	57	138	138	25
Mindanao	2024	2	25	9	61	138	138	25
Mindanao	2024	2	25	10	66	138	138	25
Mindanao	2024	2	25	11	67	138	138	25
Mindanao	2024	2	25	12	67	138	138	25
Mindanao	2024	2	25	13	65	138	138	25
Mindanao	2024	2	25	14	67	138	138	25
Mindanao	2024	2	25	15	68	138	138	25
Mindanao	2024	2	25	16	67	138	138	25
Mindanao	2024	2	25	17	69	138	138	25
Mindanao	2024	2	25	18	74	138	138	25
Mindanao	2024	2	25	19	75	138	138	25
Mindanao	2024	2	25	20	73	138	138	25
Mindanao	2024	2	25	21	69	138	138	25
Mindanao	2024	2	25	22	63	138	138	25
Mindanao	2024	2	25	23	60	138	138	25
Mindanao	2024	2	25	24	56	138	138	25
Mindanao	2024	2	26	1	49	138	138	25
Mindanao	2024	2	26	2	49	138	138	25
Mindanao	2024	2	26	3	48	138	138	25
Mindanao	2024	2	26	4	48	138	138	25
Mindanao	2024	2	26	5	50	138	138	25
Mindanao	2024	2	26	6	55	138	138	25
Mindanao	2024	2	26	7	56	138	138	25
Mindanao	2024	2	26	8	60	138	138	25
Mindanao	2024	2	26	9	68	138	138	25
Mindanao	2024	2	26	10	75	138	138	25
Mindanao	2024	2	26	11	79	138	138	25
Mindanao	2024	2	26	12	80	138	138	25
Mindanao	2024	2	26	13	81	138	138	25
Mindanao	2024	2	26	14	84	138	138	25
Mindanao	2024	2	26	15	85	138	138	25
Mindanao	2024	2	26	16	82	138	138	25
Mindanao	2024	2	26	17	79	138	138	25
Mindanao	2024	2	26	18	83	138	138	25
Mindanao	2024	2	26	19	82	138	138	25
Mindanao	2024	2	26	20	77	138	138	25
Mindanao	2024	2	26	21	75	138	138	25
Mindanao	2024	2	26	22	68	138	138	25
Mindanao	2024	2	26	23	64	138	138	25
Mindanao	2024	2	26	24	59	138	138	25
Mindanao	2024	2	27	1	55	138	138	25
Mindanao	2024	2	27	2	54	138	138	25
Mindanao	2024	2	27	3	53	138	138	25
Mindanao	2024	2	27	4	52	138	138	25
Mindanao	2024	2	27	5	55	138	138	25
Mindanao	2024	2	27	6	61	138	138	25
Mindanao	2024	2	27	7	59	138	138	25
Mindanao	2024	2	27	8	63	138	138	25
Mindanao	2024	2	27	9	70	138	138	25
Mindanao	2024	2	27	10	75	138	138	25
Mindanao	2024	2	27	11	80	138	138	25
Mindanao	2024	2	27	12	77	138	138	25
Mindanao	2024	2	27	13	79	138	138	25
Mindanao	2024	2	27	14	83	138	138	25
Mindanao	2024	2	27	15	83	138	138	25
Mindanao	2024	2	27	16	83	138	138	25
Mindanao	2024	2	27	17	78	138	138	25
Mindanao	2024	2	27	18	80	138	138	25
Mindanao	2024	2	27	19	84	138	138	25
Mindanao	2024	2	27	20	79	138	138	25
Mindanao	2024	2	27	21	76	138	138	25
Mindanao	2024	2	27	22	70	138	138	25
Mindanao	2024	2	27	23	65	138	138	25
Mindanao	2024	2	27	24	61	138	138	25
Mindanao	2024	2	28	1	58	138	138	25
Mindanao	2024	2	28	2	55	138	138	25
Mindanao	2024	2	28	3	54	138	138	25
Mindanao	2024	2	28	4	54	138	138	25
Mindanao	2024	2	28	5	56	138	138	25
Mindanao	2024	2	28	6	61	138	138	25
Mindanao	2024	2	28	7	60	138	138	25
Mindanao	2024	2	28	8	65	138	138	25
Mindanao	2024	2	28	9	75	138	138	25
Mindanao	2024	2	28	10	82	138	138	25
Mindanao	2024	2	28	11	87	138	138	25
Mindanao	2024	2	28	12	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	2	28	13	87	138	138	25
Mindanao	2024	2	28	14	92	138	138	25
Mindanao	2024	2	28	15	93	138	138	25
Mindanao	2024	2	28	16	91	138	138	25
Mindanao	2024	2	28	17	82	138	138	25
Mindanao	2024	2	28	18	83	138	138	25
Mindanao	2024	2	28	19	85	138	138	25
Mindanao	2024	2	28	20	83	138	138	25
Mindanao	2024	2	28	21	79	138	138	25
Mindanao	2024	2	28	22	74	138	138	25
Mindanao	2024	2	28	23	70	138	138	25
Mindanao	2024	2	28	24	66	138	138	25
Mindanao	2024	2	29	1	62	138	138	25
Mindanao	2024	2	29	2	59	138	138	25
Mindanao	2024	2	29	3	57	138	138	25
Mindanao	2024	2	29	4	56	138	138	25
Mindanao	2024	2	29	5	59	138	138	25
Mindanao	2024	2	29	6	63	138	138	25
Mindanao	2024	2	29	7	61	138	138	25
Mindanao	2024	2	29	8	68	138	138	25
Mindanao	2024	2	29	9	78	138	138	25
Mindanao	2024	2	29	10	84	138	138	25
Mindanao	2024	2	29	11	88	138	138	25
Mindanao	2024	2	29	12	88	138	138	25
Mindanao	2024	2	29	13	89	138	138	25
Mindanao	2024	2	29	14	95	138	138	25
Mindanao	2024	2	29	15	92	138	138	25
Mindanao	2024	2	29	16	91	138	138	25
Mindanao	2024	2	29	17	83	138	138	25
Mindanao	2024	2	29	18	86	138	138	25
Mindanao	2024	2	29	19	86	138	138	25
Mindanao	2024	2	29	20	84	138	138	25
Mindanao	2024	2	29	21	80	138	138	25
Mindanao	2024	2	29	22	74	138	138	25
Mindanao	2024	2	29	23	70	138	138	25
Mindanao	2024	2	29	24	65	138	138	25
Mindanao	2024	3	1	1	62	138	138	25
Mindanao	2024	3	1	2	58	138	138	25
Mindanao	2024	3	1	3	56	138	138	25
Mindanao	2024	3	1	4	56	138	138	25
Mindanao	2024	3	1	5	57	138	138	25
Mindanao	2024	3	1	6	62	138	138	25
Mindanao	2024	3	1	7	61	138	138	25
Mindanao	2024	3	1	8	66	138	138	25
Mindanao	2024	3	1	9	76	138	138	25
Mindanao	2024	3	1	10	84	138	138	25
Mindanao	2024	3	1	11	89	138	138	25
Mindanao	2024	3	1	12	88	138	138	25
Mindanao	2024	3	1	13	90	138	138	25
Mindanao	2024	3	1	14	95	138	138	25
Mindanao	2024	3	1	15	95	138	138	25
Mindanao	2024	3	1	16	92	138	138	25
Mindanao	2024	3	1	17	84	138	138	25
Mindanao	2024	3	1	18	86	138	138	25
Mindanao	2024	3	1	19	89	138	138	25
Mindanao	2024	3	1	20	85	138	138	25
Mindanao	2024	3	1	21	80	138	138	25
Mindanao	2024	3	1	22	76	138	138	25
Mindanao	2024	3	1	23	71	138	138	25
Mindanao	2024	3	1	24	67	138	138	25
Mindanao	2024	3	2	1	63	138	138	25
Mindanao	2024	3	2	2	59	138	138	25
Mindanao	2024	3	2	3	56	138	138	25
Mindanao	2024	3	2	4	56	138	138	25
Mindanao	2024	3	2	5	57	138	138	25
Mindanao	2024	3	2	6	59	138	138	25
Mindanao	2024	3	2	7	56	138	138	25
Mindanao	2024	3	2	8	59	138	138	25
Mindanao	2024	3	2	9	68	138	138	25
Mindanao	2024	3	2	10	73	138	138	25
Mindanao	2024	3	2	11	76	138	138	25
Mindanao	2024	3	2	12	75	138	138	25
Mindanao	2024	3	2	13	76	138	138	25
Mindanao	2024	3	2	14	80	138	138	25
Mindanao	2024	3	2	15	77	138	138	25
Mindanao	2024	3	2	16	76	138	138	25
Mindanao	2024	3	2	17	74	138	138	25
Mindanao	2024	3	2	18	79	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	2	19	78	138	138	25
Mindanao	2024	3	2	20	76	138	138	25
Mindanao	2024	3	2	21	73	138	138	25
Mindanao	2024	3	2	22	68	138	138	25
Mindanao	2024	3	2	23	62	138	138	25
Mindanao	2024	3	2	24	59	138	138	25
Mindanao	2024	3	3	1	56	138	138	25
Mindanao	2024	3	3	2	54	138	138	25
Mindanao	2024	3	3	3	52	138	138	25
Mindanao	2024	3	3	4	51	138	138	25
Mindanao	2024	3	3	5	53	138	138	25
Mindanao	2024	3	3	6	55	138	138	25
Mindanao	2024	3	3	7	55	138	138	25
Mindanao	2024	3	3	8	52	138	138	25
Mindanao	2024	3	3	9	54	138	138	25
Mindanao	2024	3	3	10	57	138	138	25
Mindanao	2024	3	3	11	60	138	138	25
Mindanao	2024	3	3	12	61	138	138	25
Mindanao	2024	3	3	13	60	138	138	25
Mindanao	2024	3	3	14	61	138	138	25
Mindanao	2024	3	3	15	60	138	138	25
Mindanao	2024	3	3	16	59	138	138	25
Mindanao	2024	3	3	17	62	138	138	25
Mindanao	2024	3	3	18	72	138	138	25
Mindanao	2024	3	3	19	73	138	138	25
Mindanao	2024	3	3	20	70	138	138	25
Mindanao	2024	3	3	21	67	138	138	25
Mindanao	2024	3	3	22	62	138	138	25
Mindanao	2024	3	3	23	58	138	138	25
Mindanao	2024	3	3	24	54	138	138	25
Mindanao	2024	3	4	1	51	138	138	25
Mindanao	2024	3	4	2	50	138	138	25
Mindanao	2024	3	4	3	49	138	138	25
Mindanao	2024	3	4	4	50	138	138	25
Mindanao	2024	3	4	5	51	138	138	25
Mindanao	2024	3	4	6	56	138	138	25
Mindanao	2024	3	4	7	56	138	138	25
Mindanao	2024	3	4	8	62	138	138	25
Mindanao	2024	3	4	9	70	138	138	25
Mindanao	2024	3	4	10	77	138	138	25
Mindanao	2024	3	4	11	82	138	138	25
Mindanao	2024	3	4	12	83	138	138	25
Mindanao	2024	3	4	13	84	138	138	25
Mindanao	2024	3	4	14	88	138	138	25
Mindanao	2024	3	4	15	85	138	138	25
Mindanao	2024	3	4	16	83	138	138	25
Mindanao	2024	3	4	17	81	138	138	25
Mindanao	2024	3	4	18	84	138	138	25
Mindanao	2024	3	4	19	80	138	138	25
Mindanao	2024	3	4	20	77	138	138	25
Mindanao	2024	3	4	21	73	138	138	25
Mindanao	2024	3	4	22	67	138	138	25
Mindanao	2024	3	4	23	63	138	138	25
Mindanao	2024	3	4	24	58	138	138	25
Mindanao	2024	3	5	1	56	138	138	25
Mindanao	2024	3	5	2	54	138	138	25
Mindanao	2024	3	5	3	52	138	138	25
Mindanao	2024	3	5	4	52	138	138	25
Mindanao	2024	3	5	5	53	138	138	25
Mindanao	2024	3	5	6	58	138	138	25
Mindanao	2024	3	5	7	57	138	138	25
Mindanao	2024	3	5	8	63	138	138	25
Mindanao	2024	3	5	9	72	138	138	25
Mindanao	2024	3	5	10	79	138	138	25
Mindanao	2024	3	5	11	83	138	138	25
Mindanao	2024	3	5	12	81	138	138	25
Mindanao	2024	3	5	13	81	138	138	25
Mindanao	2024	3	5	14	86	138	138	25
Mindanao	2024	3	5	15	86	138	138	25
Mindanao	2024	3	5	16	85	138	138	25
Mindanao	2024	3	5	17	80	138	138	25
Mindanao	2024	3	5	18	83	138	138	25
Mindanao	2024	3	5	19	82	138	138	25
Mindanao	2024	3	5	20	78	138	138	25
Mindanao	2024	3	5	21	73	138	138	25
Mindanao	2024	3	5	22	68	138	138	25
Mindanao	2024	3	5	23	64	138	138	25
Mindanao	2024	3	5	24	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	6	1	56	138	138	25
Mindanao	2024	3	6	2	53	138	138	25
Mindanao	2024	3	6	3	52	138	138	25
Mindanao	2024	3	6	4	52	138	138	25
Mindanao	2024	3	6	5	54	138	138	25
Mindanao	2024	3	6	6	60	138	138	25
Mindanao	2024	3	6	7	60	138	138	25
Mindanao	2024	3	6	8	66	138	138	25
Mindanao	2024	3	6	9	75	138	138	25
Mindanao	2024	3	6	10	79	138	138	25
Mindanao	2024	3	6	11	84	138	138	25
Mindanao	2024	3	6	12	82	138	138	25
Mindanao	2024	3	6	13	81	138	138	25
Mindanao	2024	3	6	14	87	138	138	25
Mindanao	2024	3	6	15	84	138	138	25
Mindanao	2024	3	6	16	84	138	138	25
Mindanao	2024	3	6	17	80	138	138	25
Mindanao	2024	3	6	18	82	138	138	25
Mindanao	2024	3	6	19	81	138	138	25
Mindanao	2024	3	6	20	77	138	138	25
Mindanao	2024	3	6	21	73	138	138	25
Mindanao	2024	3	6	22	68	138	138	25
Mindanao	2024	3	6	23	63	138	138	25
Mindanao	2024	3	6	24	59	138	138	25
Mindanao	2024	3	7	1	56	138	138	25
Mindanao	2024	3	7	2	54	138	138	25
Mindanao	2024	3	7	3	52	138	138	25
Mindanao	2024	3	7	4	52	138	138	25
Mindanao	2024	3	7	5	54	138	138	25
Mindanao	2024	3	7	6	59	138	138	25
Mindanao	2024	3	7	7	59	138	138	25
Mindanao	2024	3	7	8	64	138	138	25
Mindanao	2024	3	7	9	73	138	138	25
Mindanao	2024	3	7	10	81	138	138	25
Mindanao	2024	3	7	11	87	138	138	25
Mindanao	2024	3	7	12	86	138	138	25
Mindanao	2024	3	7	13	85	138	138	25
Mindanao	2024	3	7	14	92	138	138	25
Mindanao	2024	3	7	15	93	138	138	25
Mindanao	2024	3	7	16	91	138	138	25
Mindanao	2024	3	7	17	84	138	138	25
Mindanao	2024	3	7	18	85	138	138	25
Mindanao	2024	3	7	19	86	138	138	25
Mindanao	2024	3	7	20	82	138	138	25
Mindanao	2024	3	7	21	79	138	138	25
Mindanao	2024	3	7	22	74	138	138	25
Mindanao	2024	3	7	23	69	138	138	25
Mindanao	2024	3	7	24	66	138	138	25
Mindanao	2024	3	8	1	61	138	138	25
Mindanao	2024	3	8	2	59	138	138	25
Mindanao	2024	3	8	3	57	138	138	25
Mindanao	2024	3	8	4	56	138	138	25
Mindanao	2024	3	8	5	59	138	138	25
Mindanao	2024	3	8	6	63	138	138	25
Mindanao	2024	3	8	7	61	138	138	25
Mindanao	2024	3	8	8	67	138	138	25
Mindanao	2024	3	8	9	79	138	138	25
Mindanao	2024	3	8	10	85	138	138	25
Mindanao	2024	3	8	11	90	138	138	25
Mindanao	2024	3	8	12	89	138	138	25
Mindanao	2024	3	8	13	90	138	138	25
Mindanao	2024	3	8	14	96	138	138	25
Mindanao	2024	3	8	15	94	138	138	25
Mindanao	2024	3	8	16	92	138	138	25
Mindanao	2024	3	8	17	84	138	138	25
Mindanao	2024	3	8	18	88	138	138	25
Mindanao	2024	3	8	19	87	138	138	25
Mindanao	2024	3	8	20	84	138	138	25
Mindanao	2024	3	8	21	80	138	138	25
Mindanao	2024	3	8	22	76	138	138	25
Mindanao	2024	3	8	23	71	138	138	25
Mindanao	2024	3	8	24	66	138	138	25
Mindanao	2024	3	9	1	61	138	138	25
Mindanao	2024	3	9	2	59	138	138	25
Mindanao	2024	3	9	3	56	138	138	25
Mindanao	2024	3	9	4	55	138	138	25
Mindanao	2024	3	9	5	58	138	138	25
Mindanao	2024	3	9	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	9	7	57	138	138	25
Mindanao	2024	3	9	8	61	138	138	25
Mindanao	2024	3	9	9	67	138	138	25
Mindanao	2024	3	9	10	73	138	138	25
Mindanao	2024	3	9	11	77	138	138	25
Mindanao	2024	3	9	12	77	138	138	25
Mindanao	2024	3	9	13	79	138	138	25
Mindanao	2024	3	9	14	81	138	138	25
Mindanao	2024	3	9	15	80	138	138	25
Mindanao	2024	3	9	16	76	138	138	25
Mindanao	2024	3	9	17	74	138	138	25
Mindanao	2024	3	9	18	79	138	138	25
Mindanao	2024	3	9	19	79	138	138	25
Mindanao	2024	3	9	20	81	138	138	25
Mindanao	2024	3	9	21	78	138	138	25
Mindanao	2024	3	9	22	72	138	138	25
Mindanao	2024	3	9	23	68	138	138	25
Mindanao	2024	3	9	24	63	138	138	25
Mindanao	2024	3	10	1	59	138	138	25
Mindanao	2024	3	10	2	56	138	138	25
Mindanao	2024	3	10	3	55	138	138	25
Mindanao	2024	3	10	4	54	138	138	25
Mindanao	2024	3	10	5	55	138	138	25
Mindanao	2024	3	10	6	57	138	138	25
Mindanao	2024	3	10	7	56	138	138	25
Mindanao	2024	3	10	8	55	138	138	25
Mindanao	2024	3	10	9	57	138	138	25
Mindanao	2024	3	10	10	62	138	138	25
Mindanao	2024	3	10	11	67	138	138	25
Mindanao	2024	3	10	12	68	138	138	25
Mindanao	2024	3	10	13	72	138	138	25
Mindanao	2024	3	10	14	73	138	138	25
Mindanao	2024	3	10	15	70	138	138	25
Mindanao	2024	3	10	16	69	138	138	25
Mindanao	2024	3	10	17	70	138	138	25
Mindanao	2024	3	10	18	76	138	138	25
Mindanao	2024	3	10	19	77	138	138	25
Mindanao	2024	3	10	20	75	138	138	25
Mindanao	2024	3	10	21	74	138	138	25
Mindanao	2024	3	10	22	70	138	138	25
Mindanao	2024	3	10	23	65	138	138	25
Mindanao	2024	3	10	24	61	138	138	25
Mindanao	2024	3	11	1	58	138	138	25
Mindanao	2024	3	11	2	55	138	138	25
Mindanao	2024	3	11	3	53	138	138	25
Mindanao	2024	3	11	4	53	138	138	25
Mindanao	2024	3	11	5	55	138	138	25
Mindanao	2024	3	11	6	60	138	138	25
Mindanao	2024	3	11	7	58	138	138	25
Mindanao	2024	3	11	8	66	138	138	25
Mindanao	2024	3	11	9	77	138	138	25
Mindanao	2024	3	11	10	85	138	138	25
Mindanao	2024	3	11	11	91	138	138	25
Mindanao	2024	3	11	12	91	138	138	25
Mindanao	2024	3	11	13	92	138	138	25
Mindanao	2024	3	11	14	97	138	138	25
Mindanao	2024	3	11	15	95	138	138	25
Mindanao	2024	3	11	16	93	138	138	25
Mindanao	2024	3	11	17	84	138	138	25
Mindanao	2024	3	11	18	85	138	138	25
Mindanao	2024	3	11	19	84	138	138	25
Mindanao	2024	3	11	20	81	138	138	25
Mindanao	2024	3	11	21	77	138	138	25
Mindanao	2024	3	11	22	73	138	138	25
Mindanao	2024	3	11	23	68	138	138	25
Mindanao	2024	3	11	24	64	138	138	25
Mindanao	2024	3	12	1	60	138	138	25
Mindanao	2024	3	12	2	57	138	138	25
Mindanao	2024	3	12	3	56	138	138	25
Mindanao	2024	3	12	4	55	138	138	25
Mindanao	2024	3	12	5	56	138	138	25
Mindanao	2024	3	12	6	60	138	138	25
Mindanao	2024	3	12	7	60	138	138	25
Mindanao	2024	3	12	8	67	138	138	25
Mindanao	2024	3	12	9	77	138	138	25
Mindanao	2024	3	12	10	85	138	138	25
Mindanao	2024	3	12	11	90	138	138	25
Mindanao	2024	3	12	12	89	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	12	13	88	138	138	25
Mindanao	2024	3	12	14	94	138	138	25
Mindanao	2024	3	12	15	95	138	138	25
Mindanao	2024	3	12	16	92	138	138	25
Mindanao	2024	3	12	17	87	138	138	25
Mindanao	2024	3	12	18	89	138	138	25
Mindanao	2024	3	12	19	89	138	138	25
Mindanao	2024	3	12	20	85	138	138	25
Mindanao	2024	3	12	21	81	138	138	25
Mindanao	2024	3	12	22	76	138	138	25
Mindanao	2024	3	12	23	71	138	138	25
Mindanao	2024	3	12	24	66	138	138	25
Mindanao	2024	3	13	1	63	138	138	25
Mindanao	2024	3	13	2	60	138	138	25
Mindanao	2024	3	13	3	57	138	138	25
Mindanao	2024	3	13	4	56	138	138	25
Mindanao	2024	3	13	5	59	138	138	25
Mindanao	2024	3	13	6	64	138	138	25
Mindanao	2024	3	13	7	61	138	138	25
Mindanao	2024	3	13	8	68	138	138	25
Mindanao	2024	3	13	9	81	138	138	25
Mindanao	2024	3	13	10	86	138	138	25
Mindanao	2024	3	13	11	91	138	138	25
Mindanao	2024	3	13	12	90	138	138	25
Mindanao	2024	3	13	13	92	138	138	25
Mindanao	2024	3	13	14	96	138	138	25
Mindanao	2024	3	13	15	90	138	138	25
Mindanao	2024	3	13	16	92	138	138	25
Mindanao	2024	3	13	17	86	138	138	25
Mindanao	2024	3	13	18	87	138	138	25
Mindanao	2024	3	13	19	88	138	138	25
Mindanao	2024	3	13	20	84	138	138	25
Mindanao	2024	3	13	21	80	138	138	25
Mindanao	2024	3	13	22	75	138	138	25
Mindanao	2024	3	13	23	70	138	138	25
Mindanao	2024	3	13	24	66	138	138	25
Mindanao	2024	3	14	1	63	138	138	25
Mindanao	2024	3	14	2	61	138	138	25
Mindanao	2024	3	14	3	58	138	138	25
Mindanao	2024	3	14	4	58	138	138	25
Mindanao	2024	3	14	5	60	138	138	25
Mindanao	2024	3	14	6	63	138	138	25
Mindanao	2024	3	14	7	61	138	138	25
Mindanao	2024	3	14	8	68	138	138	25
Mindanao	2024	3	14	9	79	138	138	25
Mindanao	2024	3	14	10	84	138	138	25
Mindanao	2024	3	14	11	86	138	138	25
Mindanao	2024	3	14	12	84	138	138	25
Mindanao	2024	3	14	13	84	138	138	25
Mindanao	2024	3	14	14	89	138	138	25
Mindanao	2024	3	14	15	89	138	138	25
Mindanao	2024	3	14	16	85	138	138	25
Mindanao	2024	3	14	17	83	138	138	25
Mindanao	2024	3	14	18	86	138	138	25
Mindanao	2024	3	14	19	86	138	138	25
Mindanao	2024	3	14	20	82	138	138	25
Mindanao	2024	3	14	21	77	138	138	25
Mindanao	2024	3	14	22	72	138	138	25
Mindanao	2024	3	14	23	67	138	138	25
Mindanao	2024	3	14	24	63	138	138	25
Mindanao	2024	3	15	1	59	138	138	25
Mindanao	2024	3	15	2	57	138	138	25
Mindanao	2024	3	15	3	55	138	138	25
Mindanao	2024	3	15	4	53	138	138	25
Mindanao	2024	3	15	5	57	138	138	25
Mindanao	2024	3	15	6	61	138	138	25
Mindanao	2024	3	15	7	60	138	138	25
Mindanao	2024	3	15	8	65	138	138	25
Mindanao	2024	3	15	9	76	138	138	25
Mindanao	2024	3	15	10	82	138	138	25
Mindanao	2024	3	15	11	88	138	138	25
Mindanao	2024	3	15	12	86	138	138	25
Mindanao	2024	3	15	13	88	138	138	25
Mindanao	2024	3	15	14	94	138	138	25
Mindanao	2024	3	15	15	92	138	138	25
Mindanao	2024	3	15	16	90	138	138	25
Mindanao	2024	3	15	17	84	138	138	25
Mindanao	2024	3	15	18	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	15	19	89	138	138	25
Mindanao	2024	3	15	20	86	138	138	25
Mindanao	2024	3	15	21	81	138	138	25
Mindanao	2024	3	15	22	75	138	138	25
Mindanao	2024	3	15	23	72	138	138	25
Mindanao	2024	3	15	24	67	138	138	25
Mindanao	2024	3	16	1	63	138	138	25
Mindanao	2024	3	16	2	59	138	138	25
Mindanao	2024	3	16	3	57	138	138	25
Mindanao	2024	3	16	4	56	138	138	25
Mindanao	2024	3	16	5	57	138	138	25
Mindanao	2024	3	16	6	58	138	138	25
Mindanao	2024	3	16	7	58	138	138	25
Mindanao	2024	3	16	8	62	138	138	25
Mindanao	2024	3	16	9	69	138	138	25
Mindanao	2024	3	16	10	75	138	138	25
Mindanao	2024	3	16	11	79	138	138	25
Mindanao	2024	3	16	12	79	138	138	25
Mindanao	2024	3	16	13	79	138	138	25
Mindanao	2024	3	16	14	84	138	138	25
Mindanao	2024	3	16	15	81	138	138	25
Mindanao	2024	3	16	16	78	138	138	25
Mindanao	2024	3	16	17	76	138	138	25
Mindanao	2024	3	16	18	79	138	138	25
Mindanao	2024	3	16	19	84	138	138	25
Mindanao	2024	3	16	20	81	138	138	25
Mindanao	2024	3	16	21	78	138	138	25
Mindanao	2024	3	16	22	72	138	138	25
Mindanao	2024	3	16	23	67	138	138	25
Mindanao	2024	3	16	24	63	138	138	25
Mindanao	2024	3	17	1	59	138	138	25
Mindanao	2024	3	17	2	57	138	138	25
Mindanao	2024	3	17	3	54	138	138	25
Mindanao	2024	3	17	4	54	138	138	25
Mindanao	2024	3	17	5	56	138	138	25
Mindanao	2024	3	17	6	58	138	138	25
Mindanao	2024	3	17	7	56	138	138	25
Mindanao	2024	3	17	8	56	138	138	25
Mindanao	2024	3	17	9	58	138	138	25
Mindanao	2024	3	17	10	62	138	138	25
Mindanao	2024	3	17	11	66	138	138	25
Mindanao	2024	3	17	12	66	138	138	25
Mindanao	2024	3	17	13	64	138	138	25
Mindanao	2024	3	17	14	66	138	138	25
Mindanao	2024	3	17	15	66	138	138	25
Mindanao	2024	3	17	16	66	138	138	25
Mindanao	2024	3	17	17	67	138	138	25
Mindanao	2024	3	17	18	76	138	138	25
Mindanao	2024	3	17	19	77	138	138	25
Mindanao	2024	3	17	20	74	138	138	25
Mindanao	2024	3	17	21	69	138	138	25
Mindanao	2024	3	17	22	65	138	138	25
Mindanao	2024	3	17	23	61	138	138	25
Mindanao	2024	3	17	24	57	138	138	25
Mindanao	2024	3	18	1	55	138	138	25
Mindanao	2024	3	18	2	54	138	138	25
Mindanao	2024	3	18	3	52	138	138	25
Mindanao	2024	3	18	4	52	138	138	25
Mindanao	2024	3	18	5	54	138	138	25
Mindanao	2024	3	18	6	58	138	138	25
Mindanao	2024	3	18	7	58	138	138	25
Mindanao	2024	3	18	8	63	138	138	25
Mindanao	2024	3	18	9	75	138	138	25
Mindanao	2024	3	18	10	82	138	138	25
Mindanao	2024	3	18	11	87	138	138	25
Mindanao	2024	3	18	12	85	138	138	25
Mindanao	2024	3	18	13	84	138	138	25
Mindanao	2024	3	18	14	88	138	138	25
Mindanao	2024	3	18	15	86	138	138	25
Mindanao	2024	3	18	16	82	138	138	25
Mindanao	2024	3	18	17	79	138	138	25
Mindanao	2024	3	18	18	84	138	138	25
Mindanao	2024	3	18	19	84	138	138	25
Mindanao	2024	3	18	20	79	138	138	25
Mindanao	2024	3	18	21	75	138	138	25
Mindanao	2024	3	18	22	70	138	138	25
Mindanao	2024	3	18	23	65	138	138	25
Mindanao	2024	3	18	24	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	19	1	57	138	138	25
Mindanao	2024	3	19	2	54	138	138	25
Mindanao	2024	3	19	3	54	138	138	25
Mindanao	2024	3	19	4	54	138	138	25
Mindanao	2024	3	19	5	56	138	138	25
Mindanao	2024	3	19	6	62	138	138	25
Mindanao	2024	3	19	7	60	138	138	25
Mindanao	2024	3	19	8	66	138	138	25
Mindanao	2024	3	19	9	76	138	138	25
Mindanao	2024	3	19	10	85	138	138	25
Mindanao	2024	3	19	11	91	138	138	25
Mindanao	2024	3	19	12	90	138	138	25
Mindanao	2024	3	19	13	91	138	138	25
Mindanao	2024	3	19	14	96	138	138	25
Mindanao	2024	3	19	15	97	138	138	25
Mindanao	2024	3	19	16	94	138	138	25
Mindanao	2024	3	19	17	85	138	138	25
Mindanao	2024	3	19	18	89	138	138	25
Mindanao	2024	3	19	19	91	138	138	25
Mindanao	2024	3	19	20	87	138	138	25
Mindanao	2024	3	19	21	84	138	138	25
Mindanao	2024	3	19	22	77	138	138	25
Mindanao	2024	3	19	23	72	138	138	25
Mindanao	2024	3	19	24	67	138	138	25
Mindanao	2024	3	20	1	63	138	138	25
Mindanao	2024	3	20	2	61	138	138	25
Mindanao	2024	3	20	3	58	138	138	25
Mindanao	2024	3	20	4	57	138	138	25
Mindanao	2024	3	20	5	60	138	138	25
Mindanao	2024	3	20	6	64	138	138	25
Mindanao	2024	3	20	7	62	138	138	25
Mindanao	2024	3	20	8	69	138	138	25
Mindanao	2024	3	20	9	79	138	138	25
Mindanao	2024	3	20	10	88	138	138	25
Mindanao	2024	3	20	11	90	138	138	25
Mindanao	2024	3	20	12	87	138	138	25
Mindanao	2024	3	20	13	91	138	138	25
Mindanao	2024	3	20	14	95	138	138	25
Mindanao	2024	3	20	15	97	138	138	25
Mindanao	2024	3	20	16	92	138	138	25
Mindanao	2024	3	20	17	87	138	138	25
Mindanao	2024	3	20	18	90	138	138	25
Mindanao	2024	3	20	19	92	138	138	25
Mindanao	2024	3	20	20	87	138	138	25
Mindanao	2024	3	20	21	84	138	138	25
Mindanao	2024	3	20	22	78	138	138	25
Mindanao	2024	3	20	23	73	138	138	25
Mindanao	2024	3	20	24	65	138	138	25
Mindanao	2024	3	21	1	62	138	138	25
Mindanao	2024	3	21	2	59	138	138	25
Mindanao	2024	3	21	3	57	138	138	25
Mindanao	2024	3	21	4	57	138	138	25
Mindanao	2024	3	21	5	60	138	138	25
Mindanao	2024	3	21	6	65	138	138	25
Mindanao	2024	3	21	7	62	138	138	25
Mindanao	2024	3	21	8	70	138	138	25
Mindanao	2024	3	21	9	80	138	138	25
Mindanao	2024	3	21	10	87	138	138	25
Mindanao	2024	3	21	11	90	138	138	25
Mindanao	2024	3	21	12	89	138	138	25
Mindanao	2024	3	21	13	91	138	138	25
Mindanao	2024	3	21	14	93	138	138	25
Mindanao	2024	3	21	15	91	138	138	25
Mindanao	2024	3	21	16	91	138	138	25
Mindanao	2024	3	21	17	84	138	138	25
Mindanao	2024	3	21	18	88	138	138	25
Mindanao	2024	3	21	19	89	138	138	25
Mindanao	2024	3	21	20	85	138	138	25
Mindanao	2024	3	21	21	81	138	138	25
Mindanao	2024	3	21	22	75	138	138	25
Mindanao	2024	3	21	23	70	138	138	25
Mindanao	2024	3	21	24	66	138	138	25
Mindanao	2024	3	22	1	62	138	138	25
Mindanao	2024	3	22	2	60	138	138	25
Mindanao	2024	3	22	3	57	138	138	25
Mindanao	2024	3	22	4	57	138	138	25
Mindanao	2024	3	22	5	60	138	138	25
Mindanao	2024	3	22	6	63	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	22	7	63	138	138	25
Mindanao	2024	3	22	8	69	138	138	25
Mindanao	2024	3	22	9	79	138	138	25
Mindanao	2024	3	22	10	84	138	138	25
Mindanao	2024	3	22	11	91	138	138	25
Mindanao	2024	3	22	12	89	138	138	25
Mindanao	2024	3	22	13	91	138	138	25
Mindanao	2024	3	22	14	94	138	138	25
Mindanao	2024	3	22	15	96	138	138	25
Mindanao	2024	3	22	16	93	138	138	25
Mindanao	2024	3	22	17	87	138	138	25
Mindanao	2024	3	22	18	90	138	138	25
Mindanao	2024	3	22	19	91	138	138	25
Mindanao	2024	3	22	20	88	138	138	25
Mindanao	2024	3	22	21	84	138	138	25
Mindanao	2024	3	22	22	78	138	138	25
Mindanao	2024	3	22	23	72	138	138	25
Mindanao	2024	3	22	24	68	138	138	25
Mindanao	2024	3	23	1	65	138	138	25
Mindanao	2024	3	23	2	62	138	138	25
Mindanao	2024	3	23	3	60	138	138	25
Mindanao	2024	3	23	4	59	138	138	25
Mindanao	2024	3	23	5	61	138	138	25
Mindanao	2024	3	23	6	65	138	138	25
Mindanao	2024	3	23	7	63	138	138	25
Mindanao	2024	3	23	8	65	138	138	25
Mindanao	2024	3	23	9	66	138	138	25
Mindanao	2024	3	23	10	71	138	138	25
Mindanao	2024	3	23	11	72	138	138	25
Mindanao	2024	3	23	12	71	138	138	25
Mindanao	2024	3	23	13	72	138	138	25
Mindanao	2024	3	23	14	76	138	138	25
Mindanao	2024	3	23	15	75	138	138	25
Mindanao	2024	3	23	16	75	138	138	25
Mindanao	2024	3	23	17	75	138	138	25
Mindanao	2024	3	23	18	82	138	138	25
Mindanao	2024	3	23	19	82	138	138	25
Mindanao	2024	3	23	20	77	138	138	25
Mindanao	2024	3	23	21	73	138	138	25
Mindanao	2024	3	23	22	68	138	138	25
Mindanao	2024	3	23	23	63	138	138	25
Mindanao	2024	3	23	24	59	138	138	25
Mindanao	2024	3	24	1	56	138	138	25
Mindanao	2024	3	24	2	53	138	138	25
Mindanao	2024	3	24	3	52	138	138	25
Mindanao	2024	3	24	4	52	138	138	25
Mindanao	2024	3	24	5	53	138	138	25
Mindanao	2024	3	24	6	54	138	138	25
Mindanao	2024	3	24	7	55	138	138	25
Mindanao	2024	3	24	8	54	138	138	25
Mindanao	2024	3	24	9	55	138	138	25
Mindanao	2024	3	24	10	58	138	138	25
Mindanao	2024	3	24	11	62	138	138	25
Mindanao	2024	3	24	12	63	138	138	25
Mindanao	2024	3	24	13	62	138	138	25
Mindanao	2024	3	24	14	61	138	138	25
Mindanao	2024	3	24	15	62	138	138	25
Mindanao	2024	3	24	16	62	138	138	25
Mindanao	2024	3	24	17	65	138	138	25
Mindanao	2024	3	24	18	72	138	138	25
Mindanao	2024	3	24	19	74	138	138	25
Mindanao	2024	3	24	20	71	138	138	25
Mindanao	2024	3	24	21	68	138	138	25
Mindanao	2024	3	24	22	63	138	138	25
Mindanao	2024	3	24	23	60	138	138	25
Mindanao	2024	3	24	24	54	138	138	25
Mindanao	2024	3	25	1	52	138	138	25
Mindanao	2024	3	25	2	50	138	138	25
Mindanao	2024	3	25	3	50	138	138	25
Mindanao	2024	3	25	4	50	138	138	25
Mindanao	2024	3	25	5	53	138	138	25
Mindanao	2024	3	25	6	58	138	138	25
Mindanao	2024	3	25	7	58	138	138	25
Mindanao	2024	3	25	8	65	138	138	25
Mindanao	2024	3	25	9	75	138	138	25
Mindanao	2024	3	25	10	79	138	138	25
Mindanao	2024	3	25	11	86	138	138	25
Mindanao	2024	3	25	12	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	25	13	85	138	138	25
Mindanao	2024	3	25	14	89	138	138	25
Mindanao	2024	3	25	15	88	138	138	25
Mindanao	2024	3	25	16	86	138	138	25
Mindanao	2024	3	25	17	83	138	138	25
Mindanao	2024	3	25	18	87	138	138	25
Mindanao	2024	3	25	19	85	138	138	25
Mindanao	2024	3	25	20	82	138	138	25
Mindanao	2024	3	25	21	78	138	138	25
Mindanao	2024	3	25	22	73	138	138	25
Mindanao	2024	3	25	23	68	138	138	25
Mindanao	2024	3	25	24	65	138	138	25
Mindanao	2024	3	26	1	59	138	138	25
Mindanao	2024	3	26	2	57	138	138	25
Mindanao	2024	3	26	3	56	138	138	25
Mindanao	2024	3	26	4	55	138	138	25
Mindanao	2024	3	26	5	59	138	138	25
Mindanao	2024	3	26	6	65	138	138	25
Mindanao	2024	3	26	7	63	138	138	25
Mindanao	2024	3	26	8	71	138	138	25
Mindanao	2024	3	26	9	81	138	138	25
Mindanao	2024	3	26	10	89	138	138	25
Mindanao	2024	3	26	11	92	138	138	25
Mindanao	2024	3	26	12	90	138	138	25
Mindanao	2024	3	26	13	94	138	138	25
Mindanao	2024	3	26	14	98	138	138	25
Mindanao	2024	3	26	15	96	138	138	25
Mindanao	2024	3	26	16	91	138	138	25
Mindanao	2024	3	26	17	85	138	138	25
Mindanao	2024	3	26	18	88	138	138	25
Mindanao	2024	3	26	19	90	138	138	25
Mindanao	2024	3	26	20	84	138	138	25
Mindanao	2024	3	26	21	79	138	138	25
Mindanao	2024	3	26	22	75	138	138	25
Mindanao	2024	3	26	23	70	138	138	25
Mindanao	2024	3	26	24	65	138	138	25
Mindanao	2024	3	27	1	62	138	138	25
Mindanao	2024	3	27	2	60	138	138	25
Mindanao	2024	3	27	3	57	138	138	25
Mindanao	2024	3	27	4	56	138	138	25
Mindanao	2024	3	27	5	60	138	138	25
Mindanao	2024	3	27	6	66	138	138	25
Mindanao	2024	3	27	7	61	138	138	25
Mindanao	2024	3	27	8	69	138	138	25
Mindanao	2024	3	27	9	79	138	138	25
Mindanao	2024	3	27	10	86	138	138	25
Mindanao	2024	3	27	11	95	138	138	25
Mindanao	2024	3	27	12	92	138	138	25
Mindanao	2024	3	27	13	94	138	138	25
Mindanao	2024	3	27	14	99	138	138	25
Mindanao	2024	3	27	15	96	138	138	25
Mindanao	2024	3	27	16	95	138	138	25
Mindanao	2024	3	27	17	83	138	138	25
Mindanao	2024	3	27	18	87	138	138	25
Mindanao	2024	3	27	19	88	138	138	25
Mindanao	2024	3	27	20	86	138	138	25
Mindanao	2024	3	27	21	83	138	138	25
Mindanao	2024	3	27	22	76	138	138	25
Mindanao	2024	3	27	23	73	138	138	25
Mindanao	2024	3	27	24	68	138	138	25
Mindanao	2024	3	28	1	57	138	138	25
Mindanao	2024	3	28	2	55	138	138	25
Mindanao	2024	3	28	3	54	138	138	25
Mindanao	2024	3	28	4	53	138	138	25
Mindanao	2024	3	28	5	53	138	138	25
Mindanao	2024	3	28	6	52	138	138	25
Mindanao	2024	3	28	7	53	138	138	25
Mindanao	2024	3	28	8	54	138	138	25
Mindanao	2024	3	28	9	57	138	138	25
Mindanao	2024	3	28	10	62	138	138	25
Mindanao	2024	3	28	11	66	138	138	25
Mindanao	2024	3	28	12	67	138	138	25
Mindanao	2024	3	28	13	68	138	138	25
Mindanao	2024	3	28	14	69	138	138	25
Mindanao	2024	3	28	15	69	138	138	25
Mindanao	2024	3	28	16	68	138	138	25
Mindanao	2024	3	28	17	67	138	138	25
Mindanao	2024	3	28	18	74	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	3	28	19	75	138	138	25
Mindanao	2024	3	28	20	74	138	138	25
Mindanao	2024	3	28	21	71	138	138	25
Mindanao	2024	3	28	22	67	138	138	25
Mindanao	2024	3	28	23	63	138	138	25
Mindanao	2024	3	28	24	57	138	138	25
Mindanao	2024	3	29	1	52	138	138	25
Mindanao	2024	3	29	2	51	138	138	25
Mindanao	2024	3	29	3	50	138	138	25
Mindanao	2024	3	29	4	49	138	138	25
Mindanao	2024	3	29	5	48	138	138	25
Mindanao	2024	3	29	6	49	138	138	25
Mindanao	2024	3	29	7	48	138	138	25
Mindanao	2024	3	29	8	48	138	138	25
Mindanao	2024	3	29	9	48	138	138	25
Mindanao	2024	3	29	10	49	138	138	25
Mindanao	2024	3	29	11	52	138	138	25
Mindanao	2024	3	29	12	53	138	138	25
Mindanao	2024	3	29	13	55	138	138	25
Mindanao	2024	3	29	14	56	138	138	25
Mindanao	2024	3	29	15	56	138	138	25
Mindanao	2024	3	29	16	56	138	138	25
Mindanao	2024	3	29	17	55	138	138	25
Mindanao	2024	3	29	18	65	138	138	25
Mindanao	2024	3	29	19	69	138	138	25
Mindanao	2024	3	29	20	68	138	138	25
Mindanao	2024	3	29	21	68	138	138	25
Mindanao	2024	3	29	22	64	138	138	25
Mindanao	2024	3	29	23	61	138	138	25
Mindanao	2024	3	29	24	56	138	138	25
Mindanao	2024	3	30	1	64	138	138	25
Mindanao	2024	3	30	2	61	138	138	25
Mindanao	2024	3	30	3	60	138	138	25
Mindanao	2024	3	30	4	58	138	138	25
Mindanao	2024	3	30	5	61	138	138	25
Mindanao	2024	3	30	6	62	138	138	25
Mindanao	2024	3	30	7	61	138	138	25
Mindanao	2024	3	30	8	64	138	138	25
Mindanao	2024	3	30	9	69	138	138	25
Mindanao	2024	3	30	10	75	138	138	25
Mindanao	2024	3	30	11	79	138	138	25
Mindanao	2024	3	30	12	75	138	138	25
Mindanao	2024	3	30	13	77	138	138	25
Mindanao	2024	3	30	14	79	138	138	25
Mindanao	2024	3	30	15	77	138	138	25
Mindanao	2024	3	30	16	76	138	138	25
Mindanao	2024	3	30	17	77	138	138	25
Mindanao	2024	3	30	18	84	138	138	25
Mindanao	2024	3	30	19	80	138	138	25
Mindanao	2024	3	30	20	77	138	138	25
Mindanao	2024	3	30	21	74	138	138	25
Mindanao	2024	3	30	22	68	138	138	25
Mindanao	2024	3	30	23	64	138	138	25
Mindanao	2024	3	30	24	61	138	138	25
Mindanao	2024	3	31	1	58	138	138	25
Mindanao	2024	3	31	2	56	138	138	25
Mindanao	2024	3	31	3	56	138	138	25
Mindanao	2024	3	31	4	54	138	138	25
Mindanao	2024	3	31	5	55	138	138	25
Mindanao	2024	3	31	6	55	138	138	25
Mindanao	2024	3	31	7	54	138	138	25
Mindanao	2024	3	31	8	54	138	138	25
Mindanao	2024	3	31	9	56	138	138	25
Mindanao	2024	3	31	10	60	138	138	25
Mindanao	2024	3	31	11	64	138	138	25
Mindanao	2024	3	31	12	66	138	138	25
Mindanao	2024	3	31	13	68	138	138	25
Mindanao	2024	3	31	14	71	138	138	25
Mindanao	2024	3	31	15	71	138	138	25
Mindanao	2024	3	31	16	71	138	138	25
Mindanao	2024	3	31	17	73	138	138	25
Mindanao	2024	3	31	18	80	138	138	25
Mindanao	2024	3	31	19	80	138	138	25
Mindanao	2024	3	31	20	78	138	138	25
Mindanao	2024	3	31	21	75	138	138	25
Mindanao	2024	3	31	22	71	138	138	25
Mindanao	2024	3	31	23	65	138	138	25
Mindanao	2024	3	31	24	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	1	1	59	138	138	25
Mindanao	2024	4	1	2	56	138	138	25
Mindanao	2024	4	1	3	57	138	138	25
Mindanao	2024	4	1	4	55	138	138	25
Mindanao	2024	4	1	5	57	138	138	25
Mindanao	2024	4	1	6	61	138	138	25
Mindanao	2024	4	1	7	59	138	138	25
Mindanao	2024	4	1	8	68	138	138	25
Mindanao	2024	4	1	9	78	138	138	25
Mindanao	2024	4	1	10	87	138	138	25
Mindanao	2024	4	1	11	91	138	138	25
Mindanao	2024	4	1	12	91	138	138	25
Mindanao	2024	4	1	13	88	138	138	25
Mindanao	2024	4	1	14	98	138	138	25
Mindanao	2024	4	1	15	96	138	138	25
Mindanao	2024	4	1	16	94	138	138	25
Mindanao	2024	4	1	17	88	138	138	25
Mindanao	2024	4	1	18	90	138	138	25
Mindanao	2024	4	1	19	88	138	138	25
Mindanao	2024	4	1	20	86	138	138	25
Mindanao	2024	4	1	21	83	138	138	25
Mindanao	2024	4	1	22	77	138	138	25
Mindanao	2024	4	1	23	71	138	138	25
Mindanao	2024	4	1	24	66	138	138	25
Mindanao	2024	4	2	1	64	138	138	25
Mindanao	2024	4	2	2	62	138	138	25
Mindanao	2024	4	2	3	62	138	138	25
Mindanao	2024	4	2	4	58	138	138	25
Mindanao	2024	4	2	5	62	138	138	25
Mindanao	2024	4	2	6	65	138	138	25
Mindanao	2024	4	2	7	64	138	138	25
Mindanao	2024	4	2	8	70	138	138	25
Mindanao	2024	4	2	9	79	138	138	25
Mindanao	2024	4	2	10	82	138	138	25
Mindanao	2024	4	2	11	86	138	138	25
Mindanao	2024	4	2	12	81	138	138	25
Mindanao	2024	4	2	13	80	138	138	25
Mindanao	2024	4	2	14	84	138	138	25
Mindanao	2024	4	2	15	84	138	138	25
Mindanao	2024	4	2	16	85	138	138	25
Mindanao	2024	4	2	17	85	138	138	25
Mindanao	2024	4	2	18	87	138	138	25
Mindanao	2024	4	2	19	81	138	138	25
Mindanao	2024	4	2	20	78	138	138	25
Mindanao	2024	4	2	21	73	138	138	25
Mindanao	2024	4	2	22	65	138	138	25
Mindanao	2024	4	2	23	62	138	138	25
Mindanao	2024	4	2	24	57	138	138	25
Mindanao	2024	4	3	1	55	138	138	25
Mindanao	2024	4	3	2	54	138	138	25
Mindanao	2024	4	3	3	54	138	138	25
Mindanao	2024	4	3	4	52	138	138	25
Mindanao	2024	4	3	5	54	138	138	25
Mindanao	2024	4	3	6	60	138	138	25
Mindanao	2024	4	3	7	58	138	138	25
Mindanao	2024	4	3	8	64	138	138	25
Mindanao	2024	4	3	9	72	138	138	25
Mindanao	2024	4	3	10	77	138	138	25
Mindanao	2024	4	3	11	81	138	138	25
Mindanao	2024	4	3	12	79	138	138	25
Mindanao	2024	4	3	13	80	138	138	25
Mindanao	2024	4	3	14	82	138	138	25
Mindanao	2024	4	3	15	83	138	138	25
Mindanao	2024	4	3	16	83	138	138	25
Mindanao	2024	4	3	17	80	138	138	25
Mindanao	2024	4	3	18	84	138	138	25
Mindanao	2024	4	3	19	83	138	138	25
Mindanao	2024	4	3	20	77	138	138	25
Mindanao	2024	4	3	21	74	138	138	25
Mindanao	2024	4	3	22	68	138	138	25
Mindanao	2024	4	3	23	64	138	138	25
Mindanao	2024	4	3	24	59	138	138	25
Mindanao	2024	4	4	1	57	138	138	25
Mindanao	2024	4	4	2	56	138	138	25
Mindanao	2024	4	4	3	56	138	138	25
Mindanao	2024	4	4	4	54	138	138	25
Mindanao	2024	4	4	5	58	138	138	25
Mindanao	2024	4	4	6	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	4	7	59	138	138	25
Mindanao	2024	4	4	8	67	138	138	25
Mindanao	2024	4	4	9	74	138	138	25
Mindanao	2024	4	4	10	81	138	138	25
Mindanao	2024	4	4	11	85	138	138	25
Mindanao	2024	4	4	12	84	138	138	25
Mindanao	2024	4	4	13	81	138	138	25
Mindanao	2024	4	4	14	85	138	138	25
Mindanao	2024	4	4	15	84	138	138	25
Mindanao	2024	4	4	16	84	138	138	25
Mindanao	2024	4	4	17	81	138	138	25
Mindanao	2024	4	4	18	84	138	138	25
Mindanao	2024	4	4	19	83	138	138	25
Mindanao	2024	4	4	20	79	138	138	25
Mindanao	2024	4	4	21	77	138	138	25
Mindanao	2024	4	4	22	71	138	138	25
Mindanao	2024	4	4	23	67	138	138	25
Mindanao	2024	4	4	24	61	138	138	25
Mindanao	2024	4	5	1	59	138	138	25
Mindanao	2024	4	5	2	57	138	138	25
Mindanao	2024	4	5	3	56	138	138	25
Mindanao	2024	4	5	4	56	138	138	25
Mindanao	2024	4	5	5	58	138	138	25
Mindanao	2024	4	5	6	61	138	138	25
Mindanao	2024	4	5	7	61	138	138	25
Mindanao	2024	4	5	8	67	138	138	25
Mindanao	2024	4	5	9	77	138	138	25
Mindanao	2024	4	5	10	83	138	138	25
Mindanao	2024	4	5	11	87	138	138	25
Mindanao	2024	4	5	12	85	138	138	25
Mindanao	2024	4	5	13	84	138	138	25
Mindanao	2024	4	5	14	89	138	138	25
Mindanao	2024	4	5	15	88	138	138	25
Mindanao	2024	4	5	16	86	138	138	25
Mindanao	2024	4	5	17	84	138	138	25
Mindanao	2024	4	5	18	88	138	138	25
Mindanao	2024	4	5	19	86	138	138	25
Mindanao	2024	4	5	20	82	138	138	25
Mindanao	2024	4	5	21	78	138	138	25
Mindanao	2024	4	5	22	72	138	138	25
Mindanao	2024	4	5	23	67	138	138	25
Mindanao	2024	4	5	24	63	138	138	25
Mindanao	2024	4	6	1	64	138	138	25
Mindanao	2024	4	6	2	61	138	138	25
Mindanao	2024	4	6	3	60	138	138	25
Mindanao	2024	4	6	4	58	138	138	25
Mindanao	2024	4	6	5	61	138	138	25
Mindanao	2024	4	6	6	62	138	138	25
Mindanao	2024	4	6	7	61	138	138	25
Mindanao	2024	4	6	8	64	138	138	25
Mindanao	2024	4	6	9	69	138	138	25
Mindanao	2024	4	6	10	75	138	138	25
Mindanao	2024	4	6	11	79	138	138	25
Mindanao	2024	4	6	12	75	138	138	25
Mindanao	2024	4	6	13	77	138	138	25
Mindanao	2024	4	6	14	79	138	138	25
Mindanao	2024	4	6	15	77	138	138	25
Mindanao	2024	4	6	16	76	138	138	25
Mindanao	2024	4	6	17	77	138	138	25
Mindanao	2024	4	6	18	84	138	138	25
Mindanao	2024	4	6	19	80	138	138	25
Mindanao	2024	4	6	20	77	138	138	25
Mindanao	2024	4	6	21	74	138	138	25
Mindanao	2024	4	6	22	68	138	138	25
Mindanao	2024	4	6	23	64	138	138	25
Mindanao	2024	4	6	24	61	138	138	25
Mindanao	2024	4	7	1	56	138	138	25
Mindanao	2024	4	7	2	55	138	138	25
Mindanao	2024	4	7	3	54	138	138	25
Mindanao	2024	4	7	4	53	138	138	25
Mindanao	2024	4	7	5	52	138	138	25
Mindanao	2024	4	7	6	53	138	138	25
Mindanao	2024	4	7	7	55	138	138	25
Mindanao	2024	4	7	8	57	138	138	25
Mindanao	2024	4	7	9	59	138	138	25
Mindanao	2024	4	7	10	61	138	138	25
Mindanao	2024	4	7	11	66	138	138	25
Mindanao	2024	4	7	12	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	7	13	64	138	138	25
Mindanao	2024	4	7	14	65	138	138	25
Mindanao	2024	4	7	15	66	138	138	25
Mindanao	2024	4	7	16	66	138	138	25
Mindanao	2024	4	7	17	69	138	138	25
Mindanao	2024	4	7	18	78	138	138	25
Mindanao	2024	4	7	19	79	138	138	25
Mindanao	2024	4	7	20	76	138	138	25
Mindanao	2024	4	7	21	74	138	138	25
Mindanao	2024	4	7	22	67	138	138	25
Mindanao	2024	4	7	23	63	138	138	25
Mindanao	2024	4	7	24	58	138	138	25
Mindanao	2024	4	8	1	53	138	138	25
Mindanao	2024	4	8	2	53	138	138	25
Mindanao	2024	4	8	3	53	138	138	25
Mindanao	2024	4	8	4	52	138	138	25
Mindanao	2024	4	8	5	54	138	138	25
Mindanao	2024	4	8	6	59	138	138	25
Mindanao	2024	4	8	7	56	138	138	25
Mindanao	2024	4	8	8	67	138	138	25
Mindanao	2024	4	8	9	77	138	138	25
Mindanao	2024	4	8	10	82	138	138	25
Mindanao	2024	4	8	11	81	138	138	25
Mindanao	2024	4	8	12	82	138	138	25
Mindanao	2024	4	8	13	81	138	138	25
Mindanao	2024	4	8	14	85	138	138	25
Mindanao	2024	4	8	15	88	138	138	25
Mindanao	2024	4	8	16	86	138	138	25
Mindanao	2024	4	8	17	84	138	138	25
Mindanao	2024	4	8	18	89	138	138	25
Mindanao	2024	4	8	19	84	138	138	25
Mindanao	2024	4	8	20	81	138	138	25
Mindanao	2024	4	8	21	79	138	138	25
Mindanao	2024	4	8	22	72	138	138	25
Mindanao	2024	4	8	23	66	138	138	25
Mindanao	2024	4	8	24	60	138	138	25
Mindanao	2024	4	9	1	61	138	138	25
Mindanao	2024	4	9	2	58	138	138	25
Mindanao	2024	4	9	3	56	138	138	25
Mindanao	2024	4	9	4	55	138	138	25
Mindanao	2024	4	9	5	57	138	138	25
Mindanao	2024	4	9	6	59	138	138	25
Mindanao	2024	4	9	7	58	138	138	25
Mindanao	2024	4	9	8	58	138	138	25
Mindanao	2024	4	9	9	59	138	138	25
Mindanao	2024	4	9	10	64	138	138	25
Mindanao	2024	4	9	11	67	138	138	25
Mindanao	2024	4	9	12	67	138	138	25
Mindanao	2024	4	9	13	65	138	138	25
Mindanao	2024	4	9	14	67	138	138	25
Mindanao	2024	4	9	15	69	138	138	25
Mindanao	2024	4	9	16	70	138	138	25
Mindanao	2024	4	9	17	69	138	138	25
Mindanao	2024	4	9	18	81	138	138	25
Mindanao	2024	4	9	19	78	138	138	25
Mindanao	2024	4	9	20	75	138	138	25
Mindanao	2024	4	9	21	71	138	138	25
Mindanao	2024	4	9	22	67	138	138	25
Mindanao	2024	4	9	23	62	138	138	25
Mindanao	2024	4	9	24	58	138	138	25
Mindanao	2024	4	10	1	60	138	138	25
Mindanao	2024	4	10	2	58	138	138	25
Mindanao	2024	4	10	3	58	138	138	25
Mindanao	2024	4	10	4	56	138	138	25
Mindanao	2024	4	10	5	59	138	138	25
Mindanao	2024	4	10	6	62	138	138	25
Mindanao	2024	4	10	7	61	138	138	25
Mindanao	2024	4	10	8	67	138	138	25
Mindanao	2024	4	10	9	74	138	138	25
Mindanao	2024	4	10	10	82	138	138	25
Mindanao	2024	4	10	11	86	138	138	25
Mindanao	2024	4	10	12	83	138	138	25
Mindanao	2024	4	10	13	84	138	138	25
Mindanao	2024	4	10	14	85	138	138	25
Mindanao	2024	4	10	15	85	138	138	25
Mindanao	2024	4	10	16	81	138	138	25
Mindanao	2024	4	10	17	77	138	138	25
Mindanao	2024	4	10	18	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	10	19	86	138	138	25
Mindanao	2024	4	10	20	82	138	138	25
Mindanao	2024	4	10	21	79	138	138	25
Mindanao	2024	4	10	22	75	138	138	25
Mindanao	2024	4	10	23	69	138	138	25
Mindanao	2024	4	10	24	59	138	138	25
Mindanao	2024	4	11	1	57	138	138	25
Mindanao	2024	4	11	2	56	138	138	25
Mindanao	2024	4	11	3	56	138	138	25
Mindanao	2024	4	11	4	54	138	138	25
Mindanao	2024	4	11	5	58	138	138	25
Mindanao	2024	4	11	6	62	138	138	25
Mindanao	2024	4	11	7	59	138	138	25
Mindanao	2024	4	11	8	67	138	138	25
Mindanao	2024	4	11	9	74	138	138	25
Mindanao	2024	4	11	10	81	138	138	25
Mindanao	2024	4	11	11	85	138	138	25
Mindanao	2024	4	11	12	84	138	138	25
Mindanao	2024	4	11	13	81	138	138	25
Mindanao	2024	4	11	14	85	138	138	25
Mindanao	2024	4	11	15	84	138	138	25
Mindanao	2024	4	11	16	84	138	138	25
Mindanao	2024	4	11	17	81	138	138	25
Mindanao	2024	4	11	18	84	138	138	25
Mindanao	2024	4	11	19	83	138	138	25
Mindanao	2024	4	11	20	79	138	138	25
Mindanao	2024	4	11	21	77	138	138	25
Mindanao	2024	4	11	22	71	138	138	25
Mindanao	2024	4	11	23	67	138	138	25
Mindanao	2024	4	11	24	61	138	138	25
Mindanao	2024	4	12	1	59	138	138	25
Mindanao	2024	4	12	2	57	138	138	25
Mindanao	2024	4	12	3	56	138	138	25
Mindanao	2024	4	12	4	56	138	138	25
Mindanao	2024	4	12	5	58	138	138	25
Mindanao	2024	4	12	6	61	138	138	25
Mindanao	2024	4	12	7	61	138	138	25
Mindanao	2024	4	12	8	67	138	138	25
Mindanao	2024	4	12	9	77	138	138	25
Mindanao	2024	4	12	10	83	138	138	25
Mindanao	2024	4	12	11	87	138	138	25
Mindanao	2024	4	12	12	85	138	138	25
Mindanao	2024	4	12	13	84	138	138	25
Mindanao	2024	4	12	14	89	138	138	25
Mindanao	2024	4	12	15	88	138	138	25
Mindanao	2024	4	12	16	86	138	138	25
Mindanao	2024	4	12	17	84	138	138	25
Mindanao	2024	4	12	18	88	138	138	25
Mindanao	2024	4	12	19	86	138	138	25
Mindanao	2024	4	12	20	82	138	138	25
Mindanao	2024	4	12	21	78	138	138	25
Mindanao	2024	4	12	22	72	138	138	25
Mindanao	2024	4	12	23	67	138	138	25
Mindanao	2024	4	12	24	63	138	138	25
Mindanao	2024	4	13	1	51	138	138	25
Mindanao	2024	4	13	2	50	138	138	25
Mindanao	2024	4	13	3	49	138	138	25
Mindanao	2024	4	13	4	48	138	138	25
Mindanao	2024	4	13	5	49	138	138	25
Mindanao	2024	4	13	6	49	138	138	25
Mindanao	2024	4	13	7	49	138	138	25
Mindanao	2024	4	13	8	53	138	138	25
Mindanao	2024	4	13	9	58	138	138	25
Mindanao	2024	4	13	10	63	138	138	25
Mindanao	2024	4	13	11	68	138	138	25
Mindanao	2024	4	13	12	70	138	138	25
Mindanao	2024	4	13	13	71	138	138	25
Mindanao	2024	4	13	14	73	138	138	25
Mindanao	2024	4	13	15	72	138	138	25
Mindanao	2024	4	13	16	72	138	138	25
Mindanao	2024	4	13	17	71	138	138	25
Mindanao	2024	4	13	18	78	138	138	25
Mindanao	2024	4	13	19	78	138	138	25
Mindanao	2024	4	13	20	76	138	138	25
Mindanao	2024	4	13	21	75	138	138	25
Mindanao	2024	4	13	22	71	138	138	25
Mindanao	2024	4	13	23	67	138	138	25
Mindanao	2024	4	13	24	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	14	1	54	138	138	25
Mindanao	2024	4	14	2	54	138	138	25
Mindanao	2024	4	14	3	53	138	138	25
Mindanao	2024	4	14	4	51	138	138	25
Mindanao	2024	4	14	5	51	138	138	25
Mindanao	2024	4	14	6	53	138	138	25
Mindanao	2024	4	14	7	52	138	138	25
Mindanao	2024	4	14	8	54	138	138	25
Mindanao	2024	4	14	9	57	138	138	25
Mindanao	2024	4	14	10	63	138	138	25
Mindanao	2024	4	14	11	66	138	138	25
Mindanao	2024	4	14	12	67	138	138	25
Mindanao	2024	4	14	13	68	138	138	25
Mindanao	2024	4	14	14	71	138	138	25
Mindanao	2024	4	14	15	69	138	138	25
Mindanao	2024	4	14	16	70	138	138	25
Mindanao	2024	4	14	17	71	138	138	25
Mindanao	2024	4	14	18	75	138	138	25
Mindanao	2024	4	14	19	77	138	138	25
Mindanao	2024	4	14	20	76	138	138	25
Mindanao	2024	4	14	21	76	138	138	25
Mindanao	2024	4	14	22	71	138	138	25
Mindanao	2024	4	14	23	67	138	138	25
Mindanao	2024	4	14	24	61	138	138	25
Mindanao	2024	4	15	1	56	138	138	25
Mindanao	2024	4	15	2	55	138	138	25
Mindanao	2024	4	15	3	54	138	138	25
Mindanao	2024	4	15	4	54	138	138	25
Mindanao	2024	4	15	5	57	138	138	25
Mindanao	2024	4	15	6	59	138	138	25
Mindanao	2024	4	15	7	58	138	138	25
Mindanao	2024	4	15	8	68	138	138	25
Mindanao	2024	4	15	9	78	138	138	25
Mindanao	2024	4	15	10	87	138	138	25
Mindanao	2024	4	15	11	92	138	138	25
Mindanao	2024	4	15	12	90	138	138	25
Mindanao	2024	4	15	13	91	138	138	25
Mindanao	2024	4	15	14	92	138	138	25
Mindanao	2024	4	15	15	93	138	138	25
Mindanao	2024	4	15	16	94	138	138	25
Mindanao	2024	4	15	17	89	138	138	25
Mindanao	2024	4	15	18	89	138	138	25
Mindanao	2024	4	15	19	92	138	138	25
Mindanao	2024	4	15	20	89	138	138	25
Mindanao	2024	4	15	21	85	138	138	25
Mindanao	2024	4	15	22	77	138	138	25
Mindanao	2024	4	15	23	75	138	138	25
Mindanao	2024	4	15	24	69	138	138	25
Mindanao	2024	4	16	1	64	138	138	25
Mindanao	2024	4	16	2	62	138	138	25
Mindanao	2024	4	16	3	61	138	138	25
Mindanao	2024	4	16	4	59	138	138	25
Mindanao	2024	4	16	5	60	138	138	25
Mindanao	2024	4	16	6	63	138	138	25
Mindanao	2024	4	16	7	61	138	138	25
Mindanao	2024	4	16	8	71	138	138	25
Mindanao	2024	4	16	9	82	138	138	25
Mindanao	2024	4	16	10	89	138	138	25
Mindanao	2024	4	16	11	93	138	138	25
Mindanao	2024	4	16	12	90	138	138	25
Mindanao	2024	4	16	13	91	138	138	25
Mindanao	2024	4	16	14	95	138	138	25
Mindanao	2024	4	16	15	95	138	138	25
Mindanao	2024	4	16	16	92	138	138	25
Mindanao	2024	4	16	17	88	138	138	25
Mindanao	2024	4	16	18	90	138	138	25
Mindanao	2024	4	16	19	89	138	138	25
Mindanao	2024	4	16	20	86	138	138	25
Mindanao	2024	4	16	21	85	138	138	25
Mindanao	2024	4	16	22	79	138	138	25
Mindanao	2024	4	16	23	73	138	138	25
Mindanao	2024	4	16	24	68	138	138	25
Mindanao	2024	4	17	1	64	138	138	25
Mindanao	2024	4	17	2	62	138	138	25
Mindanao	2024	4	17	3	61	138	138	25
Mindanao	2024	4	17	4	59	138	138	25
Mindanao	2024	4	17	5	62	138	138	25
Mindanao	2024	4	17	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	17	7	64	138	138	25
Mindanao	2024	4	17	8	71	138	138	25
Mindanao	2024	4	17	9	82	138	138	25
Mindanao	2024	4	17	10	89	138	138	25
Mindanao	2024	4	17	11	95	138	138	25
Mindanao	2024	4	17	12	94	138	138	25
Mindanao	2024	4	17	13	95	138	138	25
Mindanao	2024	4	17	14	96	138	138	25
Mindanao	2024	4	17	15	98	138	138	25
Mindanao	2024	4	17	16	97	138	138	25
Mindanao	2024	4	17	17	87	138	138	25
Mindanao	2024	4	17	18	92	138	138	25
Mindanao	2024	4	17	19	92	138	138	25
Mindanao	2024	4	17	20	91	138	138	25
Mindanao	2024	4	17	21	87	138	138	25
Mindanao	2024	4	17	22	81	138	138	25
Mindanao	2024	4	17	23	76	138	138	25
Mindanao	2024	4	17	24	71	138	138	25
Mindanao	2024	4	18	1	67	138	138	25
Mindanao	2024	4	18	2	65	138	138	25
Mindanao	2024	4	18	3	62	138	138	25
Mindanao	2024	4	18	4	61	138	138	25
Mindanao	2024	4	18	5	63	138	138	25
Mindanao	2024	4	18	6	65	138	138	25
Mindanao	2024	4	18	7	63	138	138	25
Mindanao	2024	4	18	8	72	138	138	25
Mindanao	2024	4	18	9	83	138	138	25
Mindanao	2024	4	18	10	90	138	138	25
Mindanao	2024	4	18	11	97	138	138	25
Mindanao	2024	4	18	12	96	138	138	25
Mindanao	2024	4	18	13	98	138	138	25
Mindanao	2024	4	18	14	100	138	138	25
Mindanao	2024	4	18	15	97	138	138	25
Mindanao	2024	4	18	16	96	138	138	25
Mindanao	2024	4	18	17	90	138	138	25
Mindanao	2024	4	18	18	93	138	138	25
Mindanao	2024	4	18	19	92	138	138	25
Mindanao	2024	4	18	20	88	138	138	25
Mindanao	2024	4	18	21	86	138	138	25
Mindanao	2024	4	18	22	78	138	138	25
Mindanao	2024	4	18	23	75	138	138	25
Mindanao	2024	4	18	24	71	138	138	25
Mindanao	2024	4	19	1	67	138	138	25
Mindanao	2024	4	19	2	64	138	138	25
Mindanao	2024	4	19	3	63	138	138	25
Mindanao	2024	4	19	4	61	138	138	25
Mindanao	2024	4	19	5	64	138	138	25
Mindanao	2024	4	19	6	66	138	138	25
Mindanao	2024	4	19	7	62	138	138	25
Mindanao	2024	4	19	8	72	138	138	25
Mindanao	2024	4	19	9	83	138	138	25
Mindanao	2024	4	19	10	91	138	138	25
Mindanao	2024	4	19	11	96	138	138	25
Mindanao	2024	4	19	12	94	138	138	25
Mindanao	2024	4	19	13	95	138	138	25
Mindanao	2024	4	19	14	99	138	138	25
Mindanao	2024	4	19	15	98	138	138	25
Mindanao	2024	4	19	16	96	138	138	25
Mindanao	2024	4	19	17	91	138	138	25
Mindanao	2024	4	19	18	95	138	138	25
Mindanao	2024	4	19	19	93	138	138	25
Mindanao	2024	4	19	20	92	138	138	25
Mindanao	2024	4	19	21	88	138	138	25
Mindanao	2024	4	19	22	83	138	138	25
Mindanao	2024	4	19	23	77	138	138	25
Mindanao	2024	4	19	24	72	138	138	25
Mindanao	2024	4	20	1	67	138	138	25
Mindanao	2024	4	20	2	64	138	138	25
Mindanao	2024	4	20	3	64	138	138	25
Mindanao	2024	4	20	4	60	138	138	25
Mindanao	2024	4	20	5	62	138	138	25
Mindanao	2024	4	20	6	60	138	138	25
Mindanao	2024	4	20	7	58	138	138	25
Mindanao	2024	4	20	8	62	138	138	25
Mindanao	2024	4	20	9	66	138	138	25
Mindanao	2024	4	20	10	69	138	138	25
Mindanao	2024	4	20	11	71	138	138	25
Mindanao	2024	4	20	12	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	20	13	74	138	138	25
Mindanao	2024	4	20	14	78	138	138	25
Mindanao	2024	4	20	15	79	138	138	25
Mindanao	2024	4	20	16	79	138	138	25
Mindanao	2024	4	20	17	76	138	138	25
Mindanao	2024	4	20	18	89	138	138	25
Mindanao	2024	4	20	19	89	138	138	25
Mindanao	2024	4	20	20	88	138	138	25
Mindanao	2024	4	20	21	84	138	138	25
Mindanao	2024	4	20	22	78	138	138	25
Mindanao	2024	4	20	23	73	138	138	25
Mindanao	2024	4	20	24	70	138	138	25
Mindanao	2024	4	21	1	64	138	138	25
Mindanao	2024	4	21	2	62	138	138	25
Mindanao	2024	4	21	3	60	138	138	25
Mindanao	2024	4	21	4	56	138	138	25
Mindanao	2024	4	21	5	59	138	138	25
Mindanao	2024	4	21	6	58	138	138	25
Mindanao	2024	4	21	7	56	138	138	25
Mindanao	2024	4	21	8	58	138	138	25
Mindanao	2024	4	21	9	62	138	138	25
Mindanao	2024	4	21	10	67	138	138	25
Mindanao	2024	4	21	11	69	138	138	25
Mindanao	2024	4	21	12	71	138	138	25
Mindanao	2024	4	21	13	73	138	138	25
Mindanao	2024	4	21	14	75	138	138	25
Mindanao	2024	4	21	15	75	138	138	25
Mindanao	2024	4	21	16	70	138	138	25
Mindanao	2024	4	21	17	72	138	138	25
Mindanao	2024	4	21	18	82	138	138	25
Mindanao	2024	4	21	19	85	138	138	25
Mindanao	2024	4	21	20	84	138	138	25
Mindanao	2024	4	21	21	81	138	138	25
Mindanao	2024	4	21	22	77	138	138	25
Mindanao	2024	4	21	23	72	138	138	25
Mindanao	2024	4	21	24	69	138	138	25
Mindanao	2024	4	22	1	63	138	138	25
Mindanao	2024	4	22	2	60	138	138	25
Mindanao	2024	4	22	3	59	138	138	25
Mindanao	2024	4	22	4	57	138	138	25
Mindanao	2024	4	22	5	60	138	138	25
Mindanao	2024	4	22	6	62	138	138	25
Mindanao	2024	4	22	7	62	138	138	25
Mindanao	2024	4	22	8	72	138	138	25
Mindanao	2024	4	22	9	82	138	138	25
Mindanao	2024	4	22	10	91	138	138	25
Mindanao	2024	4	22	11	97	138	138	25
Mindanao	2024	4	22	12	97	138	138	25
Mindanao	2024	4	22	13	98	138	138	25
Mindanao	2024	4	22	14	101	138	138	25
Mindanao	2024	4	22	15	99	138	138	25
Mindanao	2024	4	22	16	98	138	138	25
Mindanao	2024	4	22	17	94	138	138	25
Mindanao	2024	4	22	18	96	138	138	25
Mindanao	2024	4	22	19	94	138	138	25
Mindanao	2024	4	22	20	93	138	138	25
Mindanao	2024	4	22	21	89	138	138	25
Mindanao	2024	4	22	22	84	138	138	25
Mindanao	2024	4	22	23	79	138	138	25
Mindanao	2024	4	22	24	73	138	138	25
Mindanao	2024	4	23	1	70	138	138	25
Mindanao	2024	4	23	2	66	138	138	25
Mindanao	2024	4	23	3	65	138	138	25
Mindanao	2024	4	23	4	63	138	138	25
Mindanao	2024	4	23	5	65	138	138	25
Mindanao	2024	4	23	6	68	138	138	25
Mindanao	2024	4	23	7	64	138	138	25
Mindanao	2024	4	23	8	72	138	138	25
Mindanao	2024	4	23	9	84	138	138	25
Mindanao	2024	4	23	10	91	138	138	25
Mindanao	2024	4	23	11	96	138	138	25
Mindanao	2024	4	23	12	95	138	138	25
Mindanao	2024	4	23	13	96	138	138	25
Mindanao	2024	4	23	14	98	138	138	25
Mindanao	2024	4	23	15	95	138	138	25
Mindanao	2024	4	23	16	93	138	138	25
Mindanao	2024	4	23	17	89	138	138	25
Mindanao	2024	4	23	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	23	19	90	138	138	25
Mindanao	2024	4	23	20	85	138	138	25
Mindanao	2024	4	23	21	84	138	138	25
Mindanao	2024	4	23	22	78	138	138	25
Mindanao	2024	4	23	23	74	138	138	25
Mindanao	2024	4	23	24	70	138	138	25
Mindanao	2024	4	24	1	66	138	138	25
Mindanao	2024	4	24	2	64	138	138	25
Mindanao	2024	4	24	3	61	138	138	25
Mindanao	2024	4	24	4	60	138	138	25
Mindanao	2024	4	24	5	62	138	138	25
Mindanao	2024	4	24	6	66	138	138	25
Mindanao	2024	4	24	7	64	138	138	25
Mindanao	2024	4	24	8	71	138	138	25
Mindanao	2024	4	24	9	81	138	138	25
Mindanao	2024	4	24	10	89	138	138	25
Mindanao	2024	4	24	11	93	138	138	25
Mindanao	2024	4	24	12	92	138	138	25
Mindanao	2024	4	24	13	92	138	138	25
Mindanao	2024	4	24	14	97	138	138	25
Mindanao	2024	4	24	15	95	138	138	25
Mindanao	2024	4	24	16	94	138	138	25
Mindanao	2024	4	24	17	88	138	138	25
Mindanao	2024	4	24	18	93	138	138	25
Mindanao	2024	4	24	19	90	138	138	25
Mindanao	2024	4	24	20	82	138	138	25
Mindanao	2024	4	24	21	82	138	138	25
Mindanao	2024	4	24	22	77	138	138	25
Mindanao	2024	4	24	23	72	138	138	25
Mindanao	2024	4	24	24	68	138	138	25
Mindanao	2024	4	25	1	65	138	138	25
Mindanao	2024	4	25	2	64	138	138	25
Mindanao	2024	4	25	3	61	138	138	25
Mindanao	2024	4	25	4	58	138	138	25
Mindanao	2024	4	25	5	60	138	138	25
Mindanao	2024	4	25	6	64	138	138	25
Mindanao	2024	4	25	7	61	138	138	25
Mindanao	2024	4	25	8	68	138	138	25
Mindanao	2024	4	25	9	78	138	138	25
Mindanao	2024	4	25	10	82	138	138	25
Mindanao	2024	4	25	11	90	138	138	25
Mindanao	2024	4	25	12	90	138	138	25
Mindanao	2024	4	25	13	91	138	138	25
Mindanao	2024	4	25	14	94	138	138	25
Mindanao	2024	4	25	15	95	138	138	25
Mindanao	2024	4	25	16	90	138	138	25
Mindanao	2024	4	25	17	89	138	138	25
Mindanao	2024	4	25	18	92	138	138	25
Mindanao	2024	4	25	19	90	138	138	25
Mindanao	2024	4	25	20	84	138	138	25
Mindanao	2024	4	25	21	80	138	138	25
Mindanao	2024	4	25	22	77	138	138	25
Mindanao	2024	4	25	23	73	138	138	25
Mindanao	2024	4	25	24	70	138	138	25
Mindanao	2024	4	26	1	67	138	138	25
Mindanao	2024	4	26	2	64	138	138	25
Mindanao	2024	4	26	3	63	138	138	25
Mindanao	2024	4	26	4	61	138	138	25
Mindanao	2024	4	26	5	61	138	138	25
Mindanao	2024	4	26	6	64	138	138	25
Mindanao	2024	4	26	7	63	138	138	25
Mindanao	2024	4	26	8	69	138	138	25
Mindanao	2024	4	26	9	81	138	138	25
Mindanao	2024	4	26	10	88	138	138	25
Mindanao	2024	4	26	11	89	138	138	25
Mindanao	2024	4	26	12	92	138	138	25
Mindanao	2024	4	26	13	92	138	138	25
Mindanao	2024	4	26	14	99	138	138	25
Mindanao	2024	4	26	15	97	138	138	25
Mindanao	2024	4	26	16	92	138	138	25
Mindanao	2024	4	26	17	90	138	138	25
Mindanao	2024	4	26	18	92	138	138	25
Mindanao	2024	4	26	19	90	138	138	25
Mindanao	2024	4	26	20	86	138	138	25
Mindanao	2024	4	26	21	84	138	138	25
Mindanao	2024	4	26	22	78	138	138	25
Mindanao	2024	4	26	23	73	138	138	25
Mindanao	2024	4	26	24	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	27	1	65	138	138	25
Mindanao	2024	4	27	2	63	138	138	25
Mindanao	2024	4	27	3	61	138	138	25
Mindanao	2024	4	27	4	59	138	138	25
Mindanao	2024	4	27	5	61	138	138	25
Mindanao	2024	4	27	6	63	138	138	25
Mindanao	2024	4	27	7	62	138	138	25
Mindanao	2024	4	27	8	66	138	138	25
Mindanao	2024	4	27	9	72	138	138	25
Mindanao	2024	4	27	10	77	138	138	25
Mindanao	2024	4	27	11	80	138	138	25
Mindanao	2024	4	27	12	76	138	138	25
Mindanao	2024	4	27	13	77	138	138	25
Mindanao	2024	4	27	14	80	138	138	25
Mindanao	2024	4	27	15	77	138	138	25
Mindanao	2024	4	27	16	78	138	138	25
Mindanao	2024	4	27	17	78	138	138	25
Mindanao	2024	4	27	18	84	138	138	25
Mindanao	2024	4	27	19	83	138	138	25
Mindanao	2024	4	27	20	80	138	138	25
Mindanao	2024	4	27	21	78	138	138	25
Mindanao	2024	4	27	22	74	138	138	25
Mindanao	2024	4	27	23	70	138	138	25
Mindanao	2024	4	27	24	65	138	138	25
Mindanao	2024	4	28	1	64	138	138	25
Mindanao	2024	4	28	2	62	138	138	25
Mindanao	2024	4	28	3	60	138	138	25
Mindanao	2024	4	28	4	56	138	138	25
Mindanao	2024	4	28	5	59	138	138	25
Mindanao	2024	4	28	6	58	138	138	25
Mindanao	2024	4	28	7	56	138	138	25
Mindanao	2024	4	28	8	58	138	138	25
Mindanao	2024	4	28	9	62	138	138	25
Mindanao	2024	4	28	10	67	138	138	25
Mindanao	2024	4	28	11	69	138	138	25
Mindanao	2024	4	28	12	71	138	138	25
Mindanao	2024	4	28	13	73	138	138	25
Mindanao	2024	4	28	14	75	138	138	25
Mindanao	2024	4	28	15	75	138	138	25
Mindanao	2024	4	28	16	70	138	138	25
Mindanao	2024	4	28	17	72	138	138	25
Mindanao	2024	4	28	18	82	138	138	25
Mindanao	2024	4	28	19	85	138	138	25
Mindanao	2024	4	28	20	84	138	138	25
Mindanao	2024	4	28	21	81	138	138	25
Mindanao	2024	4	28	22	77	138	138	25
Mindanao	2024	4	28	23	72	138	138	25
Mindanao	2024	4	28	24	69	138	138	25
Mindanao	2024	4	29	1	57	138	138	25
Mindanao	2024	4	29	2	54	138	138	25
Mindanao	2024	4	29	3	52	138	138	25
Mindanao	2024	4	29	4	53	138	138	25
Mindanao	2024	4	29	5	55	138	138	25
Mindanao	2024	4	29	6	58	138	138	25
Mindanao	2024	4	29	7	58	138	138	25
Mindanao	2024	4	29	8	65	138	138	25
Mindanao	2024	4	29	9	74	138	138	25
Mindanao	2024	4	29	10	80	138	138	25
Mindanao	2024	4	29	11	84	138	138	25
Mindanao	2024	4	29	12	82	138	138	25
Mindanao	2024	4	29	13	83	138	138	25
Mindanao	2024	4	29	14	85	138	138	25
Mindanao	2024	4	29	15	84	138	138	25
Mindanao	2024	4	29	16	82	138	138	25
Mindanao	2024	4	29	17	81	138	138	25
Mindanao	2024	4	29	18	85	138	138	25
Mindanao	2024	4	29	19	85	138	138	25
Mindanao	2024	4	29	20	82	138	138	25
Mindanao	2024	4	29	21	76	138	138	25
Mindanao	2024	4	29	22	72	138	138	25
Mindanao	2024	4	29	23	69	138	138	25
Mindanao	2024	4	29	24	66	138	138	25
Mindanao	2024	4	30	1	61	138	138	25
Mindanao	2024	4	30	2	58	138	138	25
Mindanao	2024	4	30	3	55	138	138	25
Mindanao	2024	4	30	4	55	138	138	25
Mindanao	2024	4	30	5	57	138	138	25
Mindanao	2024	4	30	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	4	30	7	59	138	138	25
Mindanao	2024	4	30	8	62	138	138	25
Mindanao	2024	4	30	9	65	138	138	25
Mindanao	2024	4	30	10	70	138	138	25
Mindanao	2024	4	30	11	75	138	138	25
Mindanao	2024	4	30	12	76	138	138	25
Mindanao	2024	4	30	13	75	138	138	25
Mindanao	2024	4	30	14	75	138	138	25
Mindanao	2024	4	30	15	74	138	138	25
Mindanao	2024	4	30	16	74	138	138	25
Mindanao	2024	4	30	17	75	138	138	25
Mindanao	2024	4	30	18	81	138	138	25
Mindanao	2024	4	30	19	83	138	138	25
Mindanao	2024	4	30	20	81	138	138	25
Mindanao	2024	4	30	21	77	138	138	25
Mindanao	2024	4	30	22	72	138	138	25
Mindanao	2024	4	30	23	67	138	138	25
Mindanao	2024	4	30	24	64	138	138	25
Mindanao	2024	5	1	1	62	138	138	25
Mindanao	2024	5	1	2	58	138	138	25
Mindanao	2024	5	1	3	55	138	138	25
Mindanao	2024	5	1	4	53	138	138	25
Mindanao	2024	5	1	5	54	138	138	25
Mindanao	2024	5	1	6	55	138	138	25
Mindanao	2024	5	1	7	55	138	138	25
Mindanao	2024	5	1	8	54	138	138	25
Mindanao	2024	5	1	9	58	138	138	25
Mindanao	2024	5	1	10	62	138	138	25
Mindanao	2024	5	1	11	65	138	138	25
Mindanao	2024	5	1	12	67	138	138	25
Mindanao	2024	5	1	13	66	138	138	25
Mindanao	2024	5	1	14	67	138	138	25
Mindanao	2024	5	1	15	67	138	138	25
Mindanao	2024	5	1	16	67	138	138	25
Mindanao	2024	5	1	17	69	138	138	25
Mindanao	2024	5	1	18	77	138	138	25
Mindanao	2024	5	1	19	78	138	138	25
Mindanao	2024	5	1	20	76	138	138	25
Mindanao	2024	5	1	21	74	138	138	25
Mindanao	2024	5	1	22	71	138	138	25
Mindanao	2024	5	1	23	66	138	138	25
Mindanao	2024	5	1	24	61	138	138	25
Mindanao	2024	5	2	1	63	138	138	25
Mindanao	2024	5	2	2	60	138	138	25
Mindanao	2024	5	2	3	57	138	138	25
Mindanao	2024	5	2	4	56	138	138	25
Mindanao	2024	5	2	5	59	138	138	25
Mindanao	2024	5	2	6	63	138	138	25
Mindanao	2024	5	2	7	62	138	138	25
Mindanao	2024	5	2	8	70	138	138	25
Mindanao	2024	5	2	9	80	138	138	25
Mindanao	2024	5	2	10	88	138	138	25
Mindanao	2024	5	2	11	93	138	138	25
Mindanao	2024	5	2	12	87	138	138	25
Mindanao	2024	5	2	13	88	138	138	25
Mindanao	2024	5	2	14	92	138	138	25
Mindanao	2024	5	2	15	88	138	138	25
Mindanao	2024	5	2	16	87	138	138	25
Mindanao	2024	5	2	17	82	138	138	25
Mindanao	2024	5	2	18	84	138	138	25
Mindanao	2024	5	2	19	85	138	138	25
Mindanao	2024	5	2	20	82	138	138	25
Mindanao	2024	5	2	21	79	138	138	25
Mindanao	2024	5	2	22	73	138	138	25
Mindanao	2024	5	2	23	68	138	138	25
Mindanao	2024	5	2	24	64	138	138	25
Mindanao	2024	5	3	1	61	138	138	25
Mindanao	2024	5	3	2	58	138	138	25
Mindanao	2024	5	3	3	55	138	138	25
Mindanao	2024	5	3	4	55	138	138	25
Mindanao	2024	5	3	5	58	138	138	25
Mindanao	2024	5	3	6	62	138	138	25
Mindanao	2024	5	3	7	63	138	138	25
Mindanao	2024	5	3	8	70	138	138	25
Mindanao	2024	5	3	9	80	138	138	25
Mindanao	2024	5	3	10	86	138	138	25
Mindanao	2024	5	3	11	91	138	138	25
Mindanao	2024	5	3	12	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	3	13	92	138	138	25
Mindanao	2024	5	3	14	97	138	138	25
Mindanao	2024	5	3	15	97	138	138	25
Mindanao	2024	5	3	16	96	138	138	25
Mindanao	2024	5	3	17	88	138	138	25
Mindanao	2024	5	3	18	92	138	138	25
Mindanao	2024	5	3	19	94	138	138	25
Mindanao	2024	5	3	20	91	138	138	25
Mindanao	2024	5	3	21	88	138	138	25
Mindanao	2024	5	3	22	83	138	138	25
Mindanao	2024	5	3	23	76	138	138	25
Mindanao	2024	5	3	24	72	138	138	25
Mindanao	2024	5	4	1	68	138	138	25
Mindanao	2024	5	4	2	65	138	138	25
Mindanao	2024	5	4	3	61	138	138	25
Mindanao	2024	5	4	4	60	138	138	25
Mindanao	2024	5	4	5	62	138	138	25
Mindanao	2024	5	4	6	64	138	138	25
Mindanao	2024	5	4	7	62	138	138	25
Mindanao	2024	5	4	8	67	138	138	25
Mindanao	2024	5	4	9	74	138	138	25
Mindanao	2024	5	4	10	81	138	138	25
Mindanao	2024	5	4	11	86	138	138	25
Mindanao	2024	5	4	12	87	138	138	25
Mindanao	2024	5	4	13	85	138	138	25
Mindanao	2024	5	4	14	90	138	138	25
Mindanao	2024	5	4	15	88	138	138	25
Mindanao	2024	5	4	16	86	138	138	25
Mindanao	2024	5	4	17	83	138	138	25
Mindanao	2024	5	4	18	88	138	138	25
Mindanao	2024	5	4	19	90	138	138	25
Mindanao	2024	5	4	20	88	138	138	25
Mindanao	2024	5	4	21	87	138	138	25
Mindanao	2024	5	4	22	82	138	138	25
Mindanao	2024	5	4	23	76	138	138	25
Mindanao	2024	5	4	24	70	138	138	25
Mindanao	2024	5	5	1	68	138	138	25
Mindanao	2024	5	5	2	64	138	138	25
Mindanao	2024	5	5	3	62	138	138	25
Mindanao	2024	5	5	4	60	138	138	25
Mindanao	2024	5	5	5	60	138	138	25
Mindanao	2024	5	5	6	62	138	138	25
Mindanao	2024	5	5	7	61	138	138	25
Mindanao	2024	5	5	8	61	138	138	25
Mindanao	2024	5	5	9	64	138	138	25
Mindanao	2024	5	5	10	70	138	138	25
Mindanao	2024	5	5	11	73	138	138	25
Mindanao	2024	5	5	12	73	138	138	25
Mindanao	2024	5	5	13	73	138	138	25
Mindanao	2024	5	5	14	73	138	138	25
Mindanao	2024	5	5	15	73	138	138	25
Mindanao	2024	5	5	16	71	138	138	25
Mindanao	2024	5	5	17	72	138	138	25
Mindanao	2024	5	5	18	80	138	138	25
Mindanao	2024	5	5	19	79	138	138	25
Mindanao	2024	5	5	20	77	138	138	25
Mindanao	2024	5	5	21	76	138	138	25
Mindanao	2024	5	5	22	70	138	138	25
Mindanao	2024	5	5	23	67	138	138	25
Mindanao	2024	5	5	24	64	138	138	25
Mindanao	2024	5	6	1	60	138	138	25
Mindanao	2024	5	6	2	58	138	138	25
Mindanao	2024	5	6	3	57	138	138	25
Mindanao	2024	5	6	4	54	138	138	25
Mindanao	2024	5	6	5	54	138	138	25
Mindanao	2024	5	6	6	54	138	138	25
Mindanao	2024	5	6	7	50	138	138	25
Mindanao	2024	5	6	8	48	138	138	25
Mindanao	2024	5	6	9	50	138	138	25
Mindanao	2024	5	6	10	50	138	138	25
Mindanao	2024	5	6	11	53	138	138	25
Mindanao	2024	5	6	12	55	138	138	25
Mindanao	2024	5	6	13	57	138	138	25
Mindanao	2024	5	6	14	59	138	138	25
Mindanao	2024	5	6	15	58	138	138	25
Mindanao	2024	5	6	16	59	138	138	25
Mindanao	2024	5	6	17	61	138	138	25
Mindanao	2024	5	6	18	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	6	19	74	138	138	25
Mindanao	2024	5	6	20	73	138	138	25
Mindanao	2024	5	6	21	72	138	138	25
Mindanao	2024	5	6	22	69	138	138	25
Mindanao	2024	5	6	23	64	138	138	25
Mindanao	2024	5	6	24	60	138	138	25
Mindanao	2024	5	7	1	57	138	138	25
Mindanao	2024	5	7	2	56	138	138	25
Mindanao	2024	5	7	3	53	138	138	25
Mindanao	2024	5	7	4	52	138	138	25
Mindanao	2024	5	7	5	54	138	138	25
Mindanao	2024	5	7	6	57	138	138	25
Mindanao	2024	5	7	7	59	138	138	25
Mindanao	2024	5	7	8	66	138	138	25
Mindanao	2024	5	7	9	75	138	138	25
Mindanao	2024	5	7	10	82	138	138	25
Mindanao	2024	5	7	11	88	138	138	25
Mindanao	2024	5	7	12	87	138	138	25
Mindanao	2024	5	7	13	89	138	138	25
Mindanao	2024	5	7	14	94	138	138	25
Mindanao	2024	5	7	15	92	138	138	25
Mindanao	2024	5	7	16	90	138	138	25
Mindanao	2024	5	7	17	84	138	138	25
Mindanao	2024	5	7	18	88	138	138	25
Mindanao	2024	5	7	19	86	138	138	25
Mindanao	2024	5	7	20	84	138	138	25
Mindanao	2024	5	7	21	79	138	138	25
Mindanao	2024	5	7	22	75	138	138	25
Mindanao	2024	5	7	23	70	138	138	25
Mindanao	2024	5	7	24	65	138	138	25
Mindanao	2024	5	8	1	64	138	138	25
Mindanao	2024	5	8	2	60	138	138	25
Mindanao	2024	5	8	3	58	138	138	25
Mindanao	2024	5	8	4	57	138	138	25
Mindanao	2024	5	8	5	58	138	138	25
Mindanao	2024	5	8	6	61	138	138	25
Mindanao	2024	5	8	7	62	138	138	25
Mindanao	2024	5	8	8	67	138	138	25
Mindanao	2024	5	8	9	80	138	138	25
Mindanao	2024	5	8	10	86	138	138	25
Mindanao	2024	5	8	11	93	138	138	25
Mindanao	2024	5	8	12	92	138	138	25
Mindanao	2024	5	8	13	93	138	138	25
Mindanao	2024	5	8	14	97	138	138	25
Mindanao	2024	5	8	15	95	138	138	25
Mindanao	2024	5	8	16	93	138	138	25
Mindanao	2024	5	8	17	87	138	138	25
Mindanao	2024	5	8	18	91	138	138	25
Mindanao	2024	5	8	19	92	138	138	25
Mindanao	2024	5	8	20	87	138	138	25
Mindanao	2024	5	8	21	85	138	138	25
Mindanao	2024	5	8	22	82	138	138	25
Mindanao	2024	5	8	23	77	138	138	25
Mindanao	2024	5	8	24	72	138	138	25
Mindanao	2024	5	9	1	69	138	138	25
Mindanao	2024	5	9	2	67	138	138	25
Mindanao	2024	5	9	3	65	138	138	25
Mindanao	2024	5	9	4	62	138	138	25
Mindanao	2024	5	9	5	64	138	138	25
Mindanao	2024	5	9	6	66	138	138	25
Mindanao	2024	5	9	7	66	138	138	25
Mindanao	2024	5	9	8	73	138	138	25
Mindanao	2024	5	9	9	84	138	138	25
Mindanao	2024	5	9	10	91	138	138	25
Mindanao	2024	5	9	11	96	138	138	25
Mindanao	2024	5	9	12	95	138	138	25
Mindanao	2024	5	9	13	97	138	138	25
Mindanao	2024	5	9	14	101	138	138	25
Mindanao	2024	5	9	15	100	138	138	25
Mindanao	2024	5	9	16	96	138	138	25
Mindanao	2024	5	9	17	90	138	138	25
Mindanao	2024	5	9	18	96	138	138	25
Mindanao	2024	5	9	19	96	138	138	25
Mindanao	2024	5	9	20	92	138	138	25
Mindanao	2024	5	9	21	89	138	138	25
Mindanao	2024	5	9	22	82	138	138	25
Mindanao	2024	5	9	23	77	138	138	25
Mindanao	2024	5	9	24	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	10	1	69	138	138	25
Mindanao	2024	5	10	2	66	138	138	25
Mindanao	2024	5	10	3	63	138	138	25
Mindanao	2024	5	10	4	60	138	138	25
Mindanao	2024	5	10	5	63	138	138	25
Mindanao	2024	5	10	6	65	138	138	25
Mindanao	2024	5	10	7	65	138	138	25
Mindanao	2024	5	10	8	72	138	138	25
Mindanao	2024	5	10	9	81	138	138	25
Mindanao	2024	5	10	10	85	138	138	25
Mindanao	2024	5	10	11	91	138	138	25
Mindanao	2024	5	10	12	90	138	138	25
Mindanao	2024	5	10	13	92	138	138	25
Mindanao	2024	5	10	14	96	138	138	25
Mindanao	2024	5	10	15	94	138	138	25
Mindanao	2024	5	10	16	90	138	138	25
Mindanao	2024	5	10	17	85	138	138	25
Mindanao	2024	5	10	18	91	138	138	25
Mindanao	2024	5	10	19	90	138	138	25
Mindanao	2024	5	10	20	87	138	138	25
Mindanao	2024	5	10	21	83	138	138	25
Mindanao	2024	5	10	22	76	138	138	25
Mindanao	2024	5	10	23	74	138	138	25
Mindanao	2024	5	10	24	70	138	138	25
Mindanao	2024	5	11	1	68	138	138	25
Mindanao	2024	5	11	2	64	138	138	25
Mindanao	2024	5	11	3	61	138	138	25
Mindanao	2024	5	11	4	61	138	138	25
Mindanao	2024	5	11	5	63	138	138	25
Mindanao	2024	5	11	6	64	138	138	25
Mindanao	2024	5	11	7	63	138	138	25
Mindanao	2024	5	11	8	65	138	138	25
Mindanao	2024	5	11	9	71	138	138	25
Mindanao	2024	5	11	10	77	138	138	25
Mindanao	2024	5	11	11	81	138	138	25
Mindanao	2024	5	11	12	79	138	138	25
Mindanao	2024	5	11	13	81	138	138	25
Mindanao	2024	5	11	14	86	138	138	25
Mindanao	2024	5	11	15	82	138	138	25
Mindanao	2024	5	11	16	80	138	138	25
Mindanao	2024	5	11	17	78	138	138	25
Mindanao	2024	5	11	18	87	138	138	25
Mindanao	2024	5	11	19	86	138	138	25
Mindanao	2024	5	11	20	82	138	138	25
Mindanao	2024	5	11	21	78	138	138	25
Mindanao	2024	5	11	22	77	138	138	25
Mindanao	2024	5	11	23	71	138	138	25
Mindanao	2024	5	11	24	70	138	138	25
Mindanao	2024	5	12	1	67	138	138	25
Mindanao	2024	5	12	2	64	138	138	25
Mindanao	2024	5	12	3	58	138	138	25
Mindanao	2024	5	12	4	59	138	138	25
Mindanao	2024	5	12	5	59	138	138	25
Mindanao	2024	5	12	6	60	138	138	25
Mindanao	2024	5	12	7	60	138	138	25
Mindanao	2024	5	12	8	58	138	138	25
Mindanao	2024	5	12	9	62	138	138	25
Mindanao	2024	5	12	10	66	138	138	25
Mindanao	2024	5	12	11	69	138	138	25
Mindanao	2024	5	12	12	69	138	138	25
Mindanao	2024	5	12	13	70	138	138	25
Mindanao	2024	5	12	14	70	138	138	25
Mindanao	2024	5	12	15	70	138	138	25
Mindanao	2024	5	12	16	70	138	138	25
Mindanao	2024	5	12	17	71	138	138	25
Mindanao	2024	5	12	18	79	138	138	25
Mindanao	2024	5	12	19	80	138	138	25
Mindanao	2024	5	12	20	77	138	138	25
Mindanao	2024	5	12	21	77	138	138	25
Mindanao	2024	5	12	22	73	138	138	25
Mindanao	2024	5	12	23	68	138	138	25
Mindanao	2024	5	12	24	64	138	138	25
Mindanao	2024	5	13	1	63	138	138	25
Mindanao	2024	5	13	2	61	138	138	25
Mindanao	2024	5	13	3	59	138	138	25
Mindanao	2024	5	13	4	57	138	138	25
Mindanao	2024	5	13	5	61	138	138	25
Mindanao	2024	5	13	6	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	13	7	62	138	138	25
Mindanao	2024	5	13	8	70	138	138	25
Mindanao	2024	5	13	9	79	138	138	25
Mindanao	2024	5	13	10	88	138	138	25
Mindanao	2024	5	13	11	93	138	138	25
Mindanao	2024	5	13	12	91	138	138	25
Mindanao	2024	5	13	13	92	138	138	25
Mindanao	2024	5	13	14	97	138	138	25
Mindanao	2024	5	13	15	96	138	138	25
Mindanao	2024	5	13	16	93	138	138	25
Mindanao	2024	5	13	17	87	138	138	25
Mindanao	2024	5	13	18	89	138	138	25
Mindanao	2024	5	13	19	87	138	138	25
Mindanao	2024	5	13	20	87	138	138	25
Mindanao	2024	5	13	21	85	138	138	25
Mindanao	2024	5	13	22	80	138	138	25
Mindanao	2024	5	13	23	76	138	138	25
Mindanao	2024	5	13	24	71	138	138	25
Mindanao	2024	5	14	1	68	138	138	25
Mindanao	2024	5	14	2	62	138	138	25
Mindanao	2024	5	14	3	62	138	138	25
Mindanao	2024	5	14	4	60	138	138	25
Mindanao	2024	5	14	5	62	138	138	25
Mindanao	2024	5	14	6	66	138	138	25
Mindanao	2024	5	14	7	65	138	138	25
Mindanao	2024	5	14	8	71	138	138	25
Mindanao	2024	5	14	9	83	138	138	25
Mindanao	2024	5	14	10	90	138	138	25
Mindanao	2024	5	14	11	95	138	138	25
Mindanao	2024	5	14	12	94	138	138	25
Mindanao	2024	5	14	13	95	138	138	25
Mindanao	2024	5	14	14	101	138	138	25
Mindanao	2024	5	14	15	99	138	138	25
Mindanao	2024	5	14	16	96	138	138	25
Mindanao	2024	5	14	17	90	138	138	25
Mindanao	2024	5	14	18	94	138	138	25
Mindanao	2024	5	14	19	95	138	138	25
Mindanao	2024	5	14	20	92	138	138	25
Mindanao	2024	5	14	21	87	138	138	25
Mindanao	2024	5	14	22	83	138	138	25
Mindanao	2024	5	14	23	78	138	138	25
Mindanao	2024	5	14	24	74	138	138	25
Mindanao	2024	5	15	1	70	138	138	25
Mindanao	2024	5	15	2	66	138	138	25
Mindanao	2024	5	15	3	64	138	138	25
Mindanao	2024	5	15	4	63	138	138	25
Mindanao	2024	5	15	5	66	138	138	25
Mindanao	2024	5	15	6	68	138	138	25
Mindanao	2024	5	15	7	65	138	138	25
Mindanao	2024	5	15	8	73	138	138	25
Mindanao	2024	5	15	9	85	138	138	25
Mindanao	2024	5	15	10	94	138	138	25
Mindanao	2024	5	15	11	98	138	138	25
Mindanao	2024	5	15	12	95	138	138	25
Mindanao	2024	5	15	13	97	138	138	25
Mindanao	2024	5	15	14	102	138	138	25
Mindanao	2024	5	15	15	101	138	138	25
Mindanao	2024	5	15	16	99	138	138	25
Mindanao	2024	5	15	17	93	138	138	25
Mindanao	2024	5	15	18	95	138	138	25
Mindanao	2024	5	15	19	98	138	138	25
Mindanao	2024	5	15	20	94	138	138	25
Mindanao	2024	5	15	21	93	138	138	25
Mindanao	2024	5	15	22	86	138	138	25
Mindanao	2024	5	15	23	81	138	138	25
Mindanao	2024	5	15	24	74	138	138	25
Mindanao	2024	5	16	1	71	138	138	25
Mindanao	2024	5	16	2	69	138	138	25
Mindanao	2024	5	16	3	67	138	138	25
Mindanao	2024	5	16	4	65	138	138	25
Mindanao	2024	5	16	5	67	138	138	25
Mindanao	2024	5	16	6	69	138	138	25
Mindanao	2024	5	16	7	66	138	138	25
Mindanao	2024	5	16	8	74	138	138	25
Mindanao	2024	5	16	9	86	138	138	25
Mindanao	2024	5	16	10	95	138	138	25
Mindanao	2024	5	16	11	93	138	138	25
Mindanao	2024	5	16	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	16	13	95	138	138	25
Mindanao	2024	5	16	14	100	138	138	25
Mindanao	2024	5	16	15	100	138	138	25
Mindanao	2024	5	16	16	98	138	138	25
Mindanao	2024	5	16	17	92	138	138	25
Mindanao	2024	5	16	18	97	138	138	25
Mindanao	2024	5	16	19	97	138	138	25
Mindanao	2024	5	16	20	96	138	138	25
Mindanao	2024	5	16	21	91	138	138	25
Mindanao	2024	5	16	22	88	138	138	25
Mindanao	2024	5	16	23	82	138	138	25
Mindanao	2024	5	16	24	76	138	138	25
Mindanao	2024	5	17	1	74	138	138	25
Mindanao	2024	5	17	2	70	138	138	25
Mindanao	2024	5	17	3	69	138	138	25
Mindanao	2024	5	17	4	68	138	138	25
Mindanao	2024	5	17	5	68	138	138	25
Mindanao	2024	5	17	6	71	138	138	25
Mindanao	2024	5	17	7	70	138	138	25
Mindanao	2024	5	17	8	78	138	138	25
Mindanao	2024	5	17	9	90	138	138	25
Mindanao	2024	5	17	10	96	138	138	25
Mindanao	2024	5	17	11	100	138	138	25
Mindanao	2024	5	17	12	98	138	138	25
Mindanao	2024	5	17	13	99	138	138	25
Mindanao	2024	5	17	14	103	138	138	25
Mindanao	2024	5	17	15	101	138	138	25
Mindanao	2024	5	17	16	99	138	138	25
Mindanao	2024	5	17	17	93	138	138	25
Mindanao	2024	5	17	18	96	138	138	25
Mindanao	2024	5	17	19	97	138	138	25
Mindanao	2024	5	17	20	94	138	138	25
Mindanao	2024	5	17	21	89	138	138	25
Mindanao	2024	5	17	22	85	138	138	25
Mindanao	2024	5	17	23	81	138	138	25
Mindanao	2024	5	17	24	77	138	138	25
Mindanao	2024	5	18	1	73	138	138	25
Mindanao	2024	5	18	2	69	138	138	25
Mindanao	2024	5	18	3	66	138	138	25
Mindanao	2024	5	18	4	67	138	138	25
Mindanao	2024	5	18	5	66	138	138	25
Mindanao	2024	5	18	6	68	138	138	25
Mindanao	2024	5	18	7	66	138	138	25
Mindanao	2024	5	18	8	70	138	138	25
Mindanao	2024	5	18	9	78	138	138	25
Mindanao	2024	5	18	10	83	138	138	25
Mindanao	2024	5	18	11	87	138	138	25
Mindanao	2024	5	18	12	87	138	138	25
Mindanao	2024	5	18	13	87	138	138	25
Mindanao	2024	5	18	14	89	138	138	25
Mindanao	2024	5	18	15	88	138	138	25
Mindanao	2024	5	18	16	85	138	138	25
Mindanao	2024	5	18	17	85	138	138	25
Mindanao	2024	5	18	18	90	138	138	25
Mindanao	2024	5	18	19	93	138	138	25
Mindanao	2024	5	18	20	88	138	138	25
Mindanao	2024	5	18	21	86	138	138	25
Mindanao	2024	5	18	22	81	138	138	25
Mindanao	2024	5	18	23	76	138	138	25
Mindanao	2024	5	18	24	71	138	138	25
Mindanao	2024	5	19	1	67	138	138	25
Mindanao	2024	5	19	2	65	138	138	25
Mindanao	2024	5	19	3	63	138	138	25
Mindanao	2024	5	19	4	62	138	138	25
Mindanao	2024	5	19	5	62	138	138	25
Mindanao	2024	5	19	6	60	138	138	25
Mindanao	2024	5	19	7	57	138	138	25
Mindanao	2024	5	19	8	57	138	138	25
Mindanao	2024	5	19	9	62	138	138	25
Mindanao	2024	5	19	10	65	138	138	25
Mindanao	2024	5	19	11	70	138	138	25
Mindanao	2024	5	19	12	71	138	138	25
Mindanao	2024	5	19	13	72	138	138	25
Mindanao	2024	5	19	14	74	138	138	25
Mindanao	2024	5	19	15	73	138	138	25
Mindanao	2024	5	19	16	68	138	138	25
Mindanao	2024	5	19	17	72	138	138	25
Mindanao	2024	5	19	18	83	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	19	19	85	138	138	25
Mindanao	2024	5	19	20	83	138	138	25
Mindanao	2024	5	19	21	79	138	138	25
Mindanao	2024	5	19	22	75	138	138	25
Mindanao	2024	5	19	23	72	138	138	25
Mindanao	2024	5	19	24	67	138	138	25
Mindanao	2024	5	20	1	65	138	138	25
Mindanao	2024	5	20	2	62	138	138	25
Mindanao	2024	5	20	3	60	138	138	25
Mindanao	2024	5	20	4	60	138	138	25
Mindanao	2024	5	20	5	62	138	138	25
Mindanao	2024	5	20	6	65	138	138	25
Mindanao	2024	5	20	7	64	138	138	25
Mindanao	2024	5	20	8	71	138	138	25
Mindanao	2024	5	20	9	84	138	138	25
Mindanao	2024	5	20	10	92	138	138	25
Mindanao	2024	5	20	11	97	138	138	25
Mindanao	2024	5	20	12	96	138	138	25
Mindanao	2024	5	20	13	99	138	138	25
Mindanao	2024	5	20	14	101	138	138	25
Mindanao	2024	5	20	15	102	138	138	25
Mindanao	2024	5	20	16	99	138	138	25
Mindanao	2024	5	20	17	94	138	138	25
Mindanao	2024	5	20	18	95	138	138	25
Mindanao	2024	5	20	19	98	138	138	25
Mindanao	2024	5	20	20	92	138	138	25
Mindanao	2024	5	20	21	91	138	138	25
Mindanao	2024	5	20	22	84	138	138	25
Mindanao	2024	5	20	23	79	138	138	25
Mindanao	2024	5	20	24	75	138	138	25
Mindanao	2024	5	21	1	71	138	138	25
Mindanao	2024	5	21	2	67	138	138	25
Mindanao	2024	5	21	3	65	138	138	25
Mindanao	2024	5	21	4	64	138	138	25
Mindanao	2024	5	21	5	65	138	138	25
Mindanao	2024	5	21	6	68	138	138	25
Mindanao	2024	5	21	7	67	138	138	25
Mindanao	2024	5	21	8	73	138	138	25
Mindanao	2024	5	21	9	85	138	138	25
Mindanao	2024	5	21	10	92	138	138	25
Mindanao	2024	5	21	11	95	138	138	25
Mindanao	2024	5	21	12	93	138	138	25
Mindanao	2024	5	21	13	96	138	138	25
Mindanao	2024	5	21	14	98	138	138	25
Mindanao	2024	5	21	15	97	138	138	25
Mindanao	2024	5	21	16	96	138	138	25
Mindanao	2024	5	21	17	91	138	138	25
Mindanao	2024	5	21	18	91	138	138	25
Mindanao	2024	5	21	19	97	138	138	25
Mindanao	2024	5	21	20	92	138	138	25
Mindanao	2024	5	21	21	90	138	138	25
Mindanao	2024	5	21	22	83	138	138	25
Mindanao	2024	5	21	23	79	138	138	25
Mindanao	2024	5	21	24	73	138	138	25
Mindanao	2024	5	22	1	70	138	138	25
Mindanao	2024	5	22	2	68	138	138	25
Mindanao	2024	5	22	3	65	138	138	25
Mindanao	2024	5	22	4	62	138	138	25
Mindanao	2024	5	22	5	66	138	138	25
Mindanao	2024	5	22	6	70	138	138	25
Mindanao	2024	5	22	7	67	138	138	25
Mindanao	2024	5	22	8	71	138	138	25
Mindanao	2024	5	22	9	80	138	138	25
Mindanao	2024	5	22	10	87	138	138	25
Mindanao	2024	5	22	11	91	138	138	25
Mindanao	2024	5	22	12	87	138	138	25
Mindanao	2024	5	22	13	88	138	138	25
Mindanao	2024	5	22	14	93	138	138	25
Mindanao	2024	5	22	15	94	138	138	25
Mindanao	2024	5	22	16	92	138	138	25
Mindanao	2024	5	22	17	89	138	138	25
Mindanao	2024	5	22	18	93	138	138	25
Mindanao	2024	5	22	19	93	138	138	25
Mindanao	2024	5	22	20	90	138	138	25
Mindanao	2024	5	22	21	87	138	138	25
Mindanao	2024	5	22	22	81	138	138	25
Mindanao	2024	5	22	23	77	138	138	25
Mindanao	2024	5	22	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	23	1	67	138	138	25
Mindanao	2024	5	23	2	65	138	138	25
Mindanao	2024	5	23	3	63	138	138	25
Mindanao	2024	5	23	4	61	138	138	25
Mindanao	2024	5	23	5	63	138	138	25
Mindanao	2024	5	23	6	67	138	138	25
Mindanao	2024	5	23	7	64	138	138	25
Mindanao	2024	5	23	8	71	138	138	25
Mindanao	2024	5	23	9	82	138	138	25
Mindanao	2024	5	23	10	89	138	138	25
Mindanao	2024	5	23	11	94	138	138	25
Mindanao	2024	5	23	12	92	138	138	25
Mindanao	2024	5	23	13	92	138	138	25
Mindanao	2024	5	23	14	90	138	138	25
Mindanao	2024	5	23	15	90	138	138	25
Mindanao	2024	5	23	16	88	138	138	25
Mindanao	2024	5	23	17	85	138	138	25
Mindanao	2024	5	23	18	87	138	138	25
Mindanao	2024	5	23	19	88	138	138	25
Mindanao	2024	5	23	20	86	138	138	25
Mindanao	2024	5	23	21	81	138	138	25
Mindanao	2024	5	23	22	76	138	138	25
Mindanao	2024	5	23	23	72	138	138	25
Mindanao	2024	5	23	24	69	138	138	25
Mindanao	2024	5	24	1	65	138	138	25
Mindanao	2024	5	24	2	63	138	138	25
Mindanao	2024	5	24	3	61	138	138	25
Mindanao	2024	5	24	4	59	138	138	25
Mindanao	2024	5	24	5	61	138	138	25
Mindanao	2024	5	24	6	66	138	138	25
Mindanao	2024	5	24	7	62	138	138	25
Mindanao	2024	5	24	8	70	138	138	25
Mindanao	2024	5	24	9	81	138	138	25
Mindanao	2024	5	24	10	85	138	138	25
Mindanao	2024	5	24	11	92	138	138	25
Mindanao	2024	5	24	12	90	138	138	25
Mindanao	2024	5	24	13	90	138	138	25
Mindanao	2024	5	24	14	95	138	138	25
Mindanao	2024	5	24	15	93	138	138	25
Mindanao	2024	5	24	16	92	138	138	25
Mindanao	2024	5	24	17	86	138	138	25
Mindanao	2024	5	24	18	92	138	138	25
Mindanao	2024	5	24	19	91	138	138	25
Mindanao	2024	5	24	20	89	138	138	25
Mindanao	2024	5	24	21	83	138	138	25
Mindanao	2024	5	24	22	80	138	138	25
Mindanao	2024	5	24	23	74	138	138	25
Mindanao	2024	5	24	24	69	138	138	25
Mindanao	2024	5	25	1	66	138	138	25
Mindanao	2024	5	25	2	64	138	138	25
Mindanao	2024	5	25	3	62	138	138	25
Mindanao	2024	5	25	4	60	138	138	25
Mindanao	2024	5	25	5	59	138	138	25
Mindanao	2024	5	25	6	63	138	138	25
Mindanao	2024	5	25	7	62	138	138	25
Mindanao	2024	5	25	8	65	138	138	25
Mindanao	2024	5	25	9	72	138	138	25
Mindanao	2024	5	25	10	77	138	138	25
Mindanao	2024	5	25	11	81	138	138	25
Mindanao	2024	5	25	12	80	138	138	25
Mindanao	2024	5	25	13	81	138	138	25
Mindanao	2024	5	25	14	85	138	138	25
Mindanao	2024	5	25	15	83	138	138	25
Mindanao	2024	5	25	16	80	138	138	25
Mindanao	2024	5	25	17	81	138	138	25
Mindanao	2024	5	25	18	87	138	138	25
Mindanao	2024	5	25	19	88	138	138	25
Mindanao	2024	5	25	20	85	138	138	25
Mindanao	2024	5	25	21	83	138	138	25
Mindanao	2024	5	25	22	78	138	138	25
Mindanao	2024	5	25	23	71	138	138	25
Mindanao	2024	5	25	24	69	138	138	25
Mindanao	2024	5	26	1	65	138	138	25
Mindanao	2024	5	26	2	63	138	138	25
Mindanao	2024	5	26	3	61	138	138	25
Mindanao	2024	5	26	4	58	138	138	25
Mindanao	2024	5	26	5	58	138	138	25
Mindanao	2024	5	26	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	26	7	59	138	138	25
Mindanao	2024	5	26	8	60	138	138	25
Mindanao	2024	5	26	9	62	138	138	25
Mindanao	2024	5	26	10	65	138	138	25
Mindanao	2024	5	26	11	70	138	138	25
Mindanao	2024	5	26	12	71	138	138	25
Mindanao	2024	5	26	13	73	138	138	25
Mindanao	2024	5	26	14	75	138	138	25
Mindanao	2024	5	26	15	74	138	138	25
Mindanao	2024	5	26	16	72	138	138	25
Mindanao	2024	5	26	17	74	138	138	25
Mindanao	2024	5	26	18	81	138	138	25
Mindanao	2024	5	26	19	82	138	138	25
Mindanao	2024	5	26	20	80	138	138	25
Mindanao	2024	5	26	21	75	138	138	25
Mindanao	2024	5	26	22	72	138	138	25
Mindanao	2024	5	26	23	67	138	138	25
Mindanao	2024	5	26	24	64	138	138	25
Mindanao	2024	5	27	1	62	138	138	25
Mindanao	2024	5	27	2	58	138	138	25
Mindanao	2024	5	27	3	57	138	138	25
Mindanao	2024	5	27	4	56	138	138	25
Mindanao	2024	5	27	5	59	138	138	25
Mindanao	2024	5	27	6	63	138	138	25
Mindanao	2024	5	27	7	62	138	138	25
Mindanao	2024	5	27	8	69	138	138	25
Mindanao	2024	5	27	9	77	138	138	25
Mindanao	2024	5	27	10	82	138	138	25
Mindanao	2024	5	27	11	86	138	138	25
Mindanao	2024	5	27	12	84	138	138	25
Mindanao	2024	5	27	13	83	138	138	25
Mindanao	2024	5	27	14	89	138	138	25
Mindanao	2024	5	27	15	88	138	138	25
Mindanao	2024	5	27	16	88	138	138	25
Mindanao	2024	5	27	17	85	138	138	25
Mindanao	2024	5	27	18	88	138	138	25
Mindanao	2024	5	27	19	87	138	138	25
Mindanao	2024	5	27	20	84	138	138	25
Mindanao	2024	5	27	21	81	138	138	25
Mindanao	2024	5	27	22	75	138	138	25
Mindanao	2024	5	27	23	71	138	138	25
Mindanao	2024	5	27	24	66	138	138	25
Mindanao	2024	5	28	1	63	138	138	25
Mindanao	2024	5	28	2	61	138	138	25
Mindanao	2024	5	28	3	58	138	138	25
Mindanao	2024	5	28	4	58	138	138	25
Mindanao	2024	5	28	5	60	138	138	25
Mindanao	2024	5	28	6	64	138	138	25
Mindanao	2024	5	28	7	63	138	138	25
Mindanao	2024	5	28	8	70	138	138	25
Mindanao	2024	5	28	9	79	138	138	25
Mindanao	2024	5	28	10	88	138	138	25
Mindanao	2024	5	28	11	92	138	138	25
Mindanao	2024	5	28	12	93	138	138	25
Mindanao	2024	5	28	13	95	138	138	25
Mindanao	2024	5	28	14	98	138	138	25
Mindanao	2024	5	28	15	97	138	138	25
Mindanao	2024	5	28	16	95	138	138	25
Mindanao	2024	5	28	17	89	138	138	25
Mindanao	2024	5	28	18	91	138	138	25
Mindanao	2024	5	28	19	96	138	138	25
Mindanao	2024	5	28	20	94	138	138	25
Mindanao	2024	5	28	21	89	138	138	25
Mindanao	2024	5	28	22	84	138	138	25
Mindanao	2024	5	28	23	77	138	138	25
Mindanao	2024	5	28	24	72	138	138	25
Mindanao	2024	5	29	1	70	138	138	25
Mindanao	2024	5	29	2	68	138	138	25
Mindanao	2024	5	29	3	65	138	138	25
Mindanao	2024	5	29	4	64	138	138	25
Mindanao	2024	5	29	5	65	138	138	25
Mindanao	2024	5	29	6	68	138	138	25
Mindanao	2024	5	29	7	66	138	138	25
Mindanao	2024	5	29	8	74	138	138	25
Mindanao	2024	5	29	9	87	138	138	25
Mindanao	2024	5	29	10	94	138	138	25
Mindanao	2024	5	29	11	98	138	138	25
Mindanao	2024	5	29	12	96	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	5	29	13	97	138	138	25
Mindanao	2024	5	29	14	102	138	138	25
Mindanao	2024	5	29	15	103	138	138	25
Mindanao	2024	5	29	16	101	138	138	25
Mindanao	2024	5	29	17	92	138	138	25
Mindanao	2024	5	29	18	94	138	138	25
Mindanao	2024	5	29	19	94	138	138	25
Mindanao	2024	5	29	20	91	138	138	25
Mindanao	2024	5	29	21	88	138	138	25
Mindanao	2024	5	29	22	82	138	138	25
Mindanao	2024	5	29	23	77	138	138	25
Mindanao	2024	5	29	24	72	138	138	25
Mindanao	2024	5	30	1	69	138	138	25
Mindanao	2024	5	30	2	66	138	138	25
Mindanao	2024	5	30	3	63	138	138	25
Mindanao	2024	5	30	4	62	138	138	25
Mindanao	2024	5	30	5	65	138	138	25
Mindanao	2024	5	30	6	67	138	138	25
Mindanao	2024	5	30	7	65	138	138	25
Mindanao	2024	5	30	8	73	138	138	25
Mindanao	2024	5	30	9	83	138	138	25
Mindanao	2024	5	30	10	92	138	138	25
Mindanao	2024	5	30	11	96	138	138	25
Mindanao	2024	5	30	12	96	138	138	25
Mindanao	2024	5	30	13	96	138	138	25
Mindanao	2024	5	30	14	101	138	138	25
Mindanao	2024	5	30	15	98	138	138	25
Mindanao	2024	5	30	16	93	138	138	25
Mindanao	2024	5	30	17	88	138	138	25
Mindanao	2024	5	30	18	90	138	138	25
Mindanao	2024	5	30	19	92	138	138	25
Mindanao	2024	5	30	20	89	138	138	25
Mindanao	2024	5	30	21	85	138	138	25
Mindanao	2024	5	30	22	79	138	138	25
Mindanao	2024	5	30	23	74	138	138	25
Mindanao	2024	5	30	24	68	138	138	25
Mindanao	2024	5	31	1	66	138	138	25
Mindanao	2024	5	31	2	63	138	138	25
Mindanao	2024	5	31	3	60	138	138	25
Mindanao	2024	5	31	4	58	138	138	25
Mindanao	2024	5	31	5	61	138	138	25
Mindanao	2024	5	31	6	65	138	138	25
Mindanao	2024	5	31	7	62	138	138	25
Mindanao	2024	5	31	8	71	138	138	25
Mindanao	2024	5	31	9	80	138	138	25
Mindanao	2024	5	31	10	90	138	138	25
Mindanao	2024	5	31	11	96	138	138	25
Mindanao	2024	5	31	12	94	138	138	25
Mindanao	2024	5	31	13	95	138	138	25
Mindanao	2024	5	31	14	97	138	138	25
Mindanao	2024	5	31	15	98	138	138	25
Mindanao	2024	5	31	16	94	138	138	25
Mindanao	2024	5	31	17	86	138	138	25
Mindanao	2024	5	31	18	89	138	138	25
Mindanao	2024	5	31	19	90	138	138	25
Mindanao	2024	5	31	20	88	138	138	25
Mindanao	2024	5	31	21	85	138	138	25
Mindanao	2024	5	31	22	80	138	138	25
Mindanao	2024	5	31	23	74	138	138	25
Mindanao	2024	5	31	24	68	138	138	25
Mindanao	2024	6	1	1	67	138	138	25
Mindanao	2024	6	1	2	63	138	138	25
Mindanao	2024	6	1	3	62	138	138	25
Mindanao	2024	6	1	4	61	138	138	25
Mindanao	2024	6	1	5	61	138	138	25
Mindanao	2024	6	1	6	64	138	138	25
Mindanao	2024	6	1	7	63	138	138	25
Mindanao	2024	6	1	8	66	138	138	25
Mindanao	2024	6	1	9	74	138	138	25
Mindanao	2024	6	1	10	80	138	138	25
Mindanao	2024	6	1	11	83	138	138	25
Mindanao	2024	6	1	12	85	138	138	25
Mindanao	2024	6	1	13	87	138	138	25
Mindanao	2024	6	1	14	89	138	138	25
Mindanao	2024	6	1	15	87	138	138	25
Mindanao	2024	6	1	16	82	138	138	25
Mindanao	2024	6	1	17	82	138	138	25
Mindanao	2024	6	1	18	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	1	19	90	138	138	25
Mindanao	2024	6	1	20	86	138	138	25
Mindanao	2024	6	1	21	81	138	138	25
Mindanao	2024	6	1	22	77	138	138	25
Mindanao	2024	6	1	23	74	138	138	25
Mindanao	2024	6	1	24	68	138	138	25
Mindanao	2024	6	2	1	64	138	138	25
Mindanao	2024	6	2	2	62	138	138	25
Mindanao	2024	6	2	3	59	138	138	25
Mindanao	2024	6	2	4	59	138	138	25
Mindanao	2024	6	2	5	58	138	138	25
Mindanao	2024	6	2	6	58	138	138	25
Mindanao	2024	6	2	7	57	138	138	25
Mindanao	2024	6	2	8	56	138	138	25
Mindanao	2024	6	2	9	57	138	138	25
Mindanao	2024	6	2	10	61	138	138	25
Mindanao	2024	6	2	11	65	138	138	25
Mindanao	2024	6	2	12	66	138	138	25
Mindanao	2024	6	2	13	65	138	138	25
Mindanao	2024	6	2	14	65	138	138	25
Mindanao	2024	6	2	15	64	138	138	25
Mindanao	2024	6	2	16	63	138	138	25
Mindanao	2024	6	2	17	67	138	138	25
Mindanao	2024	6	2	18	77	138	138	25
Mindanao	2024	6	2	19	75	138	138	25
Mindanao	2024	6	2	20	76	138	138	25
Mindanao	2024	6	2	21	72	138	138	25
Mindanao	2024	6	2	22	67	138	138	25
Mindanao	2024	6	2	23	61	138	138	25
Mindanao	2024	6	2	24	59	138	138	25
Mindanao	2024	6	3	1	56	138	138	25
Mindanao	2024	6	3	2	54	138	138	25
Mindanao	2024	6	3	3	52	138	138	25
Mindanao	2024	6	3	4	53	138	138	25
Mindanao	2024	6	3	5	54	138	138	25
Mindanao	2024	6	3	6	59	138	138	25
Mindanao	2024	6	3	7	58	138	138	25
Mindanao	2024	6	3	8	67	138	138	25
Mindanao	2024	6	3	9	79	138	138	25
Mindanao	2024	6	3	10	86	138	138	25
Mindanao	2024	6	3	11	91	138	138	25
Mindanao	2024	6	3	12	90	138	138	25
Mindanao	2024	6	3	13	93	138	138	25
Mindanao	2024	6	3	14	98	138	138	25
Mindanao	2024	6	3	15	98	138	138	25
Mindanao	2024	6	3	16	95	138	138	25
Mindanao	2024	6	3	17	89	138	138	25
Mindanao	2024	6	3	18	90	138	138	25
Mindanao	2024	6	3	19	93	138	138	25
Mindanao	2024	6	3	20	91	138	138	25
Mindanao	2024	6	3	21	88	138	138	25
Mindanao	2024	6	3	22	83	138	138	25
Mindanao	2024	6	3	23	77	138	138	25
Mindanao	2024	6	3	24	72	138	138	25
Mindanao	2024	6	4	1	67	138	138	25
Mindanao	2024	6	4	2	65	138	138	25
Mindanao	2024	6	4	3	62	138	138	25
Mindanao	2024	6	4	4	61	138	138	25
Mindanao	2024	6	4	5	63	138	138	25
Mindanao	2024	6	4	6	67	138	138	25
Mindanao	2024	6	4	7	65	138	138	25
Mindanao	2024	6	4	8	73	138	138	25
Mindanao	2024	6	4	9	85	138	138	25
Mindanao	2024	6	4	10	92	138	138	25
Mindanao	2024	6	4	11	98	138	138	25
Mindanao	2024	6	4	12	98	138	138	25
Mindanao	2024	6	4	13	98	138	138	25
Mindanao	2024	6	4	14	101	138	138	25
Mindanao	2024	6	4	15	101	138	138	25
Mindanao	2024	6	4	16	99	138	138	25
Mindanao	2024	6	4	17	89	138	138	25
Mindanao	2024	6	4	18	90	138	138	25
Mindanao	2024	6	4	19	94	138	138	25
Mindanao	2024	6	4	20	91	138	138	25
Mindanao	2024	6	4	21	86	138	138	25
Mindanao	2024	6	4	22	79	138	138	25
Mindanao	2024	6	4	23	74	138	138	25
Mindanao	2024	6	4	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	5	1	69	138	138	25
Mindanao	2024	6	5	2	65	138	138	25
Mindanao	2024	6	5	3	62	138	138	25
Mindanao	2024	6	5	4	61	138	138	25
Mindanao	2024	6	5	5	64	138	138	25
Mindanao	2024	6	5	6	69	138	138	25
Mindanao	2024	6	5	7	64	138	138	25
Mindanao	2024	6	5	8	71	138	138	25
Mindanao	2024	6	5	9	81	138	138	25
Mindanao	2024	6	5	10	93	138	138	25
Mindanao	2024	6	5	11	96	138	138	25
Mindanao	2024	6	5	12	95	138	138	25
Mindanao	2024	6	5	13	95	138	138	25
Mindanao	2024	6	5	14	98	138	138	25
Mindanao	2024	6	5	15	95	138	138	25
Mindanao	2024	6	5	16	95	138	138	25
Mindanao	2024	6	5	17	90	138	138	25
Mindanao	2024	6	5	18	93	138	138	25
Mindanao	2024	6	5	19	90	138	138	25
Mindanao	2024	6	5	20	85	138	138	25
Mindanao	2024	6	5	21	81	138	138	25
Mindanao	2024	6	5	22	76	138	138	25
Mindanao	2024	6	5	23	70	138	138	25
Mindanao	2024	6	5	24	66	138	138	25
Mindanao	2024	6	6	1	64	138	138	25
Mindanao	2024	6	6	2	60	138	138	25
Mindanao	2024	6	6	3	59	138	138	25
Mindanao	2024	6	6	4	59	138	138	25
Mindanao	2024	6	6	5	59	138	138	25
Mindanao	2024	6	6	6	63	138	138	25
Mindanao	2024	6	6	7	61	138	138	25
Mindanao	2024	6	6	8	69	138	138	25
Mindanao	2024	6	6	9	82	138	138	25
Mindanao	2024	6	6	10	89	138	138	25
Mindanao	2024	6	6	11	93	138	138	25
Mindanao	2024	6	6	12	91	138	138	25
Mindanao	2024	6	6	13	93	138	138	25
Mindanao	2024	6	6	14	98	138	138	25
Mindanao	2024	6	6	15	96	138	138	25
Mindanao	2024	6	6	16	95	138	138	25
Mindanao	2024	6	6	17	89	138	138	25
Mindanao	2024	6	6	18	90	138	138	25
Mindanao	2024	6	6	19	87	138	138	25
Mindanao	2024	6	6	20	90	138	138	25
Mindanao	2024	6	6	21	88	138	138	25
Mindanao	2024	6	6	22	82	138	138	25
Mindanao	2024	6	6	23	77	138	138	25
Mindanao	2024	6	6	24	72	138	138	25
Mindanao	2024	6	7	1	68	138	138	25
Mindanao	2024	6	7	2	65	138	138	25
Mindanao	2024	6	7	3	62	138	138	25
Mindanao	2024	6	7	4	61	138	138	25
Mindanao	2024	6	7	5	62	138	138	25
Mindanao	2024	6	7	6	66	138	138	25
Mindanao	2024	6	7	7	65	138	138	25
Mindanao	2024	6	7	8	72	138	138	25
Mindanao	2024	6	7	9	84	138	138	25
Mindanao	2024	6	7	10	90	138	138	25
Mindanao	2024	6	7	11	94	138	138	25
Mindanao	2024	6	7	12	91	138	138	25
Mindanao	2024	6	7	13	94	138	138	25
Mindanao	2024	6	7	14	98	138	138	25
Mindanao	2024	6	7	15	97	138	138	25
Mindanao	2024	6	7	16	93	138	138	25
Mindanao	2024	6	7	17	85	138	138	25
Mindanao	2024	6	7	18	88	138	138	25
Mindanao	2024	6	7	19	91	138	138	25
Mindanao	2024	6	7	20	89	138	138	25
Mindanao	2024	6	7	21	86	138	138	25
Mindanao	2024	6	7	22	78	138	138	25
Mindanao	2024	6	7	23	73	138	138	25
Mindanao	2024	6	7	24	67	138	138	25
Mindanao	2024	6	8	1	65	138	138	25
Mindanao	2024	6	8	2	60	138	138	25
Mindanao	2024	6	8	3	60	138	138	25
Mindanao	2024	6	8	4	57	138	138	25
Mindanao	2024	6	8	5	57	138	138	25
Mindanao	2024	6	8	6	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	8	7	59	138	138	25
Mindanao	2024	6	8	8	64	138	138	25
Mindanao	2024	6	8	9	71	138	138	25
Mindanao	2024	6	8	10	76	138	138	25
Mindanao	2024	6	8	11	82	138	138	25
Mindanao	2024	6	8	12	82	138	138	25
Mindanao	2024	6	8	13	82	138	138	25
Mindanao	2024	6	8	14	87	138	138	25
Mindanao	2024	6	8	15	86	138	138	25
Mindanao	2024	6	8	16	84	138	138	25
Mindanao	2024	6	8	17	78	138	138	25
Mindanao	2024	6	8	18	84	138	138	25
Mindanao	2024	6	8	19	89	138	138	25
Mindanao	2024	6	8	20	87	138	138	25
Mindanao	2024	6	8	21	84	138	138	25
Mindanao	2024	6	8	22	78	138	138	25
Mindanao	2024	6	8	23	75	138	138	25
Mindanao	2024	6	8	24	70	138	138	25
Mindanao	2024	6	9	1	64	138	138	25
Mindanao	2024	6	9	2	62	138	138	25
Mindanao	2024	6	9	3	59	138	138	25
Mindanao	2024	6	9	4	59	138	138	25
Mindanao	2024	6	9	5	58	138	138	25
Mindanao	2024	6	9	6	58	138	138	25
Mindanao	2024	6	9	7	57	138	138	25
Mindanao	2024	6	9	8	56	138	138	25
Mindanao	2024	6	9	9	57	138	138	25
Mindanao	2024	6	9	10	61	138	138	25
Mindanao	2024	6	9	11	65	138	138	25
Mindanao	2024	6	9	12	66	138	138	25
Mindanao	2024	6	9	13	65	138	138	25
Mindanao	2024	6	9	14	65	138	138	25
Mindanao	2024	6	9	15	64	138	138	25
Mindanao	2024	6	9	16	63	138	138	25
Mindanao	2024	6	9	17	67	138	138	25
Mindanao	2024	6	9	18	77	138	138	25
Mindanao	2024	6	9	19	75	138	138	25
Mindanao	2024	6	9	20	76	138	138	25
Mindanao	2024	6	9	21	72	138	138	25
Mindanao	2024	6	9	22	67	138	138	25
Mindanao	2024	6	9	23	61	138	138	25
Mindanao	2024	6	9	24	59	138	138	25
Mindanao	2024	6	10	1	62	138	138	25
Mindanao	2024	6	10	2	59	138	138	25
Mindanao	2024	6	10	3	57	138	138	25
Mindanao	2024	6	10	4	55	138	138	25
Mindanao	2024	6	10	5	57	138	138	25
Mindanao	2024	6	10	6	60	138	138	25
Mindanao	2024	6	10	7	61	138	138	25
Mindanao	2024	6	10	8	70	138	138	25
Mindanao	2024	6	10	9	82	138	138	25
Mindanao	2024	6	10	10	89	138	138	25
Mindanao	2024	6	10	11	94	138	138	25
Mindanao	2024	6	10	12	93	138	138	25
Mindanao	2024	6	10	13	93	138	138	25
Mindanao	2024	6	10	14	98	138	138	25
Mindanao	2024	6	10	15	95	138	138	25
Mindanao	2024	6	10	16	93	138	138	25
Mindanao	2024	6	10	17	88	138	138	25
Mindanao	2024	6	10	18	88	138	138	25
Mindanao	2024	6	10	19	89	138	138	25
Mindanao	2024	6	10	20	85	138	138	25
Mindanao	2024	6	10	21	80	138	138	25
Mindanao	2024	6	10	22	76	138	138	25
Mindanao	2024	6	10	23	72	138	138	25
Mindanao	2024	6	10	24	67	138	138	25
Mindanao	2024	6	11	1	63	138	138	25
Mindanao	2024	6	11	2	61	138	138	25
Mindanao	2024	6	11	3	58	138	138	25
Mindanao	2024	6	11	4	58	138	138	25
Mindanao	2024	6	11	5	60	138	138	25
Mindanao	2024	6	11	6	65	138	138	25
Mindanao	2024	6	11	7	61	138	138	25
Mindanao	2024	6	11	8	68	138	138	25
Mindanao	2024	6	11	9	81	138	138	25
Mindanao	2024	6	11	10	89	138	138	25
Mindanao	2024	6	11	11	94	138	138	25
Mindanao	2024	6	11	12	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	11	13	92	138	138	25
Mindanao	2024	6	11	14	94	138	138	25
Mindanao	2024	6	11	15	95	138	138	25
Mindanao	2024	6	11	16	92	138	138	25
Mindanao	2024	6	11	17	86	138	138	25
Mindanao	2024	6	11	18	88	138	138	25
Mindanao	2024	6	11	19	89	138	138	25
Mindanao	2024	6	11	20	87	138	138	25
Mindanao	2024	6	11	21	83	138	138	25
Mindanao	2024	6	11	22	77	138	138	25
Mindanao	2024	6	11	23	72	138	138	25
Mindanao	2024	6	11	24	66	138	138	25
Mindanao	2024	6	12	1	65	138	138	25
Mindanao	2024	6	12	2	62	138	138	25
Mindanao	2024	6	12	3	60	138	138	25
Mindanao	2024	6	12	4	57	138	138	25
Mindanao	2024	6	12	5	59	138	138	25
Mindanao	2024	6	12	6	58	138	138	25
Mindanao	2024	6	12	7	57	138	138	25
Mindanao	2024	6	12	8	56	138	138	25
Mindanao	2024	6	12	9	60	138	138	25
Mindanao	2024	6	12	10	66	138	138	25
Mindanao	2024	6	12	11	71	138	138	25
Mindanao	2024	6	12	12	71	138	138	25
Mindanao	2024	6	12	13	73	138	138	25
Mindanao	2024	6	12	14	74	138	138	25
Mindanao	2024	6	12	15	74	138	138	25
Mindanao	2024	6	12	16	72	138	138	25
Mindanao	2024	6	12	17	72	138	138	25
Mindanao	2024	6	12	18	79	138	138	25
Mindanao	2024	6	12	19	83	138	138	25
Mindanao	2024	6	12	20	81	138	138	25
Mindanao	2024	6	12	21	81	138	138	25
Mindanao	2024	6	12	22	76	138	138	25
Mindanao	2024	6	12	23	71	138	138	25
Mindanao	2024	6	12	24	66	138	138	25
Mindanao	2024	6	13	1	67	138	138	25
Mindanao	2024	6	13	2	64	138	138	25
Mindanao	2024	6	13	3	62	138	138	25
Mindanao	2024	6	13	4	59	138	138	25
Mindanao	2024	6	13	5	61	138	138	25
Mindanao	2024	6	13	6	64	138	138	25
Mindanao	2024	6	13	7	62	138	138	25
Mindanao	2024	6	13	8	70	138	138	25
Mindanao	2024	6	13	9	82	138	138	25
Mindanao	2024	6	13	10	91	138	138	25
Mindanao	2024	6	13	11	93	138	138	25
Mindanao	2024	6	13	12	90	138	138	25
Mindanao	2024	6	13	13	89	138	138	25
Mindanao	2024	6	13	14	93	138	138	25
Mindanao	2024	6	13	15	90	138	138	25
Mindanao	2024	6	13	16	89	138	138	25
Mindanao	2024	6	13	17	84	138	138	25
Mindanao	2024	6	13	18	86	138	138	25
Mindanao	2024	6	13	19	88	138	138	25
Mindanao	2024	6	13	20	84	138	138	25
Mindanao	2024	6	13	21	82	138	138	25
Mindanao	2024	6	13	22	75	138	138	25
Mindanao	2024	6	13	23	70	138	138	25
Mindanao	2024	6	13	24	65	138	138	25
Mindanao	2024	6	14	1	62	138	138	25
Mindanao	2024	6	14	2	61	138	138	25
Mindanao	2024	6	14	3	59	138	138	25
Mindanao	2024	6	14	4	58	138	138	25
Mindanao	2024	6	14	5	59	138	138	25
Mindanao	2024	6	14	6	61	138	138	25
Mindanao	2024	6	14	7	61	138	138	25
Mindanao	2024	6	14	8	67	138	138	25
Mindanao	2024	6	14	9	77	138	138	25
Mindanao	2024	6	14	10	85	138	138	25
Mindanao	2024	6	14	11	90	138	138	25
Mindanao	2024	6	14	12	92	138	138	25
Mindanao	2024	6	14	13	92	138	138	25
Mindanao	2024	6	14	14	97	138	138	25
Mindanao	2024	6	14	15	96	138	138	25
Mindanao	2024	6	14	16	88	138	138	25
Mindanao	2024	6	14	17	87	138	138	25
Mindanao	2024	6	14	18	89	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	14	19	92	138	138	25
Mindanao	2024	6	14	20	88	138	138	25
Mindanao	2024	6	14	21	84	138	138	25
Mindanao	2024	6	14	22	80	138	138	25
Mindanao	2024	6	14	23	74	138	138	25
Mindanao	2024	6	14	24	69	138	138	25
Mindanao	2024	6	15	1	67	138	138	25
Mindanao	2024	6	15	2	63	138	138	25
Mindanao	2024	6	15	3	57	138	138	25
Mindanao	2024	6	15	4	58	138	138	25
Mindanao	2024	6	15	5	60	138	138	25
Mindanao	2024	6	15	6	61	138	138	25
Mindanao	2024	6	15	7	60	138	138	25
Mindanao	2024	6	15	8	63	138	138	25
Mindanao	2024	6	15	9	69	138	138	25
Mindanao	2024	6	15	10	76	138	138	25
Mindanao	2024	6	15	11	81	138	138	25
Mindanao	2024	6	15	12	82	138	138	25
Mindanao	2024	6	15	13	82	138	138	25
Mindanao	2024	6	15	14	88	138	138	25
Mindanao	2024	6	15	15	86	138	138	25
Mindanao	2024	6	15	16	83	138	138	25
Mindanao	2024	6	15	17	81	138	138	25
Mindanao	2024	6	15	18	86	138	138	25
Mindanao	2024	6	15	19	88	138	138	25
Mindanao	2024	6	15	20	86	138	138	25
Mindanao	2024	6	15	21	83	138	138	25
Mindanao	2024	6	15	22	79	138	138	25
Mindanao	2024	6	15	23	74	138	138	25
Mindanao	2024	6	15	24	69	138	138	25
Mindanao	2024	6	16	1	65	138	138	25
Mindanao	2024	6	16	2	63	138	138	25
Mindanao	2024	6	16	3	60	138	138	25
Mindanao	2024	6	16	4	57	138	138	25
Mindanao	2024	6	16	5	59	138	138	25
Mindanao	2024	6	16	6	59	138	138	25
Mindanao	2024	6	16	7	58	138	138	25
Mindanao	2024	6	16	8	59	138	138	25
Mindanao	2024	6	16	9	62	138	138	25
Mindanao	2024	6	16	10	68	138	138	25
Mindanao	2024	6	16	11	71	138	138	25
Mindanao	2024	6	16	12	72	138	138	25
Mindanao	2024	6	16	13	73	138	138	25
Mindanao	2024	6	16	14	74	138	138	25
Mindanao	2024	6	16	15	73	138	138	25
Mindanao	2024	6	16	16	68	138	138	25
Mindanao	2024	6	16	17	70	138	138	25
Mindanao	2024	6	16	18	77	138	138	25
Mindanao	2024	6	16	19	80	138	138	25
Mindanao	2024	6	16	20	78	138	138	25
Mindanao	2024	6	16	21	77	138	138	25
Mindanao	2024	6	16	22	73	138	138	25
Mindanao	2024	6	16	23	68	138	138	25
Mindanao	2024	6	16	24	66	138	138	25
Mindanao	2024	6	17	1	61	138	138	25
Mindanao	2024	6	17	2	58	138	138	25
Mindanao	2024	6	17	3	57	138	138	25
Mindanao	2024	6	17	4	56	138	138	25
Mindanao	2024	6	17	5	59	138	138	25
Mindanao	2024	6	17	6	62	138	138	25
Mindanao	2024	6	17	7	60	138	138	25
Mindanao	2024	6	17	8	67	138	138	25
Mindanao	2024	6	17	9	80	138	138	25
Mindanao	2024	6	17	10	86	138	138	25
Mindanao	2024	6	17	11	92	138	138	25
Mindanao	2024	6	17	12	91	138	138	25
Mindanao	2024	6	17	13	93	138	138	25
Mindanao	2024	6	17	14	97	138	138	25
Mindanao	2024	6	17	15	95	138	138	25
Mindanao	2024	6	17	16	92	138	138	25
Mindanao	2024	6	17	17	87	138	138	25
Mindanao	2024	6	17	18	86	138	138	25
Mindanao	2024	6	17	19	90	138	138	25
Mindanao	2024	6	17	20	86	138	138	25
Mindanao	2024	6	17	21	84	138	138	25
Mindanao	2024	6	17	22	78	138	138	25
Mindanao	2024	6	17	23	72	138	138	25
Mindanao	2024	6	17	24	68	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	18	1	65	138	138	25
Mindanao	2024	6	18	2	62	138	138	25
Mindanao	2024	6	18	3	60	138	138	25
Mindanao	2024	6	18	4	59	138	138	25
Mindanao	2024	6	18	5	60	138	138	25
Mindanao	2024	6	18	6	63	138	138	25
Mindanao	2024	6	18	7	63	138	138	25
Mindanao	2024	6	18	8	68	138	138	25
Mindanao	2024	6	18	9	82	138	138	25
Mindanao	2024	6	18	10	88	138	138	25
Mindanao	2024	6	18	11	94	138	138	25
Mindanao	2024	6	18	12	92	138	138	25
Mindanao	2024	6	18	13	91	138	138	25
Mindanao	2024	6	18	14	93	138	138	25
Mindanao	2024	6	18	15	89	138	138	25
Mindanao	2024	6	18	16	85	138	138	25
Mindanao	2024	6	18	17	81	138	138	25
Mindanao	2024	6	18	18	85	138	138	25
Mindanao	2024	6	18	19	86	138	138	25
Mindanao	2024	6	18	20	82	138	138	25
Mindanao	2024	6	18	21	78	138	138	25
Mindanao	2024	6	18	22	73	138	138	25
Mindanao	2024	6	18	23	68	138	138	25
Mindanao	2024	6	18	24	64	138	138	25
Mindanao	2024	6	19	1	62	138	138	25
Mindanao	2024	6	19	2	60	138	138	25
Mindanao	2024	6	19	3	57	138	138	25
Mindanao	2024	6	19	4	57	138	138	25
Mindanao	2024	6	19	5	58	138	138	25
Mindanao	2024	6	19	6	63	138	138	25
Mindanao	2024	6	19	7	62	138	138	25
Mindanao	2024	6	19	8	67	138	138	25
Mindanao	2024	6	19	9	78	138	138	25
Mindanao	2024	6	19	10	83	138	138	25
Mindanao	2024	6	19	11	89	138	138	25
Mindanao	2024	6	19	12	87	138	138	25
Mindanao	2024	6	19	13	88	138	138	25
Mindanao	2024	6	19	14	87	138	138	25
Mindanao	2024	6	19	15	87	138	138	25
Mindanao	2024	6	19	16	86	138	138	25
Mindanao	2024	6	19	17	84	138	138	25
Mindanao	2024	6	19	18	88	138	138	25
Mindanao	2024	6	19	19	90	138	138	25
Mindanao	2024	6	19	20	86	138	138	25
Mindanao	2024	6	19	21	83	138	138	25
Mindanao	2024	6	19	22	75	138	138	25
Mindanao	2024	6	19	23	71	138	138	25
Mindanao	2024	6	19	24	67	138	138	25
Mindanao	2024	6	20	1	63	138	138	25
Mindanao	2024	6	20	2	60	138	138	25
Mindanao	2024	6	20	3	58	138	138	25
Mindanao	2024	6	20	4	58	138	138	25
Mindanao	2024	6	20	5	59	138	138	25
Mindanao	2024	6	20	6	64	138	138	25
Mindanao	2024	6	20	7	63	138	138	25
Mindanao	2024	6	20	8	71	138	138	25
Mindanao	2024	6	20	9	82	138	138	25
Mindanao	2024	6	20	10	89	138	138	25
Mindanao	2024	6	20	11	93	138	138	25
Mindanao	2024	6	20	12	93	138	138	25
Mindanao	2024	6	20	13	93	138	138	25
Mindanao	2024	6	20	14	98	138	138	25
Mindanao	2024	6	20	15	99	138	138	25
Mindanao	2024	6	20	16	97	138	138	25
Mindanao	2024	6	20	17	91	138	138	25
Mindanao	2024	6	20	18	90	138	138	25
Mindanao	2024	6	20	19	95	138	138	25
Mindanao	2024	6	20	20	91	138	138	25
Mindanao	2024	6	20	21	88	138	138	25
Mindanao	2024	6	20	22	82	138	138	25
Mindanao	2024	6	20	23	77	138	138	25
Mindanao	2024	6	20	24	72	138	138	25
Mindanao	2024	6	21	1	68	138	138	25
Mindanao	2024	6	21	2	65	138	138	25
Mindanao	2024	6	21	3	63	138	138	25
Mindanao	2024	6	21	4	61	138	138	25
Mindanao	2024	6	21	5	63	138	138	25
Mindanao	2024	6	21	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	21	7	66	138	138	25
Mindanao	2024	6	21	8	72	138	138	25
Mindanao	2024	6	21	9	84	138	138	25
Mindanao	2024	6	21	10	90	138	138	25
Mindanao	2024	6	21	11	94	138	138	25
Mindanao	2024	6	21	12	92	138	138	25
Mindanao	2024	6	21	13	94	138	138	25
Mindanao	2024	6	21	14	98	138	138	25
Mindanao	2024	6	21	15	98	138	138	25
Mindanao	2024	6	21	16	95	138	138	25
Mindanao	2024	6	21	17	90	138	138	25
Mindanao	2024	6	21	18	89	138	138	25
Mindanao	2024	6	21	19	95	138	138	25
Mindanao	2024	6	21	20	93	138	138	25
Mindanao	2024	6	21	21	90	138	138	25
Mindanao	2024	6	21	22	85	138	138	25
Mindanao	2024	6	21	23	79	138	138	25
Mindanao	2024	6	21	24	76	138	138	25
Mindanao	2024	6	22	1	72	138	138	25
Mindanao	2024	6	22	2	69	138	138	25
Mindanao	2024	6	22	3	65	138	138	25
Mindanao	2024	6	22	4	62	138	138	25
Mindanao	2024	6	22	5	59	138	138	25
Mindanao	2024	6	22	6	65	138	138	25
Mindanao	2024	6	22	7	62	138	138	25
Mindanao	2024	6	22	8	65	138	138	25
Mindanao	2024	6	22	9	72	138	138	25
Mindanao	2024	6	22	10	79	138	138	25
Mindanao	2024	6	22	11	83	138	138	25
Mindanao	2024	6	22	12	82	138	138	25
Mindanao	2024	6	22	13	82	138	138	25
Mindanao	2024	6	22	14	86	138	138	25
Mindanao	2024	6	22	15	85	138	138	25
Mindanao	2024	6	22	16	82	138	138	25
Mindanao	2024	6	22	17	82	138	138	25
Mindanao	2024	6	22	18	86	138	138	25
Mindanao	2024	6	22	19	90	138	138	25
Mindanao	2024	6	22	20	87	138	138	25
Mindanao	2024	6	22	21	83	138	138	25
Mindanao	2024	6	22	22	79	138	138	25
Mindanao	2024	6	22	23	74	138	138	25
Mindanao	2024	6	22	24	70	138	138	25
Mindanao	2024	6	23	1	66	138	138	25
Mindanao	2024	6	23	2	63	138	138	25
Mindanao	2024	6	23	3	62	138	138	25
Mindanao	2024	6	23	4	59	138	138	25
Mindanao	2024	6	23	5	61	138	138	25
Mindanao	2024	6	23	6	61	138	138	25
Mindanao	2024	6	23	7	60	138	138	25
Mindanao	2024	6	23	8	57	138	138	25
Mindanao	2024	6	23	9	59	138	138	25
Mindanao	2024	6	23	10	63	138	138	25
Mindanao	2024	6	23	11	64	138	138	25
Mindanao	2024	6	23	12	65	138	138	25
Mindanao	2024	6	23	13	67	138	138	25
Mindanao	2024	6	23	14	66	138	138	25
Mindanao	2024	6	23	15	64	138	138	25
Mindanao	2024	6	23	16	64	138	138	25
Mindanao	2024	6	23	17	66	138	138	25
Mindanao	2024	6	23	18	81	138	138	25
Mindanao	2024	6	23	19	82	138	138	25
Mindanao	2024	6	23	20	82	138	138	25
Mindanao	2024	6	23	21	75	138	138	25
Mindanao	2024	6	23	22	74	138	138	25
Mindanao	2024	6	23	23	69	138	138	25
Mindanao	2024	6	23	24	65	138	138	25
Mindanao	2024	6	24	1	62	138	138	25
Mindanao	2024	6	24	2	59	138	138	25
Mindanao	2024	6	24	3	57	138	138	25
Mindanao	2024	6	24	4	56	138	138	25
Mindanao	2024	6	24	5	58	138	138	25
Mindanao	2024	6	24	6	63	138	138	25
Mindanao	2024	6	24	7	62	138	138	25
Mindanao	2024	6	24	8	69	138	138	25
Mindanao	2024	6	24	9	80	138	138	25
Mindanao	2024	6	24	10	87	138	138	25
Mindanao	2024	6	24	11	93	138	138	25
Mindanao	2024	6	24	12	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	24	13	94	138	138	25
Mindanao	2024	6	24	14	99	138	138	25
Mindanao	2024	6	24	15	97	138	138	25
Mindanao	2024	6	24	16	93	138	138	25
Mindanao	2024	6	24	17	89	138	138	25
Mindanao	2024	6	24	18	90	138	138	25
Mindanao	2024	6	24	19	89	138	138	25
Mindanao	2024	6	24	20	83	138	138	25
Mindanao	2024	6	24	21	79	138	138	25
Mindanao	2024	6	24	22	74	138	138	25
Mindanao	2024	6	24	23	71	138	138	25
Mindanao	2024	6	24	24	67	138	138	25
Mindanao	2024	6	25	1	64	138	138	25
Mindanao	2024	6	25	2	60	138	138	25
Mindanao	2024	6	25	3	59	138	138	25
Mindanao	2024	6	25	4	60	138	138	25
Mindanao	2024	6	25	5	61	138	138	25
Mindanao	2024	6	25	6	64	138	138	25
Mindanao	2024	6	25	7	62	138	138	25
Mindanao	2024	6	25	8	71	138	138	25
Mindanao	2024	6	25	9	80	138	138	25
Mindanao	2024	6	25	10	89	138	138	25
Mindanao	2024	6	25	11	94	138	138	25
Mindanao	2024	6	25	12	92	138	138	25
Mindanao	2024	6	25	13	93	138	138	25
Mindanao	2024	6	25	14	97	138	138	25
Mindanao	2024	6	25	15	94	138	138	25
Mindanao	2024	6	25	16	90	138	138	25
Mindanao	2024	6	25	17	87	138	138	25
Mindanao	2024	6	25	18	89	138	138	25
Mindanao	2024	6	25	19	91	138	138	25
Mindanao	2024	6	25	20	86	138	138	25
Mindanao	2024	6	25	21	84	138	138	25
Mindanao	2024	6	25	22	78	138	138	25
Mindanao	2024	6	25	23	72	138	138	25
Mindanao	2024	6	25	24	67	138	138	25
Mindanao	2024	6	26	1	65	138	138	25
Mindanao	2024	6	26	2	63	138	138	25
Mindanao	2024	6	26	3	61	138	138	25
Mindanao	2024	6	26	4	59	138	138	25
Mindanao	2024	6	26	5	60	138	138	25
Mindanao	2024	6	26	6	66	138	138	25
Mindanao	2024	6	26	7	64	138	138	25
Mindanao	2024	6	26	8	70	138	138	25
Mindanao	2024	6	26	9	80	138	138	25
Mindanao	2024	6	26	10	90	138	138	25
Mindanao	2024	6	26	11	93	138	138	25
Mindanao	2024	6	26	12	92	138	138	25
Mindanao	2024	6	26	13	94	138	138	25
Mindanao	2024	6	26	14	97	138	138	25
Mindanao	2024	6	26	15	94	138	138	25
Mindanao	2024	6	26	16	93	138	138	25
Mindanao	2024	6	26	17	86	138	138	25
Mindanao	2024	6	26	18	89	138	138	25
Mindanao	2024	6	26	19	91	138	138	25
Mindanao	2024	6	26	20	88	138	138	25
Mindanao	2024	6	26	21	85	138	138	25
Mindanao	2024	6	26	22	78	138	138	25
Mindanao	2024	6	26	23	74	138	138	25
Mindanao	2024	6	26	24	68	138	138	25
Mindanao	2024	6	27	1	66	138	138	25
Mindanao	2024	6	27	2	64	138	138	25
Mindanao	2024	6	27	3	62	138	138	25
Mindanao	2024	6	27	4	61	138	138	25
Mindanao	2024	6	27	5	62	138	138	25
Mindanao	2024	6	27	6	66	138	138	25
Mindanao	2024	6	27	7	65	138	138	25
Mindanao	2024	6	27	8	72	138	138	25
Mindanao	2024	6	27	9	83	138	138	25
Mindanao	2024	6	27	10	92	138	138	25
Mindanao	2024	6	27	11	94	138	138	25
Mindanao	2024	6	27	12	93	138	138	25
Mindanao	2024	6	27	13	95	138	138	25
Mindanao	2024	6	27	14	97	138	138	25
Mindanao	2024	6	27	15	98	138	138	25
Mindanao	2024	6	27	16	94	138	138	25
Mindanao	2024	6	27	17	88	138	138	25
Mindanao	2024	6	27	18	90	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	6	27	19	92	138	138	25
Mindanao	2024	6	27	20	87	138	138	25
Mindanao	2024	6	27	21	85	138	138	25
Mindanao	2024	6	27	22	79	138	138	25
Mindanao	2024	6	27	23	75	138	138	25
Mindanao	2024	6	27	24	69	138	138	25
Mindanao	2024	6	28	1	67	138	138	25
Mindanao	2024	6	28	2	64	138	138	25
Mindanao	2024	6	28	3	62	138	138	25
Mindanao	2024	6	28	4	61	138	138	25
Mindanao	2024	6	28	5	62	138	138	25
Mindanao	2024	6	28	6	65	138	138	25
Mindanao	2024	6	28	7	63	138	138	25
Mindanao	2024	6	28	8	70	138	138	25
Mindanao	2024	6	28	9	83	138	138	25
Mindanao	2024	6	28	10	90	138	138	25
Mindanao	2024	6	28	11	94	138	138	25
Mindanao	2024	6	28	12	95	138	138	25
Mindanao	2024	6	28	13	95	138	138	25
Mindanao	2024	6	28	14	99	138	138	25
Mindanao	2024	6	28	15	97	138	138	25
Mindanao	2024	6	28	16	95	138	138	25
Mindanao	2024	6	28	17	87	138	138	25
Mindanao	2024	6	28	18	90	138	138	25
Mindanao	2024	6	28	19	92	138	138	25
Mindanao	2024	6	28	20	88	138	138	25
Mindanao	2024	6	28	21	84	138	138	25
Mindanao	2024	6	28	22	78	138	138	25
Mindanao	2024	6	28	23	73	138	138	25
Mindanao	2024	6	28	24	70	138	138	25
Mindanao	2024	6	29	1	65	138	138	25
Mindanao	2024	6	29	2	64	138	138	25
Mindanao	2024	6	29	3	61	138	138	25
Mindanao	2024	6	29	4	60	138	138	25
Mindanao	2024	6	29	5	61	138	138	25
Mindanao	2024	6	29	6	63	138	138	25
Mindanao	2024	6	29	7	61	138	138	25
Mindanao	2024	6	29	8	64	138	138	25
Mindanao	2024	6	29	9	71	138	138	25
Mindanao	2024	6	29	10	75	138	138	25
Mindanao	2024	6	29	11	77	138	138	25
Mindanao	2024	6	29	12	76	138	138	25
Mindanao	2024	6	29	13	76	138	138	25
Mindanao	2024	6	29	14	78	138	138	25
Mindanao	2024	6	29	15	78	138	138	25
Mindanao	2024	6	29	16	78	138	138	25
Mindanao	2024	6	29	17	78	138	138	25
Mindanao	2024	6	29	18	82	138	138	25
Mindanao	2024	6	29	19	86	138	138	25
Mindanao	2024	6	29	20	83	138	138	25
Mindanao	2024	6	29	21	80	138	138	25
Mindanao	2024	6	29	22	74	138	138	25
Mindanao	2024	6	29	23	70	138	138	25
Mindanao	2024	6	29	24	64	138	138	25
Mindanao	2024	6	30	1	62	138	138	25
Mindanao	2024	6	30	2	60	138	138	25
Mindanao	2024	6	30	3	58	138	138	25
Mindanao	2024	6	30	4	56	138	138	25
Mindanao	2024	6	30	5	56	138	138	25
Mindanao	2024	6	30	6	57	138	138	25
Mindanao	2024	6	30	7	56	138	138	25
Mindanao	2024	6	30	8	55	138	138	25
Mindanao	2024	6	30	9	60	138	138	25
Mindanao	2024	6	30	10	64	138	138	25
Mindanao	2024	6	30	11	68	138	138	25
Mindanao	2024	6	30	12	69	138	138	25
Mindanao	2024	6	30	13	69	138	138	25
Mindanao	2024	6	30	14	69	138	138	25
Mindanao	2024	6	30	15	68	138	138	25
Mindanao	2024	6	30	16	69	138	138	25
Mindanao	2024	6	30	17	68	138	138	25
Mindanao	2024	6	30	18	73	138	138	25
Mindanao	2024	6	30	19	78	138	138	25
Mindanao	2024	6	30	20	76	138	138	25
Mindanao	2024	6	30	21	74	138	138	25
Mindanao	2024	6	30	22	70	138	138	25
Mindanao	2024	6	30	23	65	138	138	25
Mindanao	2024	6	30	24	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	1	1	56	138	138	25
Mindanao	2024	7	1	2	54	138	138	25
Mindanao	2024	7	1	3	52	138	138	25
Mindanao	2024	7	1	4	51	138	138	25
Mindanao	2024	7	1	5	53	138	138	25
Mindanao	2024	7	1	6	55	138	138	25
Mindanao	2024	7	1	7	56	138	138	25
Mindanao	2024	7	1	8	65	138	138	25
Mindanao	2024	7	1	9	75	138	138	25
Mindanao	2024	7	1	10	82	138	138	25
Mindanao	2024	7	1	11	88	138	138	25
Mindanao	2024	7	1	12	87	138	138	25
Mindanao	2024	7	1	13	88	138	138	25
Mindanao	2024	7	1	14	92	138	138	25
Mindanao	2024	7	1	15	91	138	138	25
Mindanao	2024	7	1	16	89	138	138	25
Mindanao	2024	7	1	17	83	138	138	25
Mindanao	2024	7	1	18	84	138	138	25
Mindanao	2024	7	1	19	84	138	138	25
Mindanao	2024	7	1	20	81	138	138	25
Mindanao	2024	7	1	21	78	138	138	25
Mindanao	2024	7	1	22	72	138	138	25
Mindanao	2024	7	1	23	68	138	138	25
Mindanao	2024	7	1	24	64	138	138	25
Mindanao	2024	7	2	1	60	138	138	25
Mindanao	2024	7	2	2	58	138	138	25
Mindanao	2024	7	2	3	57	138	138	25
Mindanao	2024	7	2	4	56	138	138	25
Mindanao	2024	7	2	5	58	138	138	25
Mindanao	2024	7	2	6	59	138	138	25
Mindanao	2024	7	2	7	61	138	138	25
Mindanao	2024	7	2	8	68	138	138	25
Mindanao	2024	7	2	9	79	138	138	25
Mindanao	2024	7	2	10	86	138	138	25
Mindanao	2024	7	2	11	91	138	138	25
Mindanao	2024	7	2	12	90	138	138	25
Mindanao	2024	7	2	13	92	138	138	25
Mindanao	2024	7	2	14	95	138	138	25
Mindanao	2024	7	2	15	92	138	138	25
Mindanao	2024	7	2	16	91	138	138	25
Mindanao	2024	7	2	17	81	138	138	25
Mindanao	2024	7	2	18	83	138	138	25
Mindanao	2024	7	2	19	82	138	138	25
Mindanao	2024	7	2	20	79	138	138	25
Mindanao	2024	7	2	21	74	138	138	25
Mindanao	2024	7	2	22	70	138	138	25
Mindanao	2024	7	2	23	66	138	138	25
Mindanao	2024	7	2	24	62	138	138	25
Mindanao	2024	7	3	1	58	138	138	25
Mindanao	2024	7	3	2	56	138	138	25
Mindanao	2024	7	3	3	55	138	138	25
Mindanao	2024	7	3	4	55	138	138	25
Mindanao	2024	7	3	5	56	138	138	25
Mindanao	2024	7	3	6	59	138	138	25
Mindanao	2024	7	3	7	58	138	138	25
Mindanao	2024	7	3	8	67	138	138	25
Mindanao	2024	7	3	9	76	138	138	25
Mindanao	2024	7	3	10	84	138	138	25
Mindanao	2024	7	3	11	89	138	138	25
Mindanao	2024	7	3	12	88	138	138	25
Mindanao	2024	7	3	13	89	138	138	25
Mindanao	2024	7	3	14	92	138	138	25
Mindanao	2024	7	3	15	93	138	138	25
Mindanao	2024	7	3	16	91	138	138	25
Mindanao	2024	7	3	17	83	138	138	25
Mindanao	2024	7	3	18	83	138	138	25
Mindanao	2024	7	3	19	88	138	138	25
Mindanao	2024	7	3	20	86	138	138	25
Mindanao	2024	7	3	21	83	138	138	25
Mindanao	2024	7	3	22	77	138	138	25
Mindanao	2024	7	3	23	71	138	138	25
Mindanao	2024	7	3	24	65	138	138	25
Mindanao	2024	7	4	1	63	138	138	25
Mindanao	2024	7	4	2	61	138	138	25
Mindanao	2024	7	4	3	59	138	138	25
Mindanao	2024	7	4	4	57	138	138	25
Mindanao	2024	7	4	5	59	138	138	25
Mindanao	2024	7	4	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	4	7	60	138	138	25
Mindanao	2024	7	4	8	69	138	138	25
Mindanao	2024	7	4	9	79	138	138	25
Mindanao	2024	7	4	10	86	138	138	25
Mindanao	2024	7	4	11	92	138	138	25
Mindanao	2024	7	4	12	92	138	138	25
Mindanao	2024	7	4	13	91	138	138	25
Mindanao	2024	7	4	14	94	138	138	25
Mindanao	2024	7	4	15	91	138	138	25
Mindanao	2024	7	4	16	89	138	138	25
Mindanao	2024	7	4	17	82	138	138	25
Mindanao	2024	7	4	18	83	138	138	25
Mindanao	2024	7	4	19	84	138	138	25
Mindanao	2024	7	4	20	81	138	138	25
Mindanao	2024	7	4	21	78	138	138	25
Mindanao	2024	7	4	22	72	138	138	25
Mindanao	2024	7	4	23	69	138	138	25
Mindanao	2024	7	4	24	64	138	138	25
Mindanao	2024	7	5	1	60	138	138	25
Mindanao	2024	7	5	2	56	138	138	25
Mindanao	2024	7	5	3	57	138	138	25
Mindanao	2024	7	5	4	57	138	138	25
Mindanao	2024	7	5	5	56	138	138	25
Mindanao	2024	7	5	6	61	138	138	25
Mindanao	2024	7	5	7	61	138	138	25
Mindanao	2024	7	5	8	68	138	138	25
Mindanao	2024	7	5	9	77	138	138	25
Mindanao	2024	7	5	10	83	138	138	25
Mindanao	2024	7	5	11	89	138	138	25
Mindanao	2024	7	5	12	87	138	138	25
Mindanao	2024	7	5	13	87	138	138	25
Mindanao	2024	7	5	14	88	138	138	25
Mindanao	2024	7	5	15	89	138	138	25
Mindanao	2024	7	5	16	88	138	138	25
Mindanao	2024	7	5	17	83	138	138	25
Mindanao	2024	7	5	18	83	138	138	25
Mindanao	2024	7	5	19	85	138	138	25
Mindanao	2024	7	5	20	80	138	138	25
Mindanao	2024	7	5	21	76	138	138	25
Mindanao	2024	7	5	22	71	138	138	25
Mindanao	2024	7	5	23	66	138	138	25
Mindanao	2024	7	5	24	63	138	138	25
Mindanao	2024	7	6	1	59	138	138	25
Mindanao	2024	7	6	2	56	138	138	25
Mindanao	2024	7	6	3	55	138	138	25
Mindanao	2024	7	6	4	54	138	138	25
Mindanao	2024	7	6	5	56	138	138	25
Mindanao	2024	7	6	6	57	138	138	25
Mindanao	2024	7	6	7	56	138	138	25
Mindanao	2024	7	6	8	58	138	138	25
Mindanao	2024	7	6	9	63	138	138	25
Mindanao	2024	7	6	10	67	138	138	25
Mindanao	2024	7	6	11	71	138	138	25
Mindanao	2024	7	6	12	70	138	138	25
Mindanao	2024	7	6	13	70	138	138	25
Mindanao	2024	7	6	14	72	138	138	25
Mindanao	2024	7	6	15	71	138	138	25
Mindanao	2024	7	6	16	71	138	138	25
Mindanao	2024	7	6	17	70	138	138	25
Mindanao	2024	7	6	18	77	138	138	25
Mindanao	2024	7	6	19	77	138	138	25
Mindanao	2024	7	6	20	75	138	138	25
Mindanao	2024	7	6	21	74	138	138	25
Mindanao	2024	7	6	22	68	138	138	25
Mindanao	2024	7	6	23	65	138	138	25
Mindanao	2024	7	6	24	60	138	138	25
Mindanao	2024	7	7	1	56	138	138	25
Mindanao	2024	7	7	2	54	138	138	25
Mindanao	2024	7	7	3	52	138	138	25
Mindanao	2024	7	7	4	53	138	138	25
Mindanao	2024	7	7	5	53	138	138	25
Mindanao	2024	7	7	6	54	138	138	25
Mindanao	2024	7	7	7	54	138	138	25
Mindanao	2024	7	7	8	53	138	138	25
Mindanao	2024	7	7	9	55	138	138	25
Mindanao	2024	7	7	10	61	138	138	25
Mindanao	2024	7	7	11	64	138	138	25
Mindanao	2024	7	7	12	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	7	13	63	138	138	25
Mindanao	2024	7	7	14	65	138	138	25
Mindanao	2024	7	7	15	66	138	138	25
Mindanao	2024	7	7	16	65	138	138	25
Mindanao	2024	7	7	17	66	138	138	25
Mindanao	2024	7	7	18	74	138	138	25
Mindanao	2024	7	7	19	79	138	138	25
Mindanao	2024	7	7	20	78	138	138	25
Mindanao	2024	7	7	21	77	138	138	25
Mindanao	2024	7	7	22	74	138	138	25
Mindanao	2024	7	7	23	68	138	138	25
Mindanao	2024	7	7	24	64	138	138	25
Mindanao	2024	7	8	1	60	138	138	25
Mindanao	2024	7	8	2	57	138	138	25
Mindanao	2024	7	8	3	54	138	138	25
Mindanao	2024	7	8	4	54	138	138	25
Mindanao	2024	7	8	5	56	138	138	25
Mindanao	2024	7	8	6	60	138	138	25
Mindanao	2024	7	8	7	59	138	138	25
Mindanao	2024	7	8	8	67	138	138	25
Mindanao	2024	7	8	9	78	138	138	25
Mindanao	2024	7	8	10	85	138	138	25
Mindanao	2024	7	8	11	90	138	138	25
Mindanao	2024	7	8	12	85	138	138	25
Mindanao	2024	7	8	13	88	138	138	25
Mindanao	2024	7	8	14	93	138	138	25
Mindanao	2024	7	8	15	92	138	138	25
Mindanao	2024	7	8	16	91	138	138	25
Mindanao	2024	7	8	17	83	138	138	25
Mindanao	2024	7	8	18	87	138	138	25
Mindanao	2024	7	8	19	86	138	138	25
Mindanao	2024	7	8	20	83	138	138	25
Mindanao	2024	7	8	21	80	138	138	25
Mindanao	2024	7	8	22	74	138	138	25
Mindanao	2024	7	8	23	70	138	138	25
Mindanao	2024	7	8	24	64	138	138	25
Mindanao	2024	7	9	1	61	138	138	25
Mindanao	2024	7	9	2	58	138	138	25
Mindanao	2024	7	9	3	55	138	138	25
Mindanao	2024	7	9	4	55	138	138	25
Mindanao	2024	7	9	5	56	138	138	25
Mindanao	2024	7	9	6	61	138	138	25
Mindanao	2024	7	9	7	62	138	138	25
Mindanao	2024	7	9	8	68	138	138	25
Mindanao	2024	7	9	9	79	138	138	25
Mindanao	2024	7	9	10	86	138	138	25
Mindanao	2024	7	9	11	91	138	138	25
Mindanao	2024	7	9	12	91	138	138	25
Mindanao	2024	7	9	13	91	138	138	25
Mindanao	2024	7	9	14	95	138	138	25
Mindanao	2024	7	9	15	91	138	138	25
Mindanao	2024	7	9	16	90	138	138	25
Mindanao	2024	7	9	17	84	138	138	25
Mindanao	2024	7	9	18	85	138	138	25
Mindanao	2024	7	9	19	84	138	138	25
Mindanao	2024	7	9	20	83	138	138	25
Mindanao	2024	7	9	21	77	138	138	25
Mindanao	2024	7	9	22	73	138	138	25
Mindanao	2024	7	9	23	71	138	138	25
Mindanao	2024	7	9	24	66	138	138	25
Mindanao	2024	7	10	1	63	138	138	25
Mindanao	2024	7	10	2	59	138	138	25
Mindanao	2024	7	10	3	57	138	138	25
Mindanao	2024	7	10	4	55	138	138	25
Mindanao	2024	7	10	5	59	138	138	25
Mindanao	2024	7	10	6	62	138	138	25
Mindanao	2024	7	10	7	60	138	138	25
Mindanao	2024	7	10	8	65	138	138	25
Mindanao	2024	7	10	9	79	138	138	25
Mindanao	2024	7	10	10	87	138	138	25
Mindanao	2024	7	10	11	90	138	138	25
Mindanao	2024	7	10	12	90	138	138	25
Mindanao	2024	7	10	13	93	138	138	25
Mindanao	2024	7	10	14	93	138	138	25
Mindanao	2024	7	10	15	91	138	138	25
Mindanao	2024	7	10	16	87	138	138	25
Mindanao	2024	7	10	17	85	138	138	25
Mindanao	2024	7	10	18	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	10	19	87	138	138	25
Mindanao	2024	7	10	20	84	138	138	25
Mindanao	2024	7	10	21	81	138	138	25
Mindanao	2024	7	10	22	75	138	138	25
Mindanao	2024	7	10	23	70	138	138	25
Mindanao	2024	7	10	24	64	138	138	25
Mindanao	2024	7	11	1	60	138	138	25
Mindanao	2024	7	11	2	59	138	138	25
Mindanao	2024	7	11	3	56	138	138	25
Mindanao	2024	7	11	4	57	138	138	25
Mindanao	2024	7	11	5	57	138	138	25
Mindanao	2024	7	11	6	60	138	138	25
Mindanao	2024	7	11	7	60	138	138	25
Mindanao	2024	7	11	8	68	138	138	25
Mindanao	2024	7	11	9	80	138	138	25
Mindanao	2024	7	11	10	86	138	138	25
Mindanao	2024	7	11	11	92	138	138	25
Mindanao	2024	7	11	12	90	138	138	25
Mindanao	2024	7	11	13	92	138	138	25
Mindanao	2024	7	11	14	97	138	138	25
Mindanao	2024	7	11	15	94	138	138	25
Mindanao	2024	7	11	16	92	138	138	25
Mindanao	2024	7	11	17	87	138	138	25
Mindanao	2024	7	11	18	87	138	138	25
Mindanao	2024	7	11	19	88	138	138	25
Mindanao	2024	7	11	20	86	138	138	25
Mindanao	2024	7	11	21	82	138	138	25
Mindanao	2024	7	11	22	76	138	138	25
Mindanao	2024	7	11	23	71	138	138	25
Mindanao	2024	7	11	24	67	138	138	25
Mindanao	2024	7	12	1	65	138	138	25
Mindanao	2024	7	12	2	61	138	138	25
Mindanao	2024	7	12	3	58	138	138	25
Mindanao	2024	7	12	4	57	138	138	25
Mindanao	2024	7	12	5	59	138	138	25
Mindanao	2024	7	12	6	64	138	138	25
Mindanao	2024	7	12	7	60	138	138	25
Mindanao	2024	7	12	8	67	138	138	25
Mindanao	2024	7	12	9	79	138	138	25
Mindanao	2024	7	12	10	84	138	138	25
Mindanao	2024	7	12	11	89	138	138	25
Mindanao	2024	7	12	12	87	138	138	25
Mindanao	2024	7	12	13	88	138	138	25
Mindanao	2024	7	12	14	90	138	138	25
Mindanao	2024	7	12	15	90	138	138	25
Mindanao	2024	7	12	16	85	138	138	25
Mindanao	2024	7	12	17	82	138	138	25
Mindanao	2024	7	12	18	85	138	138	25
Mindanao	2024	7	12	19	85	138	138	25
Mindanao	2024	7	12	20	84	138	138	25
Mindanao	2024	7	12	21	80	138	138	25
Mindanao	2024	7	12	22	74	138	138	25
Mindanao	2024	7	12	23	69	138	138	25
Mindanao	2024	7	12	24	65	138	138	25
Mindanao	2024	7	13	1	63	138	138	25
Mindanao	2024	7	13	2	61	138	138	25
Mindanao	2024	7	13	3	57	138	138	25
Mindanao	2024	7	13	4	57	138	138	25
Mindanao	2024	7	13	5	55	138	138	25
Mindanao	2024	7	13	6	58	138	138	25
Mindanao	2024	7	13	7	58	138	138	25
Mindanao	2024	7	13	8	59	138	138	25
Mindanao	2024	7	13	9	70	138	138	25
Mindanao	2024	7	13	10	75	138	138	25
Mindanao	2024	7	13	11	78	138	138	25
Mindanao	2024	7	13	12	78	138	138	25
Mindanao	2024	7	13	13	79	138	138	25
Mindanao	2024	7	13	14	81	138	138	25
Mindanao	2024	7	13	15	78	138	138	25
Mindanao	2024	7	13	16	78	138	138	25
Mindanao	2024	7	13	17	77	138	138	25
Mindanao	2024	7	13	18	79	138	138	25
Mindanao	2024	7	13	19	78	138	138	25
Mindanao	2024	7	13	20	76	138	138	25
Mindanao	2024	7	13	21	72	138	138	25
Mindanao	2024	7	13	22	68	138	138	25
Mindanao	2024	7	13	23	64	138	138	25
Mindanao	2024	7	13	24	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	14	1	56	138	138	25
Mindanao	2024	7	14	2	55	138	138	25
Mindanao	2024	7	14	3	53	138	138	25
Mindanao	2024	7	14	4	52	138	138	25
Mindanao	2024	7	14	5	51	138	138	25
Mindanao	2024	7	14	6	55	138	138	25
Mindanao	2024	7	14	7	55	138	138	25
Mindanao	2024	7	14	8	56	138	138	25
Mindanao	2024	7	14	9	59	138	138	25
Mindanao	2024	7	14	10	62	138	138	25
Mindanao	2024	7	14	11	68	138	138	25
Mindanao	2024	7	14	12	69	138	138	25
Mindanao	2024	7	14	13	70	138	138	25
Mindanao	2024	7	14	14	72	138	138	25
Mindanao	2024	7	14	15	70	138	138	25
Mindanao	2024	7	14	16	70	138	138	25
Mindanao	2024	7	14	17	71	138	138	25
Mindanao	2024	7	14	18	76	138	138	25
Mindanao	2024	7	14	19	77	138	138	25
Mindanao	2024	7	14	20	74	138	138	25
Mindanao	2024	7	14	21	71	138	138	25
Mindanao	2024	7	14	22	66	138	138	25
Mindanao	2024	7	14	23	62	138	138	25
Mindanao	2024	7	14	24	58	138	138	25
Mindanao	2024	7	15	1	55	138	138	25
Mindanao	2024	7	15	2	53	138	138	25
Mindanao	2024	7	15	3	53	138	138	25
Mindanao	2024	7	15	4	52	138	138	25
Mindanao	2024	7	15	5	54	138	138	25
Mindanao	2024	7	15	6	57	138	138	25
Mindanao	2024	7	15	7	57	138	138	25
Mindanao	2024	7	15	8	62	138	138	25
Mindanao	2024	7	15	9	71	138	138	25
Mindanao	2024	7	15	10	79	138	138	25
Mindanao	2024	7	15	11	85	138	138	25
Mindanao	2024	7	15	12	83	138	138	25
Mindanao	2024	7	15	13	83	138	138	25
Mindanao	2024	7	15	14	83	138	138	25
Mindanao	2024	7	15	15	83	138	138	25
Mindanao	2024	7	15	16	82	138	138	25
Mindanao	2024	7	15	17	77	138	138	25
Mindanao	2024	7	15	18	83	138	138	25
Mindanao	2024	7	15	19	83	138	138	25
Mindanao	2024	7	15	20	78	138	138	25
Mindanao	2024	7	15	21	75	138	138	25
Mindanao	2024	7	15	22	69	138	138	25
Mindanao	2024	7	15	23	65	138	138	25
Mindanao	2024	7	15	24	61	138	138	25
Mindanao	2024	7	16	1	58	138	138	25
Mindanao	2024	7	16	2	57	138	138	25
Mindanao	2024	7	16	3	54	138	138	25
Mindanao	2024	7	16	4	54	138	138	25
Mindanao	2024	7	16	5	55	138	138	25
Mindanao	2024	7	16	6	60	138	138	25
Mindanao	2024	7	16	7	59	138	138	25
Mindanao	2024	7	16	8	63	138	138	25
Mindanao	2024	7	16	9	74	138	138	25
Mindanao	2024	7	16	10	77	138	138	25
Mindanao	2024	7	16	11	85	138	138	25
Mindanao	2024	7	16	12	84	138	138	25
Mindanao	2024	7	16	13	85	138	138	25
Mindanao	2024	7	16	14	92	138	138	25
Mindanao	2024	7	16	15	91	138	138	25
Mindanao	2024	7	16	16	89	138	138	25
Mindanao	2024	7	16	17	83	138	138	25
Mindanao	2024	7	16	18	84	138	138	25
Mindanao	2024	7	16	19	87	138	138	25
Mindanao	2024	7	16	20	84	138	138	25
Mindanao	2024	7	16	21	80	138	138	25
Mindanao	2024	7	16	22	74	138	138	25
Mindanao	2024	7	16	23	67	138	138	25
Mindanao	2024	7	16	24	62	138	138	25
Mindanao	2024	7	17	1	59	138	138	25
Mindanao	2024	7	17	2	57	138	138	25
Mindanao	2024	7	17	3	57	138	138	25
Mindanao	2024	7	17	4	55	138	138	25
Mindanao	2024	7	17	5	56	138	138	25
Mindanao	2024	7	17	6	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	17	7	61	138	138	25
Mindanao	2024	7	17	8	67	138	138	25
Mindanao	2024	7	17	9	78	138	138	25
Mindanao	2024	7	17	10	85	138	138	25
Mindanao	2024	7	17	11	92	138	138	25
Mindanao	2024	7	17	12	91	138	138	25
Mindanao	2024	7	17	13	91	138	138	25
Mindanao	2024	7	17	14	96	138	138	25
Mindanao	2024	7	17	15	93	138	138	25
Mindanao	2024	7	17	16	94	138	138	25
Mindanao	2024	7	17	17	88	138	138	25
Mindanao	2024	7	17	18	88	138	138	25
Mindanao	2024	7	17	19	92	138	138	25
Mindanao	2024	7	17	20	90	138	138	25
Mindanao	2024	7	17	21	87	138	138	25
Mindanao	2024	7	17	22	80	138	138	25
Mindanao	2024	7	17	23	75	138	138	25
Mindanao	2024	7	17	24	72	138	138	25
Mindanao	2024	7	18	1	66	138	138	25
Mindanao	2024	7	18	2	65	138	138	25
Mindanao	2024	7	18	3	61	138	138	25
Mindanao	2024	7	18	4	60	138	138	25
Mindanao	2024	7	18	5	60	138	138	25
Mindanao	2024	7	18	6	64	138	138	25
Mindanao	2024	7	18	7	62	138	138	25
Mindanao	2024	7	18	8	70	138	138	25
Mindanao	2024	7	18	9	81	138	138	25
Mindanao	2024	7	18	10	90	138	138	25
Mindanao	2024	7	18	11	94	138	138	25
Mindanao	2024	7	18	12	94	138	138	25
Mindanao	2024	7	18	13	95	138	138	25
Mindanao	2024	7	18	14	101	138	138	25
Mindanao	2024	7	18	15	100	138	138	25
Mindanao	2024	7	18	16	98	138	138	25
Mindanao	2024	7	18	17	92	138	138	25
Mindanao	2024	7	18	18	90	138	138	25
Mindanao	2024	7	18	19	92	138	138	25
Mindanao	2024	7	18	20	86	138	138	25
Mindanao	2024	7	18	21	85	138	138	25
Mindanao	2024	7	18	22	79	138	138	25
Mindanao	2024	7	18	23	75	138	138	25
Mindanao	2024	7	18	24	70	138	138	25
Mindanao	2024	7	19	1	67	138	138	25
Mindanao	2024	7	19	2	64	138	138	25
Mindanao	2024	7	19	3	62	138	138	25
Mindanao	2024	7	19	4	60	138	138	25
Mindanao	2024	7	19	5	61	138	138	25
Mindanao	2024	7	19	6	65	138	138	25
Mindanao	2024	7	19	7	64	138	138	25
Mindanao	2024	7	19	8	68	138	138	25
Mindanao	2024	7	19	9	79	138	138	25
Mindanao	2024	7	19	10	85	138	138	25
Mindanao	2024	7	19	11	90	138	138	25
Mindanao	2024	7	19	12	91	138	138	25
Mindanao	2024	7	19	13	91	138	138	25
Mindanao	2024	7	19	14	97	138	138	25
Mindanao	2024	7	19	15	95	138	138	25
Mindanao	2024	7	19	16	93	138	138	25
Mindanao	2024	7	19	17	87	138	138	25
Mindanao	2024	7	19	18	86	138	138	25
Mindanao	2024	7	19	19	88	138	138	25
Mindanao	2024	7	19	20	87	138	138	25
Mindanao	2024	7	19	21	83	138	138	25
Mindanao	2024	7	19	22	77	138	138	25
Mindanao	2024	7	19	23	74	138	138	25
Mindanao	2024	7	19	24	70	138	138	25
Mindanao	2024	7	20	1	66	138	138	25
Mindanao	2024	7	20	2	63	138	138	25
Mindanao	2024	7	20	3	61	138	138	25
Mindanao	2024	7	20	4	60	138	138	25
Mindanao	2024	7	20	5	61	138	138	25
Mindanao	2024	7	20	6	63	138	138	25
Mindanao	2024	7	20	7	59	138	138	25
Mindanao	2024	7	20	8	64	138	138	25
Mindanao	2024	7	20	9	70	138	138	25
Mindanao	2024	7	20	10	74	138	138	25
Mindanao	2024	7	20	11	78	138	138	25
Mindanao	2024	7	20	12	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	20	13	81	138	138	25
Mindanao	2024	7	20	14	87	138	138	25
Mindanao	2024	7	20	15	84	138	138	25
Mindanao	2024	7	20	16	82	138	138	25
Mindanao	2024	7	20	17	81	138	138	25
Mindanao	2024	7	20	18	84	138	138	25
Mindanao	2024	7	20	19	85	138	138	25
Mindanao	2024	7	20	20	81	138	138	25
Mindanao	2024	7	20	21	80	138	138	25
Mindanao	2024	7	20	22	75	138	138	25
Mindanao	2024	7	20	23	71	138	138	25
Mindanao	2024	7	20	24	66	138	138	25
Mindanao	2024	7	21	1	64	138	138	25
Mindanao	2024	7	21	2	61	138	138	25
Mindanao	2024	7	21	3	60	138	138	25
Mindanao	2024	7	21	4	58	138	138	25
Mindanao	2024	7	21	5	60	138	138	25
Mindanao	2024	7	21	6	59	138	138	25
Mindanao	2024	7	21	7	58	138	138	25
Mindanao	2024	7	21	8	54	138	138	25
Mindanao	2024	7	21	9	57	138	138	25
Mindanao	2024	7	21	10	61	138	138	25
Mindanao	2024	7	21	11	66	138	138	25
Mindanao	2024	7	21	12	67	138	138	25
Mindanao	2024	7	21	13	68	138	138	25
Mindanao	2024	7	21	14	71	138	138	25
Mindanao	2024	7	21	15	70	138	138	25
Mindanao	2024	7	21	16	68	138	138	25
Mindanao	2024	7	21	17	69	138	138	25
Mindanao	2024	7	21	18	74	138	138	25
Mindanao	2024	7	21	19	77	138	138	25
Mindanao	2024	7	21	20	76	138	138	25
Mindanao	2024	7	21	21	77	138	138	25
Mindanao	2024	7	21	22	72	138	138	25
Mindanao	2024	7	21	23	68	138	138	25
Mindanao	2024	7	21	24	69	138	138	25
Mindanao	2024	7	22	1	65	138	138	25
Mindanao	2024	7	22	2	62	138	138	25
Mindanao	2024	7	22	3	59	138	138	25
Mindanao	2024	7	22	4	58	138	138	25
Mindanao	2024	7	22	5	60	138	138	25
Mindanao	2024	7	22	6	63	138	138	25
Mindanao	2024	7	22	7	62	138	138	25
Mindanao	2024	7	22	8	71	138	138	25
Mindanao	2024	7	22	9	81	138	138	25
Mindanao	2024	7	22	10	90	138	138	25
Mindanao	2024	7	22	11	92	138	138	25
Mindanao	2024	7	22	12	93	138	138	25
Mindanao	2024	7	22	13	94	138	138	25
Mindanao	2024	7	22	14	100	138	138	25
Mindanao	2024	7	22	15	98	138	138	25
Mindanao	2024	7	22	16	96	138	138	25
Mindanao	2024	7	22	17	90	138	138	25
Mindanao	2024	7	22	18	90	138	138	25
Mindanao	2024	7	22	19	94	138	138	25
Mindanao	2024	7	22	20	89	138	138	25
Mindanao	2024	7	22	21	88	138	138	25
Mindanao	2024	7	22	22	82	138	138	25
Mindanao	2024	7	22	23	77	138	138	25
Mindanao	2024	7	22	24	68	138	138	25
Mindanao	2024	7	23	1	67	138	138	25
Mindanao	2024	7	23	2	64	138	138	25
Mindanao	2024	7	23	3	61	138	138	25
Mindanao	2024	7	23	4	59	138	138	25
Mindanao	2024	7	23	5	62	138	138	25
Mindanao	2024	7	23	6	65	138	138	25
Mindanao	2024	7	23	7	65	138	138	25
Mindanao	2024	7	23	8	70	138	138	25
Mindanao	2024	7	23	9	82	138	138	25
Mindanao	2024	7	23	10	91	138	138	25
Mindanao	2024	7	23	11	96	138	138	25
Mindanao	2024	7	23	12	95	138	138	25
Mindanao	2024	7	23	13	97	138	138	25
Mindanao	2024	7	23	14	101	138	138	25
Mindanao	2024	7	23	15	100	138	138	25
Mindanao	2024	7	23	16	96	138	138	25
Mindanao	2024	7	23	17	90	138	138	25
Mindanao	2024	7	23	18	90	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	23	19	93	138	138	25
Mindanao	2024	7	23	20	89	138	138	25
Mindanao	2024	7	23	21	86	138	138	25
Mindanao	2024	7	23	22	80	138	138	25
Mindanao	2024	7	23	23	74	138	138	25
Mindanao	2024	7	23	24	69	138	138	25
Mindanao	2024	7	24	1	66	138	138	25
Mindanao	2024	7	24	2	64	138	138	25
Mindanao	2024	7	24	3	62	138	138	25
Mindanao	2024	7	24	4	60	138	138	25
Mindanao	2024	7	24	5	59	138	138	25
Mindanao	2024	7	24	6	64	138	138	25
Mindanao	2024	7	24	7	59	138	138	25
Mindanao	2024	7	24	8	69	138	138	25
Mindanao	2024	7	24	9	79	138	138	25
Mindanao	2024	7	24	10	85	138	138	25
Mindanao	2024	7	24	11	91	138	138	25
Mindanao	2024	7	24	12	90	138	138	25
Mindanao	2024	7	24	13	93	138	138	25
Mindanao	2024	7	24	14	98	138	138	25
Mindanao	2024	7	24	15	98	138	138	25
Mindanao	2024	7	24	16	95	138	138	25
Mindanao	2024	7	24	17	90	138	138	25
Mindanao	2024	7	24	18	88	138	138	25
Mindanao	2024	7	24	19	93	138	138	25
Mindanao	2024	7	24	20	88	138	138	25
Mindanao	2024	7	24	21	86	138	138	25
Mindanao	2024	7	24	22	80	138	138	25
Mindanao	2024	7	24	23	75	138	138	25
Mindanao	2024	7	24	24	70	138	138	25
Mindanao	2024	7	25	1	67	138	138	25
Mindanao	2024	7	25	2	65	138	138	25
Mindanao	2024	7	25	3	62	138	138	25
Mindanao	2024	7	25	4	61	138	138	25
Mindanao	2024	7	25	5	62	138	138	25
Mindanao	2024	7	25	6	63	138	138	25
Mindanao	2024	7	25	7	61	138	138	25
Mindanao	2024	7	25	8	68	138	138	25
Mindanao	2024	7	25	9	81	138	138	25
Mindanao	2024	7	25	10	88	138	138	25
Mindanao	2024	7	25	11	93	138	138	25
Mindanao	2024	7	25	12	91	138	138	25
Mindanao	2024	7	25	13	91	138	138	25
Mindanao	2024	7	25	14	97	138	138	25
Mindanao	2024	7	25	15	95	138	138	25
Mindanao	2024	7	25	16	95	138	138	25
Mindanao	2024	7	25	17	89	138	138	25
Mindanao	2024	7	25	18	88	138	138	25
Mindanao	2024	7	25	19	91	138	138	25
Mindanao	2024	7	25	20	88	138	138	25
Mindanao	2024	7	25	21	82	138	138	25
Mindanao	2024	7	25	22	78	138	138	25
Mindanao	2024	7	25	23	74	138	138	25
Mindanao	2024	7	25	24	69	138	138	25
Mindanao	2024	7	26	1	65	138	138	25
Mindanao	2024	7	26	2	63	138	138	25
Mindanao	2024	7	26	3	61	138	138	25
Mindanao	2024	7	26	4	59	138	138	25
Mindanao	2024	7	26	5	60	138	138	25
Mindanao	2024	7	26	6	64	138	138	25
Mindanao	2024	7	26	7	64	138	138	25
Mindanao	2024	7	26	8	70	138	138	25
Mindanao	2024	7	26	9	80	138	138	25
Mindanao	2024	7	26	10	87	138	138	25
Mindanao	2024	7	26	11	91	138	138	25
Mindanao	2024	7	26	12	91	138	138	25
Mindanao	2024	7	26	13	92	138	138	25
Mindanao	2024	7	26	14	97	138	138	25
Mindanao	2024	7	26	15	96	138	138	25
Mindanao	2024	7	26	16	94	138	138	25
Mindanao	2024	7	26	17	87	138	138	25
Mindanao	2024	7	26	18	89	138	138	25
Mindanao	2024	7	26	19	92	138	138	25
Mindanao	2024	7	26	20	89	138	138	25
Mindanao	2024	7	26	21	87	138	138	25
Mindanao	2024	7	26	22	80	138	138	25
Mindanao	2024	7	26	23	75	138	138	25
Mindanao	2024	7	26	24	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	27	1	68	138	138	25
Mindanao	2024	7	27	2	65	138	138	25
Mindanao	2024	7	27	3	62	138	138	25
Mindanao	2024	7	27	4	61	138	138	25
Mindanao	2024	7	27	5	62	138	138	25
Mindanao	2024	7	27	6	65	138	138	25
Mindanao	2024	7	27	7	63	138	138	25
Mindanao	2024	7	27	8	66	138	138	25
Mindanao	2024	7	27	9	74	138	138	25
Mindanao	2024	7	27	10	79	138	138	25
Mindanao	2024	7	27	11	82	138	138	25
Mindanao	2024	7	27	12	80	138	138	25
Mindanao	2024	7	27	13	84	138	138	25
Mindanao	2024	7	27	14	89	138	138	25
Mindanao	2024	7	27	15	86	138	138	25
Mindanao	2024	7	27	16	82	138	138	25
Mindanao	2024	7	27	17	77	138	138	25
Mindanao	2024	7	27	18	83	138	138	25
Mindanao	2024	7	27	19	86	138	138	25
Mindanao	2024	7	27	20	84	138	138	25
Mindanao	2024	7	27	21	80	138	138	25
Mindanao	2024	7	27	22	74	138	138	25
Mindanao	2024	7	27	23	71	138	138	25
Mindanao	2024	7	27	24	66	138	138	25
Mindanao	2024	7	28	1	63	138	138	25
Mindanao	2024	7	28	2	61	138	138	25
Mindanao	2024	7	28	3	58	138	138	25
Mindanao	2024	7	28	4	56	138	138	25
Mindanao	2024	7	28	5	57	138	138	25
Mindanao	2024	7	28	6	57	138	138	25
Mindanao	2024	7	28	7	56	138	138	25
Mindanao	2024	7	28	8	53	138	138	25
Mindanao	2024	7	28	9	57	138	138	25
Mindanao	2024	7	28	10	62	138	138	25
Mindanao	2024	7	28	11	64	138	138	25
Mindanao	2024	7	28	12	66	138	138	25
Mindanao	2024	7	28	13	67	138	138	25
Mindanao	2024	7	28	14	67	138	138	25
Mindanao	2024	7	28	15	67	138	138	25
Mindanao	2024	7	28	16	66	138	138	25
Mindanao	2024	7	28	17	67	138	138	25
Mindanao	2024	7	28	18	75	138	138	25
Mindanao	2024	7	28	19	78	138	138	25
Mindanao	2024	7	28	20	76	138	138	25
Mindanao	2024	7	28	21	73	138	138	25
Mindanao	2024	7	28	22	69	138	138	25
Mindanao	2024	7	28	23	64	138	138	25
Mindanao	2024	7	28	24	62	138	138	25
Mindanao	2024	7	29	1	59	138	138	25
Mindanao	2024	7	29	2	57	138	138	25
Mindanao	2024	7	29	3	54	138	138	25
Mindanao	2024	7	29	4	54	138	138	25
Mindanao	2024	7	29	5	53	138	138	25
Mindanao	2024	7	29	6	56	138	138	25
Mindanao	2024	7	29	7	56	138	138	25
Mindanao	2024	7	29	8	64	138	138	25
Mindanao	2024	7	29	9	74	138	138	25
Mindanao	2024	7	29	10	82	138	138	25
Mindanao	2024	7	29	11	87	138	138	25
Mindanao	2024	7	29	12	87	138	138	25
Mindanao	2024	7	29	13	89	138	138	25
Mindanao	2024	7	29	14	94	138	138	25
Mindanao	2024	7	29	15	93	138	138	25
Mindanao	2024	7	29	16	91	138	138	25
Mindanao	2024	7	29	17	85	138	138	25
Mindanao	2024	7	29	18	85	138	138	25
Mindanao	2024	7	29	19	88	138	138	25
Mindanao	2024	7	29	20	86	138	138	25
Mindanao	2024	7	29	21	82	138	138	25
Mindanao	2024	7	29	22	74	138	138	25
Mindanao	2024	7	29	23	70	138	138	25
Mindanao	2024	7	29	24	66	138	138	25
Mindanao	2024	7	30	1	61	138	138	25
Mindanao	2024	7	30	2	60	138	138	25
Mindanao	2024	7	30	3	58	138	138	25
Mindanao	2024	7	30	4	57	138	138	25
Mindanao	2024	7	30	5	57	138	138	25
Mindanao	2024	7	30	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	7	30	7	59	138	138	25
Mindanao	2024	7	30	8	66	138	138	25
Mindanao	2024	7	30	9	79	138	138	25
Mindanao	2024	7	30	10	86	138	138	25
Mindanao	2024	7	30	11	90	138	138	25
Mindanao	2024	7	30	12	90	138	138	25
Mindanao	2024	7	30	13	89	138	138	25
Mindanao	2024	7	30	14	94	138	138	25
Mindanao	2024	7	30	15	92	138	138	25
Mindanao	2024	7	30	16	90	138	138	25
Mindanao	2024	7	30	17	83	138	138	25
Mindanao	2024	7	30	18	85	138	138	25
Mindanao	2024	7	30	19	88	138	138	25
Mindanao	2024	7	30	20	83	138	138	25
Mindanao	2024	7	30	21	81	138	138	25
Mindanao	2024	7	30	22	75	138	138	25
Mindanao	2024	7	30	23	69	138	138	25
Mindanao	2024	7	30	24	66	138	138	25
Mindanao	2024	7	31	1	63	138	138	25
Mindanao	2024	7	31	2	60	138	138	25
Mindanao	2024	7	31	3	58	138	138	25
Mindanao	2024	7	31	4	59	138	138	25
Mindanao	2024	7	31	5	58	138	138	25
Mindanao	2024	7	31	6	62	138	138	25
Mindanao	2024	7	31	7	62	138	138	25
Mindanao	2024	7	31	8	69	138	138	25
Mindanao	2024	7	31	9	81	138	138	25
Mindanao	2024	7	31	10	89	138	138	25
Mindanao	2024	7	31	11	94	138	138	25
Mindanao	2024	7	31	12	94	138	138	25
Mindanao	2024	7	31	13	95	138	138	25
Mindanao	2024	7	31	14	100	138	138	25
Mindanao	2024	7	31	15	100	138	138	25
Mindanao	2024	7	31	16	97	138	138	25
Mindanao	2024	7	31	17	90	138	138	25
Mindanao	2024	7	31	18	90	138	138	25
Mindanao	2024	7	31	19	93	138	138	25
Mindanao	2024	7	31	20	90	138	138	25
Mindanao	2024	7	31	21	89	138	138	25
Mindanao	2024	7	31	22	80	138	138	25
Mindanao	2024	7	31	23	76	138	138	25
Mindanao	2024	7	31	24	71	138	138	25
Mindanao	2024	8	1	1	68	138	138	25
Mindanao	2024	8	1	2	65	138	138	25
Mindanao	2024	8	1	3	63	138	138	25
Mindanao	2024	8	1	4	62	138	138	25
Mindanao	2024	8	1	5	62	138	138	25
Mindanao	2024	8	1	6	65	138	138	25
Mindanao	2024	8	1	7	64	138	138	25
Mindanao	2024	8	1	8	70	138	138	25
Mindanao	2024	8	1	9	81	138	138	25
Mindanao	2024	8	1	10	88	138	138	25
Mindanao	2024	8	1	11	95	138	138	25
Mindanao	2024	8	1	12	94	138	138	25
Mindanao	2024	8	1	13	93	138	138	25
Mindanao	2024	8	1	14	98	138	138	25
Mindanao	2024	8	1	15	96	138	138	25
Mindanao	2024	8	1	16	93	138	138	25
Mindanao	2024	8	1	17	86	138	138	25
Mindanao	2024	8	1	18	89	138	138	25
Mindanao	2024	8	1	19	91	138	138	25
Mindanao	2024	8	1	20	87	138	138	25
Mindanao	2024	8	1	21	86	138	138	25
Mindanao	2024	8	1	22	77	138	138	25
Mindanao	2024	8	1	23	73	138	138	25
Mindanao	2024	8	1	24	67	138	138	25
Mindanao	2024	8	2	1	63	138	138	25
Mindanao	2024	8	2	2	61	138	138	25
Mindanao	2024	8	2	3	58	138	138	25
Mindanao	2024	8	2	4	57	138	138	25
Mindanao	2024	8	2	5	59	138	138	25
Mindanao	2024	8	2	6	63	138	138	25
Mindanao	2024	8	2	7	60	138	138	25
Mindanao	2024	8	2	8	67	138	138	25
Mindanao	2024	8	2	9	77	138	138	25
Mindanao	2024	8	2	10	81	138	138	25
Mindanao	2024	8	2	11	86	138	138	25
Mindanao	2024	8	2	12	83	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	2	13	83	138	138	25
Mindanao	2024	8	2	14	88	138	138	25
Mindanao	2024	8	2	15	87	138	138	25
Mindanao	2024	8	2	16	86	138	138	25
Mindanao	2024	8	2	17	82	138	138	25
Mindanao	2024	8	2	18	84	138	138	25
Mindanao	2024	8	2	19	84	138	138	25
Mindanao	2024	8	2	20	82	138	138	25
Mindanao	2024	8	2	21	79	138	138	25
Mindanao	2024	8	2	22	75	138	138	25
Mindanao	2024	8	2	23	69	138	138	25
Mindanao	2024	8	2	24	65	138	138	25
Mindanao	2024	8	3	1	63	138	138	25
Mindanao	2024	8	3	2	60	138	138	25
Mindanao	2024	8	3	3	59	138	138	25
Mindanao	2024	8	3	4	57	138	138	25
Mindanao	2024	8	3	5	58	138	138	25
Mindanao	2024	8	3	6	61	138	138	25
Mindanao	2024	8	3	7	59	138	138	25
Mindanao	2024	8	3	8	61	138	138	25
Mindanao	2024	8	3	9	71	138	138	25
Mindanao	2024	8	3	10	75	138	138	25
Mindanao	2024	8	3	11	80	138	138	25
Mindanao	2024	8	3	12	80	138	138	25
Mindanao	2024	8	3	13	84	138	138	25
Mindanao	2024	8	3	14	87	138	138	25
Mindanao	2024	8	3	15	86	138	138	25
Mindanao	2024	8	3	16	83	138	138	25
Mindanao	2024	8	3	17	80	138	138	25
Mindanao	2024	8	3	18	83	138	138	25
Mindanao	2024	8	3	19	87	138	138	25
Mindanao	2024	8	3	20	84	138	138	25
Mindanao	2024	8	3	21	80	138	138	25
Mindanao	2024	8	3	22	75	138	138	25
Mindanao	2024	8	3	23	70	138	138	25
Mindanao	2024	8	3	24	65	138	138	25
Mindanao	2024	8	4	1	61	138	138	25
Mindanao	2024	8	4	2	59	138	138	25
Mindanao	2024	8	4	3	58	138	138	25
Mindanao	2024	8	4	4	56	138	138	25
Mindanao	2024	8	4	5	56	138	138	25
Mindanao	2024	8	4	6	58	138	138	25
Mindanao	2024	8	4	7	53	138	138	25
Mindanao	2024	8	4	8	55	138	138	25
Mindanao	2024	8	4	9	59	138	138	25
Mindanao	2024	8	4	10	64	138	138	25
Mindanao	2024	8	4	11	66	138	138	25
Mindanao	2024	8	4	12	68	138	138	25
Mindanao	2024	8	4	13	67	138	138	25
Mindanao	2024	8	4	14	69	138	138	25
Mindanao	2024	8	4	15	68	138	138	25
Mindanao	2024	8	4	16	66	138	138	25
Mindanao	2024	8	4	17	68	138	138	25
Mindanao	2024	8	4	18	75	138	138	25
Mindanao	2024	8	4	19	75	138	138	25
Mindanao	2024	8	4	20	73	138	138	25
Mindanao	2024	8	4	21	68	138	138	25
Mindanao	2024	8	4	22	65	138	138	25
Mindanao	2024	8	4	23	59	138	138	25
Mindanao	2024	8	4	24	54	138	138	25
Mindanao	2024	8	5	1	55	138	138	25
Mindanao	2024	8	5	2	52	138	138	25
Mindanao	2024	8	5	3	51	138	138	25
Mindanao	2024	8	5	4	52	138	138	25
Mindanao	2024	8	5	5	53	138	138	25
Mindanao	2024	8	5	6	58	138	138	25
Mindanao	2024	8	5	7	56	138	138	25
Mindanao	2024	8	5	8	64	138	138	25
Mindanao	2024	8	5	9	74	138	138	25
Mindanao	2024	8	5	10	80	138	138	25
Mindanao	2024	8	5	11	85	138	138	25
Mindanao	2024	8	5	12	85	138	138	25
Mindanao	2024	8	5	13	87	138	138	25
Mindanao	2024	8	5	14	92	138	138	25
Mindanao	2024	8	5	15	88	138	138	25
Mindanao	2024	8	5	16	83	138	138	25
Mindanao	2024	8	5	17	84	138	138	25
Mindanao	2024	8	5	18	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	5	19	81	138	138	25
Mindanao	2024	8	5	20	76	138	138	25
Mindanao	2024	8	5	21	75	138	138	25
Mindanao	2024	8	5	22	69	138	138	25
Mindanao	2024	8	5	23	65	138	138	25
Mindanao	2024	8	5	24	60	138	138	25
Mindanao	2024	8	6	1	59	138	138	25
Mindanao	2024	8	6	2	57	138	138	25
Mindanao	2024	8	6	3	55	138	138	25
Mindanao	2024	8	6	4	56	138	138	25
Mindanao	2024	8	6	5	56	138	138	25
Mindanao	2024	8	6	6	62	138	138	25
Mindanao	2024	8	6	7	60	138	138	25
Mindanao	2024	8	6	8	67	138	138	25
Mindanao	2024	8	6	9	76	138	138	25
Mindanao	2024	8	6	10	83	138	138	25
Mindanao	2024	8	6	11	87	138	138	25
Mindanao	2024	8	6	12	85	138	138	25
Mindanao	2024	8	6	13	86	138	138	25
Mindanao	2024	8	6	14	93	138	138	25
Mindanao	2024	8	6	15	91	138	138	25
Mindanao	2024	8	6	16	88	138	138	25
Mindanao	2024	8	6	17	85	138	138	25
Mindanao	2024	8	6	18	86	138	138	25
Mindanao	2024	8	6	19	84	138	138	25
Mindanao	2024	8	6	20	81	138	138	25
Mindanao	2024	8	6	21	77	138	138	25
Mindanao	2024	8	6	22	72	138	138	25
Mindanao	2024	8	6	23	67	138	138	25
Mindanao	2024	8	6	24	62	138	138	25
Mindanao	2024	8	7	1	60	138	138	25
Mindanao	2024	8	7	2	58	138	138	25
Mindanao	2024	8	7	3	56	138	138	25
Mindanao	2024	8	7	4	56	138	138	25
Mindanao	2024	8	7	5	59	138	138	25
Mindanao	2024	8	7	6	64	138	138	25
Mindanao	2024	8	7	7	62	138	138	25
Mindanao	2024	8	7	8	67	138	138	25
Mindanao	2024	8	7	9	77	138	138	25
Mindanao	2024	8	7	10	82	138	138	25
Mindanao	2024	8	7	11	87	138	138	25
Mindanao	2024	8	7	12	86	138	138	25
Mindanao	2024	8	7	13	86	138	138	25
Mindanao	2024	8	7	14	92	138	138	25
Mindanao	2024	8	7	15	93	138	138	25
Mindanao	2024	8	7	16	91	138	138	25
Mindanao	2024	8	7	17	86	138	138	25
Mindanao	2024	8	7	18	88	138	138	25
Mindanao	2024	8	7	19	91	138	138	25
Mindanao	2024	8	7	20	87	138	138	25
Mindanao	2024	8	7	21	84	138	138	25
Mindanao	2024	8	7	22	75	138	138	25
Mindanao	2024	8	7	23	71	138	138	25
Mindanao	2024	8	7	24	67	138	138	25
Mindanao	2024	8	8	1	64	138	138	25
Mindanao	2024	8	8	2	60	138	138	25
Mindanao	2024	8	8	3	58	138	138	25
Mindanao	2024	8	8	4	58	138	138	25
Mindanao	2024	8	8	5	59	138	138	25
Mindanao	2024	8	8	6	64	138	138	25
Mindanao	2024	8	8	7	63	138	138	25
Mindanao	2024	8	8	8	69	138	138	25
Mindanao	2024	8	8	9	80	138	138	25
Mindanao	2024	8	8	10	89	138	138	25
Mindanao	2024	8	8	11	93	138	138	25
Mindanao	2024	8	8	12	91	138	138	25
Mindanao	2024	8	8	13	91	138	138	25
Mindanao	2024	8	8	14	98	138	138	25
Mindanao	2024	8	8	15	96	138	138	25
Mindanao	2024	8	8	16	93	138	138	25
Mindanao	2024	8	8	17	89	138	138	25
Mindanao	2024	8	8	18	89	138	138	25
Mindanao	2024	8	8	19	92	138	138	25
Mindanao	2024	8	8	20	90	138	138	25
Mindanao	2024	8	8	21	86	138	138	25
Mindanao	2024	8	8	22	80	138	138	25
Mindanao	2024	8	8	23	76	138	138	25
Mindanao	2024	8	8	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	9	1	67	138	138	25
Mindanao	2024	8	9	2	62	138	138	25
Mindanao	2024	8	9	3	61	138	138	25
Mindanao	2024	8	9	4	60	138	138	25
Mindanao	2024	8	9	5	61	138	138	25
Mindanao	2024	8	9	6	66	138	138	25
Mindanao	2024	8	9	7	64	138	138	25
Mindanao	2024	8	9	8	70	138	138	25
Mindanao	2024	8	9	9	81	138	138	25
Mindanao	2024	8	9	10	89	138	138	25
Mindanao	2024	8	9	11	93	138	138	25
Mindanao	2024	8	9	12	94	138	138	25
Mindanao	2024	8	9	13	96	138	138	25
Mindanao	2024	8	9	14	101	138	138	25
Mindanao	2024	8	9	15	99	138	138	25
Mindanao	2024	8	9	16	97	138	138	25
Mindanao	2024	8	9	17	92	138	138	25
Mindanao	2024	8	9	18	91	138	138	25
Mindanao	2024	8	9	19	94	138	138	25
Mindanao	2024	8	9	20	91	138	138	25
Mindanao	2024	8	9	21	90	138	138	25
Mindanao	2024	8	9	22	85	138	138	25
Mindanao	2024	8	9	23	77	138	138	25
Mindanao	2024	8	9	24	72	138	138	25
Mindanao	2024	8	10	1	67	138	138	25
Mindanao	2024	8	10	2	65	138	138	25
Mindanao	2024	8	10	3	61	138	138	25
Mindanao	2024	8	10	4	61	138	138	25
Mindanao	2024	8	10	5	61	138	138	25
Mindanao	2024	8	10	6	63	138	138	25
Mindanao	2024	8	10	7	61	138	138	25
Mindanao	2024	8	10	8	64	138	138	25
Mindanao	2024	8	10	9	71	138	138	25
Mindanao	2024	8	10	10	78	138	138	25
Mindanao	2024	8	10	11	80	138	138	25
Mindanao	2024	8	10	12	79	138	138	25
Mindanao	2024	8	10	13	80	138	138	25
Mindanao	2024	8	10	14	86	138	138	25
Mindanao	2024	8	10	15	85	138	138	25
Mindanao	2024	8	10	16	81	138	138	25
Mindanao	2024	8	10	17	80	138	138	25
Mindanao	2024	8	10	18	84	138	138	25
Mindanao	2024	8	10	19	85	138	138	25
Mindanao	2024	8	10	20	82	138	138	25
Mindanao	2024	8	10	21	80	138	138	25
Mindanao	2024	8	10	22	75	138	138	25
Mindanao	2024	8	10	23	70	138	138	25
Mindanao	2024	8	10	24	65	138	138	25
Mindanao	2024	8	11	1	63	138	138	25
Mindanao	2024	8	11	2	60	138	138	25
Mindanao	2024	8	11	3	59	138	138	25
Mindanao	2024	8	11	4	56	138	138	25
Mindanao	2024	8	11	5	56	138	138	25
Mindanao	2024	8	11	6	57	138	138	25
Mindanao	2024	8	11	7	54	138	138	25
Mindanao	2024	8	11	8	46	138	138	25
Mindanao	2024	8	11	9	48	138	138	25
Mindanao	2024	8	11	10	55	138	138	25
Mindanao	2024	8	11	11	58	138	138	25
Mindanao	2024	8	11	12	58	138	138	25
Mindanao	2024	8	11	13	60	138	138	25
Mindanao	2024	8	11	14	60	138	138	25
Mindanao	2024	8	11	15	62	138	138	25
Mindanao	2024	8	11	16	59	138	138	25
Mindanao	2024	8	11	17	64	138	138	25
Mindanao	2024	8	11	18	72	138	138	25
Mindanao	2024	8	11	19	73	138	138	25
Mindanao	2024	8	11	20	70	138	138	25
Mindanao	2024	8	11	21	68	138	138	25
Mindanao	2024	8	11	22	64	138	138	25
Mindanao	2024	8	11	23	58	138	138	25
Mindanao	2024	8	11	24	54	138	138	25
Mindanao	2024	8	12	1	53	138	138	25
Mindanao	2024	8	12	2	51	138	138	25
Mindanao	2024	8	12	3	50	138	138	25
Mindanao	2024	8	12	4	49	138	138	25
Mindanao	2024	8	12	5	51	138	138	25
Mindanao	2024	8	12	6	56	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	12	7	57	138	138	25
Mindanao	2024	8	12	8	62	138	138	25
Mindanao	2024	8	12	9	72	138	138	25
Mindanao	2024	8	12	10	79	138	138	25
Mindanao	2024	8	12	11	84	138	138	25
Mindanao	2024	8	12	12	83	138	138	25
Mindanao	2024	8	12	13	84	138	138	25
Mindanao	2024	8	12	14	86	138	138	25
Mindanao	2024	8	12	15	91	138	138	25
Mindanao	2024	8	12	16	89	138	138	25
Mindanao	2024	8	12	17	81	138	138	25
Mindanao	2024	8	12	18	85	138	138	25
Mindanao	2024	8	12	19	88	138	138	25
Mindanao	2024	8	12	20	84	138	138	25
Mindanao	2024	8	12	21	81	138	138	25
Mindanao	2024	8	12	22	75	138	138	25
Mindanao	2024	8	12	23	71	138	138	25
Mindanao	2024	8	12	24	66	138	138	25
Mindanao	2024	8	13	1	63	138	138	25
Mindanao	2024	8	13	2	60	138	138	25
Mindanao	2024	8	13	3	58	138	138	25
Mindanao	2024	8	13	4	56	138	138	25
Mindanao	2024	8	13	5	57	138	138	25
Mindanao	2024	8	13	6	62	138	138	25
Mindanao	2024	8	13	7	59	138	138	25
Mindanao	2024	8	13	8	69	138	138	25
Mindanao	2024	8	13	9	80	138	138	25
Mindanao	2024	8	13	10	86	138	138	25
Mindanao	2024	8	13	11	93	138	138	25
Mindanao	2024	8	13	12	91	138	138	25
Mindanao	2024	8	13	13	94	138	138	25
Mindanao	2024	8	13	14	98	138	138	25
Mindanao	2024	8	13	15	96	138	138	25
Mindanao	2024	8	13	16	92	138	138	25
Mindanao	2024	8	13	17	86	138	138	25
Mindanao	2024	8	13	18	89	138	138	25
Mindanao	2024	8	13	19	91	138	138	25
Mindanao	2024	8	13	20	87	138	138	25
Mindanao	2024	8	13	21	83	138	138	25
Mindanao	2024	8	13	22	75	138	138	25
Mindanao	2024	8	13	23	71	138	138	25
Mindanao	2024	8	13	24	67	138	138	25
Mindanao	2024	8	14	1	64	138	138	25
Mindanao	2024	8	14	2	60	138	138	25
Mindanao	2024	8	14	3	56	138	138	25
Mindanao	2024	8	14	4	56	138	138	25
Mindanao	2024	8	14	5	58	138	138	25
Mindanao	2024	8	14	6	64	138	138	25
Mindanao	2024	8	14	7	62	138	138	25
Mindanao	2024	8	14	8	69	138	138	25
Mindanao	2024	8	14	9	80	138	138	25
Mindanao	2024	8	14	10	87	138	138	25
Mindanao	2024	8	14	11	94	138	138	25
Mindanao	2024	8	14	12	92	138	138	25
Mindanao	2024	8	14	13	94	138	138	25
Mindanao	2024	8	14	14	97	138	138	25
Mindanao	2024	8	14	15	94	138	138	25
Mindanao	2024	8	14	16	92	138	138	25
Mindanao	2024	8	14	17	88	138	138	25
Mindanao	2024	8	14	18	87	138	138	25
Mindanao	2024	8	14	19	88	138	138	25
Mindanao	2024	8	14	20	83	138	138	25
Mindanao	2024	8	14	21	80	138	138	25
Mindanao	2024	8	14	22	73	138	138	25
Mindanao	2024	8	14	23	69	138	138	25
Mindanao	2024	8	14	24	66	138	138	25
Mindanao	2024	8	15	1	61	138	138	25
Mindanao	2024	8	15	2	59	138	138	25
Mindanao	2024	8	15	3	57	138	138	25
Mindanao	2024	8	15	4	56	138	138	25
Mindanao	2024	8	15	5	58	138	138	25
Mindanao	2024	8	15	6	61	138	138	25
Mindanao	2024	8	15	7	61	138	138	25
Mindanao	2024	8	15	8	67	138	138	25
Mindanao	2024	8	15	9	75	138	138	25
Mindanao	2024	8	15	10	78	138	138	25
Mindanao	2024	8	15	11	81	138	138	25
Mindanao	2024	8	15	12	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	15	13	77	138	138	25
Mindanao	2024	8	15	14	83	138	138	25
Mindanao	2024	8	15	15	86	138	138	25
Mindanao	2024	8	15	16	84	138	138	25
Mindanao	2024	8	15	17	80	138	138	25
Mindanao	2024	8	15	18	85	138	138	25
Mindanao	2024	8	15	19	86	138	138	25
Mindanao	2024	8	15	20	82	138	138	25
Mindanao	2024	8	15	21	78	138	138	25
Mindanao	2024	8	15	22	72	138	138	25
Mindanao	2024	8	15	23	68	138	138	25
Mindanao	2024	8	15	24	64	138	138	25
Mindanao	2024	8	16	1	61	138	138	25
Mindanao	2024	8	16	2	58	138	138	25
Mindanao	2024	8	16	3	56	138	138	25
Mindanao	2024	8	16	4	55	138	138	25
Mindanao	2024	8	16	5	57	138	138	25
Mindanao	2024	8	16	6	61	138	138	25
Mindanao	2024	8	16	7	61	138	138	25
Mindanao	2024	8	16	8	65	138	138	25
Mindanao	2024	8	16	9	75	138	138	25
Mindanao	2024	8	16	10	82	138	138	25
Mindanao	2024	8	16	11	89	138	138	25
Mindanao	2024	8	16	12	86	138	138	25
Mindanao	2024	8	16	13	88	138	138	25
Mindanao	2024	8	16	14	93	138	138	25
Mindanao	2024	8	16	15	94	138	138	25
Mindanao	2024	8	16	16	92	138	138	25
Mindanao	2024	8	16	17	86	138	138	25
Mindanao	2024	8	16	18	87	138	138	25
Mindanao	2024	8	16	19	89	138	138	25
Mindanao	2024	8	16	20	86	138	138	25
Mindanao	2024	8	16	21	84	138	138	25
Mindanao	2024	8	16	22	79	138	138	25
Mindanao	2024	8	16	23	73	138	138	25
Mindanao	2024	8	16	24	69	138	138	25
Mindanao	2024	8	17	1	64	138	138	25
Mindanao	2024	8	17	2	63	138	138	25
Mindanao	2024	8	17	3	60	138	138	25
Mindanao	2024	8	17	4	60	138	138	25
Mindanao	2024	8	17	5	59	138	138	25
Mindanao	2024	8	17	6	62	138	138	25
Mindanao	2024	8	17	7	61	138	138	25
Mindanao	2024	8	17	8	66	138	138	25
Mindanao	2024	8	17	9	70	138	138	25
Mindanao	2024	8	17	10	75	138	138	25
Mindanao	2024	8	17	11	79	138	138	25
Mindanao	2024	8	17	12	76	138	138	25
Mindanao	2024	8	17	13	78	138	138	25
Mindanao	2024	8	17	14	83	138	138	25
Mindanao	2024	8	17	15	81	138	138	25
Mindanao	2024	8	17	16	78	138	138	25
Mindanao	2024	8	17	17	76	138	138	25
Mindanao	2024	8	17	18	81	138	138	25
Mindanao	2024	8	17	19	84	138	138	25
Mindanao	2024	8	17	20	83	138	138	25
Mindanao	2024	8	17	21	83	138	138	25
Mindanao	2024	8	17	22	78	138	138	25
Mindanao	2024	8	17	23	73	138	138	25
Mindanao	2024	8	17	24	68	138	138	25
Mindanao	2024	8	18	1	63	138	138	25
Mindanao	2024	8	18	2	60	138	138	25
Mindanao	2024	8	18	3	59	138	138	25
Mindanao	2024	8	18	4	56	138	138	25
Mindanao	2024	8	18	5	56	138	138	25
Mindanao	2024	8	18	6	57	138	138	25
Mindanao	2024	8	18	7	54	138	138	25
Mindanao	2024	8	18	8	46	138	138	25
Mindanao	2024	8	18	9	48	138	138	25
Mindanao	2024	8	18	10	55	138	138	25
Mindanao	2024	8	18	11	58	138	138	25
Mindanao	2024	8	18	12	58	138	138	25
Mindanao	2024	8	18	13	60	138	138	25
Mindanao	2024	8	18	14	60	138	138	25
Mindanao	2024	8	18	15	62	138	138	25
Mindanao	2024	8	18	16	59	138	138	25
Mindanao	2024	8	18	17	64	138	138	25
Mindanao	2024	8	18	18	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	18	19	73	138	138	25
Mindanao	2024	8	18	20	70	138	138	25
Mindanao	2024	8	18	21	68	138	138	25
Mindanao	2024	8	18	22	64	138	138	25
Mindanao	2024	8	18	23	58	138	138	25
Mindanao	2024	8	18	24	54	138	138	25
Mindanao	2024	8	19	1	62	138	138	25
Mindanao	2024	8	19	2	58	138	138	25
Mindanao	2024	8	19	3	57	138	138	25
Mindanao	2024	8	19	4	57	138	138	25
Mindanao	2024	8	19	5	62	138	138	25
Mindanao	2024	8	19	6	63	138	138	25
Mindanao	2024	8	19	7	57	138	138	25
Mindanao	2024	8	19	8	66	138	138	25
Mindanao	2024	8	19	9	79	138	138	25
Mindanao	2024	8	19	10	86	138	138	25
Mindanao	2024	8	19	11	94	138	138	25
Mindanao	2024	8	19	12	92	138	138	25
Mindanao	2024	8	19	13	93	138	138	25
Mindanao	2024	8	19	14	93	138	138	25
Mindanao	2024	8	19	15	90	138	138	25
Mindanao	2024	8	19	16	88	138	138	25
Mindanao	2024	8	19	17	83	138	138	25
Mindanao	2024	8	19	18	86	138	138	25
Mindanao	2024	8	19	19	85	138	138	25
Mindanao	2024	8	19	20	84	138	138	25
Mindanao	2024	8	19	21	80	138	138	25
Mindanao	2024	8	19	22	73	138	138	25
Mindanao	2024	8	19	23	67	138	138	25
Mindanao	2024	8	19	24	64	138	138	25
Mindanao	2024	8	20	1	62	138	138	25
Mindanao	2024	8	20	2	60	138	138	25
Mindanao	2024	8	20	3	57	138	138	25
Mindanao	2024	8	20	4	57	138	138	25
Mindanao	2024	8	20	5	61	138	138	25
Mindanao	2024	8	20	6	64	138	138	25
Mindanao	2024	8	20	7	57	138	138	25
Mindanao	2024	8	20	8	68	138	138	25
Mindanao	2024	8	20	9	80	138	138	25
Mindanao	2024	8	20	10	88	138	138	25
Mindanao	2024	8	20	11	92	138	138	25
Mindanao	2024	8	20	12	91	138	138	25
Mindanao	2024	8	20	13	92	138	138	25
Mindanao	2024	8	20	14	95	138	138	25
Mindanao	2024	8	20	15	94	138	138	25
Mindanao	2024	8	20	16	94	138	138	25
Mindanao	2024	8	20	17	87	138	138	25
Mindanao	2024	8	20	18	88	138	138	25
Mindanao	2024	8	20	19	89	138	138	25
Mindanao	2024	8	20	20	87	138	138	25
Mindanao	2024	8	20	21	82	138	138	25
Mindanao	2024	8	20	22	78	138	138	25
Mindanao	2024	8	20	23	71	138	138	25
Mindanao	2024	8	20	24	65	138	138	25
Mindanao	2024	8	21	1	65	138	138	25
Mindanao	2024	8	21	2	60	138	138	25
Mindanao	2024	8	21	3	59	138	138	25
Mindanao	2024	8	21	4	58	138	138	25
Mindanao	2024	8	21	5	56	138	138	25
Mindanao	2024	8	21	6	58	138	138	25
Mindanao	2024	8	21	7	57	138	138	25
Mindanao	2024	8	21	8	60	138	138	25
Mindanao	2024	8	21	9	64	138	138	25
Mindanao	2024	8	21	10	68	138	138	25
Mindanao	2024	8	21	11	73	138	138	25
Mindanao	2024	8	21	12	73	138	138	25
Mindanao	2024	8	21	13	74	138	138	25
Mindanao	2024	8	21	14	76	138	138	25
Mindanao	2024	8	21	15	76	138	138	25
Mindanao	2024	8	21	16	74	138	138	25
Mindanao	2024	8	21	17	73	138	138	25
Mindanao	2024	8	21	18	81	138	138	25
Mindanao	2024	8	21	19	85	138	138	25
Mindanao	2024	8	21	20	83	138	138	25
Mindanao	2024	8	21	21	80	138	138	25
Mindanao	2024	8	21	22	74	138	138	25
Mindanao	2024	8	21	23	69	138	138	25
Mindanao	2024	8	21	24	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	22	1	66	138	138	25
Mindanao	2024	8	22	2	64	138	138	25
Mindanao	2024	8	22	3	62	138	138	25
Mindanao	2024	8	22	4	62	138	138	25
Mindanao	2024	8	22	5	65	138	138	25
Mindanao	2024	8	22	6	71	138	138	25
Mindanao	2024	8	22	7	62	138	138	25
Mindanao	2024	8	22	8	69	138	138	25
Mindanao	2024	8	22	9	82	138	138	25
Mindanao	2024	8	22	10	89	138	138	25
Mindanao	2024	8	22	11	92	138	138	25
Mindanao	2024	8	22	12	91	138	138	25
Mindanao	2024	8	22	13	94	138	138	25
Mindanao	2024	8	22	14	99	138	138	25
Mindanao	2024	8	22	15	95	138	138	25
Mindanao	2024	8	22	16	95	138	138	25
Mindanao	2024	8	22	17	90	138	138	25
Mindanao	2024	8	22	18	92	138	138	25
Mindanao	2024	8	22	19	93	138	138	25
Mindanao	2024	8	22	20	89	138	138	25
Mindanao	2024	8	22	21	87	138	138	25
Mindanao	2024	8	22	22	80	138	138	25
Mindanao	2024	8	22	23	74	138	138	25
Mindanao	2024	8	22	24	68	138	138	25
Mindanao	2024	8	23	1	66	138	138	25
Mindanao	2024	8	23	2	63	138	138	25
Mindanao	2024	8	23	3	62	138	138	25
Mindanao	2024	8	23	4	61	138	138	25
Mindanao	2024	8	23	5	63	138	138	25
Mindanao	2024	8	23	6	67	138	138	25
Mindanao	2024	8	23	7	62	138	138	25
Mindanao	2024	8	23	8	69	138	138	25
Mindanao	2024	8	23	9	80	138	138	25
Mindanao	2024	8	23	10	89	138	138	25
Mindanao	2024	8	23	11	95	138	138	25
Mindanao	2024	8	23	12	93	138	138	25
Mindanao	2024	8	23	13	95	138	138	25
Mindanao	2024	8	23	14	99	138	138	25
Mindanao	2024	8	23	15	98	138	138	25
Mindanao	2024	8	23	16	98	138	138	25
Mindanao	2024	8	23	17	90	138	138	25
Mindanao	2024	8	23	18	93	138	138	25
Mindanao	2024	8	23	19	92	138	138	25
Mindanao	2024	8	23	20	89	138	138	25
Mindanao	2024	8	23	21	84	138	138	25
Mindanao	2024	8	23	22	77	138	138	25
Mindanao	2024	8	23	23	72	138	138	25
Mindanao	2024	8	23	24	67	138	138	25
Mindanao	2024	8	24	1	61	138	138	25
Mindanao	2024	8	24	2	61	138	138	25
Mindanao	2024	8	24	3	60	138	138	25
Mindanao	2024	8	24	4	60	138	138	25
Mindanao	2024	8	24	5	60	138	138	25
Mindanao	2024	8	24	6	63	138	138	25
Mindanao	2024	8	24	7	62	138	138	25
Mindanao	2024	8	24	8	67	138	138	25
Mindanao	2024	8	24	9	73	138	138	25
Mindanao	2024	8	24	10	79	138	138	25
Mindanao	2024	8	24	11	84	138	138	25
Mindanao	2024	8	24	12	82	138	138	25
Mindanao	2024	8	24	13	85	138	138	25
Mindanao	2024	8	24	14	91	138	138	25
Mindanao	2024	8	24	15	90	138	138	25
Mindanao	2024	8	24	16	86	138	138	25
Mindanao	2024	8	24	17	83	138	138	25
Mindanao	2024	8	24	18	88	138	138	25
Mindanao	2024	8	24	19	92	138	138	25
Mindanao	2024	8	24	20	88	138	138	25
Mindanao	2024	8	24	21	85	138	138	25
Mindanao	2024	8	24	22	79	138	138	25
Mindanao	2024	8	24	23	75	138	138	25
Mindanao	2024	8	24	24	70	138	138	25
Mindanao	2024	8	25	1	67	138	138	25
Mindanao	2024	8	25	2	65	138	138	25
Mindanao	2024	8	25	3	61	138	138	25
Mindanao	2024	8	25	4	59	138	138	25
Mindanao	2024	8	25	5	59	138	138	25
Mindanao	2024	8	25	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	25	7	58	138	138	25
Mindanao	2024	8	25	8	58	138	138	25
Mindanao	2024	8	25	9	64	138	138	25
Mindanao	2024	8	25	10	70	138	138	25
Mindanao	2024	8	25	11	73	138	138	25
Mindanao	2024	8	25	12	74	138	138	25
Mindanao	2024	8	25	13	77	138	138	25
Mindanao	2024	8	25	14	78	138	138	25
Mindanao	2024	8	25	15	79	138	138	25
Mindanao	2024	8	25	16	78	138	138	25
Mindanao	2024	8	25	17	76	138	138	25
Mindanao	2024	8	25	18	83	138	138	25
Mindanao	2024	8	25	19	88	138	138	25
Mindanao	2024	8	25	20	85	138	138	25
Mindanao	2024	8	25	21	84	138	138	25
Mindanao	2024	8	25	22	78	138	138	25
Mindanao	2024	8	25	23	74	138	138	25
Mindanao	2024	8	25	24	69	138	138	25
Mindanao	2024	8	26	1	68	138	138	25
Mindanao	2024	8	26	2	65	138	138	25
Mindanao	2024	8	26	3	62	138	138	25
Mindanao	2024	8	26	4	63	138	138	25
Mindanao	2024	8	26	5	67	138	138	25
Mindanao	2024	8	26	6	70	138	138	25
Mindanao	2024	8	26	7	63	138	138	25
Mindanao	2024	8	26	8	71	138	138	25
Mindanao	2024	8	26	9	84	138	138	25
Mindanao	2024	8	26	10	91	138	138	25
Mindanao	2024	8	26	11	95	138	138	25
Mindanao	2024	8	26	12	92	138	138	25
Mindanao	2024	8	26	13	96	138	138	25
Mindanao	2024	8	26	14	100	138	138	25
Mindanao	2024	8	26	15	100	138	138	25
Mindanao	2024	8	26	16	97	138	138	25
Mindanao	2024	8	26	17	90	138	138	25
Mindanao	2024	8	26	18	93	138	138	25
Mindanao	2024	8	26	19	93	138	138	25
Mindanao	2024	8	26	20	91	138	138	25
Mindanao	2024	8	26	21	87	138	138	25
Mindanao	2024	8	26	22	80	138	138	25
Mindanao	2024	8	26	23	75	138	138	25
Mindanao	2024	8	26	24	70	138	138	25
Mindanao	2024	8	27	1	58	138	138	25
Mindanao	2024	8	27	2	56	138	138	25
Mindanao	2024	8	27	3	55	138	138	25
Mindanao	2024	8	27	4	54	138	138	25
Mindanao	2024	8	27	5	61	138	138	25
Mindanao	2024	8	27	6	63	138	138	25
Mindanao	2024	8	27	7	56	138	138	25
Mindanao	2024	8	27	8	63	138	138	25
Mindanao	2024	8	27	9	75	138	138	25
Mindanao	2024	8	27	10	87	138	138	25
Mindanao	2024	8	27	11	91	138	138	25
Mindanao	2024	8	27	12	89	138	138	25
Mindanao	2024	8	27	13	94	138	138	25
Mindanao	2024	8	27	14	100	138	138	25
Mindanao	2024	8	27	15	99	138	138	25
Mindanao	2024	8	27	16	98	138	138	25
Mindanao	2024	8	27	17	92	138	138	25
Mindanao	2024	8	27	18	94	138	138	25
Mindanao	2024	8	27	19	95	138	138	25
Mindanao	2024	8	27	20	92	138	138	25
Mindanao	2024	8	27	21	89	138	138	25
Mindanao	2024	8	27	22	83	138	138	25
Mindanao	2024	8	27	23	76	138	138	25
Mindanao	2024	8	27	24	71	138	138	25
Mindanao	2024	8	28	1	65	138	138	25
Mindanao	2024	8	28	2	57	138	138	25
Mindanao	2024	8	28	3	58	138	138	25
Mindanao	2024	8	28	4	56	138	138	25
Mindanao	2024	8	28	5	60	138	138	25
Mindanao	2024	8	28	6	65	138	138	25
Mindanao	2024	8	28	7	63	138	138	25
Mindanao	2024	8	28	8	71	138	138	25
Mindanao	2024	8	28	9	74	138	138	25
Mindanao	2024	8	28	10	81	138	138	25
Mindanao	2024	8	28	11	87	138	138	25
Mindanao	2024	8	28	12	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	28	13	89	138	138	25
Mindanao	2024	8	28	14	94	138	138	25
Mindanao	2024	8	28	15	95	138	138	25
Mindanao	2024	8	28	16	95	138	138	25
Mindanao	2024	8	28	17	93	138	138	25
Mindanao	2024	8	28	18	94	138	138	25
Mindanao	2024	8	28	19	94	138	138	25
Mindanao	2024	8	28	20	89	138	138	25
Mindanao	2024	8	28	21	86	138	138	25
Mindanao	2024	8	28	22	77	138	138	25
Mindanao	2024	8	28	23	71	138	138	25
Mindanao	2024	8	28	24	69	138	138	25
Mindanao	2024	8	29	1	66	138	138	25
Mindanao	2024	8	29	2	65	138	138	25
Mindanao	2024	8	29	3	61	138	138	25
Mindanao	2024	8	29	4	61	138	138	25
Mindanao	2024	8	29	5	64	138	138	25
Mindanao	2024	8	29	6	67	138	138	25
Mindanao	2024	8	29	7	61	138	138	25
Mindanao	2024	8	29	8	70	138	138	25
Mindanao	2024	8	29	9	83	138	138	25
Mindanao	2024	8	29	10	85	138	138	25
Mindanao	2024	8	29	11	93	138	138	25
Mindanao	2024	8	29	12	91	138	138	25
Mindanao	2024	8	29	13	91	138	138	25
Mindanao	2024	8	29	14	94	138	138	25
Mindanao	2024	8	29	15	95	138	138	25
Mindanao	2024	8	29	16	94	138	138	25
Mindanao	2024	8	29	17	85	138	138	25
Mindanao	2024	8	29	18	87	138	138	25
Mindanao	2024	8	29	19	89	138	138	25
Mindanao	2024	8	29	20	87	138	138	25
Mindanao	2024	8	29	21	84	138	138	25
Mindanao	2024	8	29	22	77	138	138	25
Mindanao	2024	8	29	23	71	138	138	25
Mindanao	2024	8	29	24	66	138	138	25
Mindanao	2024	8	30	1	64	138	138	25
Mindanao	2024	8	30	2	60	138	138	25
Mindanao	2024	8	30	3	58	138	138	25
Mindanao	2024	8	30	4	57	138	138	25
Mindanao	2024	8	30	5	60	138	138	25
Mindanao	2024	8	30	6	63	138	138	25
Mindanao	2024	8	30	7	60	138	138	25
Mindanao	2024	8	30	8	70	138	138	25
Mindanao	2024	8	30	9	82	138	138	25
Mindanao	2024	8	30	10	91	138	138	25
Mindanao	2024	8	30	11	96	138	138	25
Mindanao	2024	8	30	12	93	138	138	25
Mindanao	2024	8	30	13	97	138	138	25
Mindanao	2024	8	30	14	97	138	138	25
Mindanao	2024	8	30	15	95	138	138	25
Mindanao	2024	8	30	16	99	138	138	25
Mindanao	2024	8	30	17	92	138	138	25
Mindanao	2024	8	30	18	96	138	138	25
Mindanao	2024	8	30	19	91	138	138	25
Mindanao	2024	8	30	20	91	138	138	25
Mindanao	2024	8	30	21	90	138	138	25
Mindanao	2024	8	30	22	84	138	138	25
Mindanao	2024	8	30	23	80	138	138	25
Mindanao	2024	8	30	24	75	138	138	25
Mindanao	2024	8	31	1	71	138	138	25
Mindanao	2024	8	31	2	69	138	138	25
Mindanao	2024	8	31	3	67	138	138	25
Mindanao	2024	8	31	4	64	138	138	25
Mindanao	2024	8	31	5	64	138	138	25
Mindanao	2024	8	31	6	67	138	138	25
Mindanao	2024	8	31	7	66	138	138	25
Mindanao	2024	8	31	8	70	138	138	25
Mindanao	2024	8	31	9	77	138	138	25
Mindanao	2024	8	31	10	82	138	138	25
Mindanao	2024	8	31	11	88	138	138	25
Mindanao	2024	8	31	12	87	138	138	25
Mindanao	2024	8	31	13	86	138	138	25
Mindanao	2024	8	31	14	91	138	138	25
Mindanao	2024	8	31	15	92	138	138	25
Mindanao	2024	8	31	16	86	138	138	25
Mindanao	2024	8	31	17	83	138	138	25
Mindanao	2024	8	31	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	8	31	19	89	138	138	25
Mindanao	2024	8	31	20	88	138	138	25
Mindanao	2024	8	31	21	84	138	138	25
Mindanao	2024	8	31	22	79	138	138	25
Mindanao	2024	8	31	23	74	138	138	25
Mindanao	2024	8	31	24	67	138	138	25
Mindanao	2024	9	1	1	65	138	138	25
Mindanao	2024	9	1	2	63	138	138	25
Mindanao	2024	9	1	3	60	138	138	25
Mindanao	2024	9	1	4	58	138	138	25
Mindanao	2024	9	1	5	57	138	138	25
Mindanao	2024	9	1	6	58	138	138	25
Mindanao	2024	9	1	7	57	138	138	25
Mindanao	2024	9	1	8	59	138	138	25
Mindanao	2024	9	1	9	61	138	138	25
Mindanao	2024	9	1	10	69	138	138	25
Mindanao	2024	9	1	11	72	138	138	25
Mindanao	2024	9	1	12	74	138	138	25
Mindanao	2024	9	1	13	74	138	138	25
Mindanao	2024	9	1	14	77	138	138	25
Mindanao	2024	9	1	15	76	138	138	25
Mindanao	2024	9	1	16	71	138	138	25
Mindanao	2024	9	1	17	76	138	138	25
Mindanao	2024	9	1	18	84	138	138	25
Mindanao	2024	9	1	19	82	138	138	25
Mindanao	2024	9	1	20	80	138	138	25
Mindanao	2024	9	1	21	77	138	138	25
Mindanao	2024	9	1	22	73	138	138	25
Mindanao	2024	9	1	23	67	138	138	25
Mindanao	2024	9	1	24	64	138	138	25
Mindanao	2024	9	2	1	60	138	138	25
Mindanao	2024	9	2	2	58	138	138	25
Mindanao	2024	9	2	3	57	138	138	25
Mindanao	2024	9	2	4	55	138	138	25
Mindanao	2024	9	2	5	61	138	138	25
Mindanao	2024	9	2	6	62	138	138	25
Mindanao	2024	9	2	7	56	138	138	25
Mindanao	2024	9	2	8	66	138	138	25
Mindanao	2024	9	2	9	78	138	138	25
Mindanao	2024	9	2	10	84	138	138	25
Mindanao	2024	9	2	11	90	138	138	25
Mindanao	2024	9	2	12	89	138	138	25
Mindanao	2024	9	2	13	90	138	138	25
Mindanao	2024	9	2	14	94	138	138	25
Mindanao	2024	9	2	15	92	138	138	25
Mindanao	2024	9	2	16	89	138	138	25
Mindanao	2024	9	2	17	86	138	138	25
Mindanao	2024	9	2	18	90	138	138	25
Mindanao	2024	9	2	19	85	138	138	25
Mindanao	2024	9	2	20	83	138	138	25
Mindanao	2024	9	2	21	78	138	138	25
Mindanao	2024	9	2	22	74	138	138	25
Mindanao	2024	9	2	23	70	138	138	25
Mindanao	2024	9	2	24	65	138	138	25
Mindanao	2024	9	3	1	61	138	138	25
Mindanao	2024	9	3	2	59	138	138	25
Mindanao	2024	9	3	3	57	138	138	25
Mindanao	2024	9	3	4	57	138	138	25
Mindanao	2024	9	3	5	62	138	138	25
Mindanao	2024	9	3	6	66	138	138	25
Mindanao	2024	9	3	7	59	138	138	25
Mindanao	2024	9	3	8	68	138	138	25
Mindanao	2024	9	3	9	79	138	138	25
Mindanao	2024	9	3	10	86	138	138	25
Mindanao	2024	9	3	11	91	138	138	25
Mindanao	2024	9	3	12	87	138	138	25
Mindanao	2024	9	3	13	82	138	138	25
Mindanao	2024	9	3	14	91	138	138	25
Mindanao	2024	9	3	15	90	138	138	25
Mindanao	2024	9	3	16	89	138	138	25
Mindanao	2024	9	3	17	85	138	138	25
Mindanao	2024	9	3	18	90	138	138	25
Mindanao	2024	9	3	19	87	138	138	25
Mindanao	2024	9	3	20	82	138	138	25
Mindanao	2024	9	3	21	78	138	138	25
Mindanao	2024	9	3	22	73	138	138	25
Mindanao	2024	9	3	23	69	138	138	25
Mindanao	2024	9	3	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	4	1	60	138	138	25
Mindanao	2024	9	4	2	58	138	138	25
Mindanao	2024	9	4	3	57	138	138	25
Mindanao	2024	9	4	4	57	138	138	25
Mindanao	2024	9	4	5	60	138	138	25
Mindanao	2024	9	4	6	65	138	138	25
Mindanao	2024	9	4	7	57	138	138	25
Mindanao	2024	9	4	8	67	138	138	25
Mindanao	2024	9	4	9	78	138	138	25
Mindanao	2024	9	4	10	86	138	138	25
Mindanao	2024	9	4	11	91	138	138	25
Mindanao	2024	9	4	12	89	138	138	25
Mindanao	2024	9	4	13	92	138	138	25
Mindanao	2024	9	4	14	97	138	138	25
Mindanao	2024	9	4	15	96	138	138	25
Mindanao	2024	9	4	16	93	138	138	25
Mindanao	2024	9	4	17	87	138	138	25
Mindanao	2024	9	4	18	91	138	138	25
Mindanao	2024	9	4	19	89	138	138	25
Mindanao	2024	9	4	20	86	138	138	25
Mindanao	2024	9	4	21	82	138	138	25
Mindanao	2024	9	4	22	76	138	138	25
Mindanao	2024	9	4	23	71	138	138	25
Mindanao	2024	9	4	24	67	138	138	25
Mindanao	2024	9	5	1	63	138	138	25
Mindanao	2024	9	5	2	61	138	138	25
Mindanao	2024	9	5	3	59	138	138	25
Mindanao	2024	9	5	4	55	138	138	25
Mindanao	2024	9	5	5	61	138	138	25
Mindanao	2024	9	5	6	65	138	138	25
Mindanao	2024	9	5	7	58	138	138	25
Mindanao	2024	9	5	8	69	138	138	25
Mindanao	2024	9	5	9	82	138	138	25
Mindanao	2024	9	5	10	89	138	138	25
Mindanao	2024	9	5	11	93	138	138	25
Mindanao	2024	9	5	12	91	138	138	25
Mindanao	2024	9	5	13	93	138	138	25
Mindanao	2024	9	5	14	97	138	138	25
Mindanao	2024	9	5	15	95	138	138	25
Mindanao	2024	9	5	16	93	138	138	25
Mindanao	2024	9	5	17	89	138	138	25
Mindanao	2024	9	5	18	90	138	138	25
Mindanao	2024	9	5	19	86	138	138	25
Mindanao	2024	9	5	20	83	138	138	25
Mindanao	2024	9	5	21	78	138	138	25
Mindanao	2024	9	5	22	72	138	138	25
Mindanao	2024	9	5	23	69	138	138	25
Mindanao	2024	9	5	24	64	138	138	25
Mindanao	2024	9	6	1	61	138	138	25
Mindanao	2024	9	6	2	58	138	138	25
Mindanao	2024	9	6	3	55	138	138	25
Mindanao	2024	9	6	4	56	138	138	25
Mindanao	2024	9	6	5	60	138	138	25
Mindanao	2024	9	6	6	64	138	138	25
Mindanao	2024	9	6	7	60	138	138	25
Mindanao	2024	9	6	8	66	138	138	25
Mindanao	2024	9	6	9	78	138	138	25
Mindanao	2024	9	6	10	86	138	138	25
Mindanao	2024	9	6	11	91	138	138	25
Mindanao	2024	9	6	12	89	138	138	25
Mindanao	2024	9	6	13	92	138	138	25
Mindanao	2024	9	6	14	97	138	138	25
Mindanao	2024	9	6	15	96	138	138	25
Mindanao	2024	9	6	16	93	138	138	25
Mindanao	2024	9	6	17	87	138	138	25
Mindanao	2024	9	6	18	90	138	138	25
Mindanao	2024	9	6	19	87	138	138	25
Mindanao	2024	9	6	20	85	138	138	25
Mindanao	2024	9	6	21	80	138	138	25
Mindanao	2024	9	6	22	74	138	138	25
Mindanao	2024	9	6	23	71	138	138	25
Mindanao	2024	9	6	24	67	138	138	25
Mindanao	2024	9	7	1	63	138	138	25
Mindanao	2024	9	7	2	60	138	138	25
Mindanao	2024	9	7	3	57	138	138	25
Mindanao	2024	9	7	4	58	138	138	25
Mindanao	2024	9	7	5	58	138	138	25
Mindanao	2024	9	7	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	7	7	58	138	138	25
Mindanao	2024	9	7	8	62	138	138	25
Mindanao	2024	9	7	9	70	138	138	25
Mindanao	2024	9	7	10	77	138	138	25
Mindanao	2024	9	7	11	81	138	138	25
Mindanao	2024	9	7	12	82	138	138	25
Mindanao	2024	9	7	13	84	138	138	25
Mindanao	2024	9	7	14	88	138	138	25
Mindanao	2024	9	7	15	87	138	138	25
Mindanao	2024	9	7	16	82	138	138	25
Mindanao	2024	9	7	17	78	138	138	25
Mindanao	2024	9	7	18	85	138	138	25
Mindanao	2024	9	7	19	86	138	138	25
Mindanao	2024	9	7	20	85	138	138	25
Mindanao	2024	9	7	21	80	138	138	25
Mindanao	2024	9	7	22	75	138	138	25
Mindanao	2024	9	7	23	70	138	138	25
Mindanao	2024	9	7	24	66	138	138	25
Mindanao	2024	9	8	1	62	138	138	25
Mindanao	2024	9	8	2	59	138	138	25
Mindanao	2024	9	8	3	57	138	138	25
Mindanao	2024	9	8	4	55	138	138	25
Mindanao	2024	9	8	5	55	138	138	25
Mindanao	2024	9	8	6	57	138	138	25
Mindanao	2024	9	8	7	54	138	138	25
Mindanao	2024	9	8	8	56	138	138	25
Mindanao	2024	9	8	9	57	138	138	25
Mindanao	2024	9	8	10	64	138	138	25
Mindanao	2024	9	8	11	68	138	138	25
Mindanao	2024	9	8	12	69	138	138	25
Mindanao	2024	9	8	13	70	138	138	25
Mindanao	2024	9	8	14	75	138	138	25
Mindanao	2024	9	8	15	73	138	138	25
Mindanao	2024	9	8	16	73	138	138	25
Mindanao	2024	9	8	17	73	138	138	25
Mindanao	2024	9	8	18	83	138	138	25
Mindanao	2024	9	8	19	84	138	138	25
Mindanao	2024	9	8	20	81	138	138	25
Mindanao	2024	9	8	21	79	138	138	25
Mindanao	2024	9	8	22	73	138	138	25
Mindanao	2024	9	8	23	68	138	138	25
Mindanao	2024	9	8	24	65	138	138	25
Mindanao	2024	9	9	1	60	138	138	25
Mindanao	2024	9	9	2	56	138	138	25
Mindanao	2024	9	9	3	55	138	138	25
Mindanao	2024	9	9	4	54	138	138	25
Mindanao	2024	9	9	5	61	138	138	25
Mindanao	2024	9	9	6	60	138	138	25
Mindanao	2024	9	9	7	56	138	138	25
Mindanao	2024	9	9	8	67	138	138	25
Mindanao	2024	9	9	9	80	138	138	25
Mindanao	2024	9	9	10	90	138	138	25
Mindanao	2024	9	9	11	93	138	138	25
Mindanao	2024	9	9	12	92	138	138	25
Mindanao	2024	9	9	13	95	138	138	25
Mindanao	2024	9	9	14	101	138	138	25
Mindanao	2024	9	9	15	98	138	138	25
Mindanao	2024	9	9	16	96	138	138	25
Mindanao	2024	9	9	17	89	138	138	25
Mindanao	2024	9	9	18	94	138	138	25
Mindanao	2024	9	9	19	92	138	138	25
Mindanao	2024	9	9	20	89	138	138	25
Mindanao	2024	9	9	21	86	138	138	25
Mindanao	2024	9	9	22	79	138	138	25
Mindanao	2024	9	9	23	74	138	138	25
Mindanao	2024	9	9	24	70	138	138	25
Mindanao	2024	9	10	1	66	138	138	25
Mindanao	2024	9	10	2	63	138	138	25
Mindanao	2024	9	10	3	60	138	138	25
Mindanao	2024	9	10	4	60	138	138	25
Mindanao	2024	9	10	5	66	138	138	25
Mindanao	2024	9	10	6	66	138	138	25
Mindanao	2024	9	10	7	61	138	138	25
Mindanao	2024	9	10	8	72	138	138	25
Mindanao	2024	9	10	9	85	138	138	25
Mindanao	2024	9	10	10	91	138	138	25
Mindanao	2024	9	10	11	96	138	138	25
Mindanao	2024	9	10	12	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	10	13	96	138	138	25
Mindanao	2024	9	10	14	101	138	138	25
Mindanao	2024	9	10	15	100	138	138	25
Mindanao	2024	9	10	16	94	138	138	25
Mindanao	2024	9	10	17	91	138	138	25
Mindanao	2024	9	10	18	94	138	138	25
Mindanao	2024	9	10	19	92	138	138	25
Mindanao	2024	9	10	20	88	138	138	25
Mindanao	2024	9	10	21	85	138	138	25
Mindanao	2024	9	10	22	76	138	138	25
Mindanao	2024	9	10	23	72	138	138	25
Mindanao	2024	9	10	24	67	138	138	25
Mindanao	2024	9	11	1	63	138	138	25
Mindanao	2024	9	11	2	61	138	138	25
Mindanao	2024	9	11	3	58	138	138	25
Mindanao	2024	9	11	4	59	138	138	25
Mindanao	2024	9	11	5	63	138	138	25
Mindanao	2024	9	11	6	65	138	138	25
Mindanao	2024	9	11	7	58	138	138	25
Mindanao	2024	9	11	8	70	138	138	25
Mindanao	2024	9	11	9	82	138	138	25
Mindanao	2024	9	11	10	91	138	138	25
Mindanao	2024	9	11	11	95	138	138	25
Mindanao	2024	9	11	12	94	138	138	25
Mindanao	2024	9	11	13	96	138	138	25
Mindanao	2024	9	11	14	100	138	138	25
Mindanao	2024	9	11	15	97	138	138	25
Mindanao	2024	9	11	16	93	138	138	25
Mindanao	2024	9	11	17	87	138	138	25
Mindanao	2024	9	11	18	93	138	138	25
Mindanao	2024	9	11	19	87	138	138	25
Mindanao	2024	9	11	20	89	138	138	25
Mindanao	2024	9	11	21	84	138	138	25
Mindanao	2024	9	11	22	78	138	138	25
Mindanao	2024	9	11	23	73	138	138	25
Mindanao	2024	9	11	24	69	138	138	25
Mindanao	2024	9	12	1	67	138	138	25
Mindanao	2024	9	12	2	63	138	138	25
Mindanao	2024	9	12	3	61	138	138	25
Mindanao	2024	9	12	4	59	138	138	25
Mindanao	2024	9	12	5	65	138	138	25
Mindanao	2024	9	12	6	68	138	138	25
Mindanao	2024	9	12	7	63	138	138	25
Mindanao	2024	9	12	8	69	138	138	25
Mindanao	2024	9	12	9	82	138	138	25
Mindanao	2024	9	12	10	90	138	138	25
Mindanao	2024	9	12	11	93	138	138	25
Mindanao	2024	9	12	12	89	138	138	25
Mindanao	2024	9	12	13	90	138	138	25
Mindanao	2024	9	12	14	92	138	138	25
Mindanao	2024	9	12	15	90	138	138	25
Mindanao	2024	9	12	16	88	138	138	25
Mindanao	2024	9	12	17	84	138	138	25
Mindanao	2024	9	12	18	90	138	138	25
Mindanao	2024	9	12	19	85	138	138	25
Mindanao	2024	9	12	20	84	138	138	25
Mindanao	2024	9	12	21	79	138	138	25
Mindanao	2024	9	12	22	73	138	138	25
Mindanao	2024	9	12	23	69	138	138	25
Mindanao	2024	9	12	24	65	138	138	25
Mindanao	2024	9	13	1	61	138	138	25
Mindanao	2024	9	13	2	59	138	138	25
Mindanao	2024	9	13	3	57	138	138	25
Mindanao	2024	9	13	4	56	138	138	25
Mindanao	2024	9	13	5	59	138	138	25
Mindanao	2024	9	13	6	64	138	138	25
Mindanao	2024	9	13	7	59	138	138	25
Mindanao	2024	9	13	8	68	138	138	25
Mindanao	2024	9	13	9	80	138	138	25
Mindanao	2024	9	13	10	82	138	138	25
Mindanao	2024	9	13	11	88	138	138	25
Mindanao	2024	9	13	12	88	138	138	25
Mindanao	2024	9	13	13	91	138	138	25
Mindanao	2024	9	13	14	98	138	138	25
Mindanao	2024	9	13	15	96	138	138	25
Mindanao	2024	9	13	16	93	138	138	25
Mindanao	2024	9	13	17	88	138	138	25
Mindanao	2024	9	13	18	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	13	19	90	138	138	25
Mindanao	2024	9	13	20	86	138	138	25
Mindanao	2024	9	13	21	84	138	138	25
Mindanao	2024	9	13	22	78	138	138	25
Mindanao	2024	9	13	23	73	138	138	25
Mindanao	2024	9	13	24	68	138	138	25
Mindanao	2024	9	14	1	66	138	138	25
Mindanao	2024	9	14	2	62	138	138	25
Mindanao	2024	9	14	3	60	138	138	25
Mindanao	2024	9	14	4	58	138	138	25
Mindanao	2024	9	14	5	59	138	138	25
Mindanao	2024	9	14	6	61	138	138	25
Mindanao	2024	9	14	7	58	138	138	25
Mindanao	2024	9	14	8	65	138	138	25
Mindanao	2024	9	14	9	73	138	138	25
Mindanao	2024	9	14	10	81	138	138	25
Mindanao	2024	9	14	11	84	138	138	25
Mindanao	2024	9	14	12	84	138	138	25
Mindanao	2024	9	14	13	87	138	138	25
Mindanao	2024	9	14	14	91	138	138	25
Mindanao	2024	9	14	15	90	138	138	25
Mindanao	2024	9	14	16	87	138	138	25
Mindanao	2024	9	14	17	82	138	138	25
Mindanao	2024	9	14	18	92	138	138	25
Mindanao	2024	9	14	19	92	138	138	25
Mindanao	2024	9	14	20	87	138	138	25
Mindanao	2024	9	14	21	85	138	138	25
Mindanao	2024	9	14	22	81	138	138	25
Mindanao	2024	9	14	23	76	138	138	25
Mindanao	2024	9	14	24	71	138	138	25
Mindanao	2024	9	15	1	68	138	138	25
Mindanao	2024	9	15	2	65	138	138	25
Mindanao	2024	9	15	3	62	138	138	25
Mindanao	2024	9	15	4	59	138	138	25
Mindanao	2024	9	15	5	59	138	138	25
Mindanao	2024	9	15	6	60	138	138	25
Mindanao	2024	9	15	7	60	138	138	25
Mindanao	2024	9	15	8	59	138	138	25
Mindanao	2024	9	15	9	64	138	138	25
Mindanao	2024	9	15	10	70	138	138	25
Mindanao	2024	9	15	11	74	138	138	25
Mindanao	2024	9	15	12	75	138	138	25
Mindanao	2024	9	15	13	77	138	138	25
Mindanao	2024	9	15	14	79	138	138	25
Mindanao	2024	9	15	15	78	138	138	25
Mindanao	2024	9	15	16	76	138	138	25
Mindanao	2024	9	15	17	72	138	138	25
Mindanao	2024	9	15	18	84	138	138	25
Mindanao	2024	9	15	19	85	138	138	25
Mindanao	2024	9	15	20	83	138	138	25
Mindanao	2024	9	15	21	81	138	138	25
Mindanao	2024	9	15	22	76	138	138	25
Mindanao	2024	9	15	23	71	138	138	25
Mindanao	2024	9	15	24	67	138	138	25
Mindanao	2024	9	16	1	64	138	138	25
Mindanao	2024	9	16	2	61	138	138	25
Mindanao	2024	9	16	3	57	138	138	25
Mindanao	2024	9	16	4	58	138	138	25
Mindanao	2024	9	16	5	61	138	138	25
Mindanao	2024	9	16	6	64	138	138	25
Mindanao	2024	9	16	7	57	138	138	25
Mindanao	2024	9	16	8	67	138	138	25
Mindanao	2024	9	16	9	81	138	138	25
Mindanao	2024	9	16	10	90	138	138	25
Mindanao	2024	9	16	11	94	138	138	25
Mindanao	2024	9	16	12	94	138	138	25
Mindanao	2024	9	16	13	95	138	138	25
Mindanao	2024	9	16	14	101	138	138	25
Mindanao	2024	9	16	15	100	138	138	25
Mindanao	2024	9	16	16	97	138	138	25
Mindanao	2024	9	16	17	89	138	138	25
Mindanao	2024	9	16	18	97	138	138	25
Mindanao	2024	9	16	19	93	138	138	25
Mindanao	2024	9	16	20	91	138	138	25
Mindanao	2024	9	16	21	87	138	138	25
Mindanao	2024	9	16	22	81	138	138	25
Mindanao	2024	9	16	23	76	138	138	25
Mindanao	2024	9	16	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	17	1	68	138	138	25
Mindanao	2024	9	17	2	66	138	138	25
Mindanao	2024	9	17	3	62	138	138	25
Mindanao	2024	9	17	4	62	138	138	25
Mindanao	2024	9	17	5	66	138	138	25
Mindanao	2024	9	17	6	68	138	138	25
Mindanao	2024	9	17	7	63	138	138	25
Mindanao	2024	9	17	8	72	138	138	25
Mindanao	2024	9	17	9	84	138	138	25
Mindanao	2024	9	17	10	90	138	138	25
Mindanao	2024	9	17	11	96	138	138	25
Mindanao	2024	9	17	12	96	138	138	25
Mindanao	2024	9	17	13	97	138	138	25
Mindanao	2024	9	17	14	103	138	138	25
Mindanao	2024	9	17	15	100	138	138	25
Mindanao	2024	9	17	16	94	138	138	25
Mindanao	2024	9	17	17	90	138	138	25
Mindanao	2024	9	17	18	94	138	138	25
Mindanao	2024	9	17	19	90	138	138	25
Mindanao	2024	9	17	20	88	138	138	25
Mindanao	2024	9	17	21	84	138	138	25
Mindanao	2024	9	17	22	77	138	138	25
Mindanao	2024	9	17	23	71	138	138	25
Mindanao	2024	9	17	24	68	138	138	25
Mindanao	2024	9	18	1	65	138	138	25
Mindanao	2024	9	18	2	62	138	138	25
Mindanao	2024	9	18	3	59	138	138	25
Mindanao	2024	9	18	4	59	138	138	25
Mindanao	2024	9	18	5	64	138	138	25
Mindanao	2024	9	18	6	66	138	138	25
Mindanao	2024	9	18	7	60	138	138	25
Mindanao	2024	9	18	8	71	138	138	25
Mindanao	2024	9	18	9	82	138	138	25
Mindanao	2024	9	18	10	90	138	138	25
Mindanao	2024	9	18	11	94	138	138	25
Mindanao	2024	9	18	12	93	138	138	25
Mindanao	2024	9	18	13	96	138	138	25
Mindanao	2024	9	18	14	100	138	138	25
Mindanao	2024	9	18	15	99	138	138	25
Mindanao	2024	9	18	16	96	138	138	25
Mindanao	2024	9	18	17	89	138	138	25
Mindanao	2024	9	18	18	95	138	138	25
Mindanao	2024	9	18	19	92	138	138	25
Mindanao	2024	9	18	20	90	138	138	25
Mindanao	2024	9	18	21	86	138	138	25
Mindanao	2024	9	18	22	80	138	138	25
Mindanao	2024	9	18	23	75	138	138	25
Mindanao	2024	9	18	24	71	138	138	25
Mindanao	2024	9	19	1	67	138	138	25
Mindanao	2024	9	19	2	65	138	138	25
Mindanao	2024	9	19	3	62	138	138	25
Mindanao	2024	9	19	4	60	138	138	25
Mindanao	2024	9	19	5	65	138	138	25
Mindanao	2024	9	19	6	67	138	138	25
Mindanao	2024	9	19	7	61	138	138	25
Mindanao	2024	9	19	8	71	138	138	25
Mindanao	2024	9	19	9	82	138	138	25
Mindanao	2024	9	19	10	89	138	138	25
Mindanao	2024	9	19	11	95	138	138	25
Mindanao	2024	9	19	12	94	138	138	25
Mindanao	2024	9	19	13	95	138	138	25
Mindanao	2024	9	19	14	100	138	138	25
Mindanao	2024	9	19	15	98	138	138	25
Mindanao	2024	9	19	16	94	138	138	25
Mindanao	2024	9	19	17	89	138	138	25
Mindanao	2024	9	19	18	96	138	138	25
Mindanao	2024	9	19	19	93	138	138	25
Mindanao	2024	9	19	20	89	138	138	25
Mindanao	2024	9	19	21	87	138	138	25
Mindanao	2024	9	19	22	80	138	138	25
Mindanao	2024	9	19	23	75	138	138	25
Mindanao	2024	9	19	24	70	138	138	25
Mindanao	2024	9	20	1	66	138	138	25
Mindanao	2024	9	20	2	64	138	138	25
Mindanao	2024	9	20	3	60	138	138	25
Mindanao	2024	9	20	4	60	138	138	25
Mindanao	2024	9	20	5	63	138	138	25
Mindanao	2024	9	20	6	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	20	7	62	138	138	25
Mindanao	2024	9	20	8	72	138	138	25
Mindanao	2024	9	20	9	84	138	138	25
Mindanao	2024	9	20	10	90	138	138	25
Mindanao	2024	9	20	11	95	138	138	25
Mindanao	2024	9	20	12	94	138	138	25
Mindanao	2024	9	20	13	96	138	138	25
Mindanao	2024	9	20	14	99	138	138	25
Mindanao	2024	9	20	15	98	138	138	25
Mindanao	2024	9	20	16	94	138	138	25
Mindanao	2024	9	20	17	89	138	138	25
Mindanao	2024	9	20	18	93	138	138	25
Mindanao	2024	9	20	19	86	138	138	25
Mindanao	2024	9	20	20	84	138	138	25
Mindanao	2024	9	20	21	82	138	138	25
Mindanao	2024	9	20	22	76	138	138	25
Mindanao	2024	9	20	23	72	138	138	25
Mindanao	2024	9	20	24	67	138	138	25
Mindanao	2024	9	21	1	63	138	138	25
Mindanao	2024	9	21	2	61	138	138	25
Mindanao	2024	9	21	3	59	138	138	25
Mindanao	2024	9	21	4	58	138	138	25
Mindanao	2024	9	21	5	58	138	138	25
Mindanao	2024	9	21	6	60	138	138	25
Mindanao	2024	9	21	7	59	138	138	25
Mindanao	2024	9	21	8	65	138	138	25
Mindanao	2024	9	21	9	71	138	138	25
Mindanao	2024	9	21	10	76	138	138	25
Mindanao	2024	9	21	11	80	138	138	25
Mindanao	2024	9	21	12	80	138	138	25
Mindanao	2024	9	21	13	81	138	138	25
Mindanao	2024	9	21	14	85	138	138	25
Mindanao	2024	9	21	15	81	138	138	25
Mindanao	2024	9	21	16	80	138	138	25
Mindanao	2024	9	21	17	79	138	138	25
Mindanao	2024	9	21	18	89	138	138	25
Mindanao	2024	9	21	19	84	138	138	25
Mindanao	2024	9	21	20	82	138	138	25
Mindanao	2024	9	21	21	79	138	138	25
Mindanao	2024	9	21	22	75	138	138	25
Mindanao	2024	9	21	23	70	138	138	25
Mindanao	2024	9	21	24	65	138	138	25
Mindanao	2024	9	22	1	62	138	138	25
Mindanao	2024	9	22	2	60	138	138	25
Mindanao	2024	9	22	3	55	138	138	25
Mindanao	2024	9	22	4	55	138	138	25
Mindanao	2024	9	22	5	55	138	138	25
Mindanao	2024	9	22	6	56	138	138	25
Mindanao	2024	9	22	7	55	138	138	25
Mindanao	2024	9	22	8	57	138	138	25
Mindanao	2024	9	22	9	60	138	138	25
Mindanao	2024	9	22	10	62	138	138	25
Mindanao	2024	9	22	11	68	138	138	25
Mindanao	2024	9	22	12	67	138	138	25
Mindanao	2024	9	22	13	67	138	138	25
Mindanao	2024	9	22	14	68	138	138	25
Mindanao	2024	9	22	15	67	138	138	25
Mindanao	2024	9	22	16	65	138	138	25
Mindanao	2024	9	22	17	69	138	138	25
Mindanao	2024	9	22	18	80	138	138	25
Mindanao	2024	9	22	19	73	138	138	25
Mindanao	2024	9	22	20	72	138	138	25
Mindanao	2024	9	22	21	69	138	138	25
Mindanao	2024	9	22	22	63	138	138	25
Mindanao	2024	9	22	23	60	138	138	25
Mindanao	2024	9	22	24	57	138	138	25
Mindanao	2024	9	23	1	56	138	138	25
Mindanao	2024	9	23	2	54	138	138	25
Mindanao	2024	9	23	3	51	138	138	25
Mindanao	2024	9	23	4	52	138	138	25
Mindanao	2024	9	23	5	57	138	138	25
Mindanao	2024	9	23	6	58	138	138	25
Mindanao	2024	9	23	7	55	138	138	25
Mindanao	2024	9	23	8	65	138	138	25
Mindanao	2024	9	23	9	76	138	138	25
Mindanao	2024	9	23	10	83	138	138	25
Mindanao	2024	9	23	11	89	138	138	25
Mindanao	2024	9	23	12	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	23	13	90	138	138	25
Mindanao	2024	9	23	14	95	138	138	25
Mindanao	2024	9	23	15	95	138	138	25
Mindanao	2024	9	23	16	91	138	138	25
Mindanao	2024	9	23	17	86	138	138	25
Mindanao	2024	9	23	18	95	138	138	25
Mindanao	2024	9	23	19	90	138	138	25
Mindanao	2024	9	23	20	87	138	138	25
Mindanao	2024	9	23	21	85	138	138	25
Mindanao	2024	9	23	22	79	138	138	25
Mindanao	2024	9	23	23	74	138	138	25
Mindanao	2024	9	23	24	68	138	138	25
Mindanao	2024	9	24	1	64	138	138	25
Mindanao	2024	9	24	2	62	138	138	25
Mindanao	2024	9	24	3	60	138	138	25
Mindanao	2024	9	24	4	59	138	138	25
Mindanao	2024	9	24	5	65	138	138	25
Mindanao	2024	9	24	6	67	138	138	25
Mindanao	2024	9	24	7	60	138	138	25
Mindanao	2024	9	24	8	71	138	138	25
Mindanao	2024	9	24	9	82	138	138	25
Mindanao	2024	9	24	10	90	138	138	25
Mindanao	2024	9	24	11	94	138	138	25
Mindanao	2024	9	24	12	92	138	138	25
Mindanao	2024	9	24	13	93	138	138	25
Mindanao	2024	9	24	14	98	138	138	25
Mindanao	2024	9	24	15	96	138	138	25
Mindanao	2024	9	24	16	93	138	138	25
Mindanao	2024	9	24	17	88	138	138	25
Mindanao	2024	9	24	18	95	138	138	25
Mindanao	2024	9	24	19	92	138	138	25
Mindanao	2024	9	24	20	89	138	138	25
Mindanao	2024	9	24	21	85	138	138	25
Mindanao	2024	9	24	22	78	138	138	25
Mindanao	2024	9	24	23	75	138	138	25
Mindanao	2024	9	24	24	70	138	138	25
Mindanao	2024	9	25	1	67	138	138	25
Mindanao	2024	9	25	2	64	138	138	25
Mindanao	2024	9	25	3	60	138	138	25
Mindanao	2024	9	25	4	62	138	138	25
Mindanao	2024	9	25	5	65	138	138	25
Mindanao	2024	9	25	6	66	138	138	25
Mindanao	2024	9	25	7	61	138	138	25
Mindanao	2024	9	25	8	71	138	138	25
Mindanao	2024	9	25	9	80	138	138	25
Mindanao	2024	9	25	10	89	138	138	25
Mindanao	2024	9	25	11	93	138	138	25
Mindanao	2024	9	25	12	91	138	138	25
Mindanao	2024	9	25	13	92	138	138	25
Mindanao	2024	9	25	14	96	138	138	25
Mindanao	2024	9	25	15	93	138	138	25
Mindanao	2024	9	25	16	90	138	138	25
Mindanao	2024	9	25	17	86	138	138	25
Mindanao	2024	9	25	18	91	138	138	25
Mindanao	2024	9	25	19	87	138	138	25
Mindanao	2024	9	25	20	82	138	138	25
Mindanao	2024	9	25	21	79	138	138	25
Mindanao	2024	9	25	22	73	138	138	25
Mindanao	2024	9	25	23	69	138	138	25
Mindanao	2024	9	25	24	66	138	138	25
Mindanao	2024	9	26	1	62	138	138	25
Mindanao	2024	9	26	2	59	138	138	25
Mindanao	2024	9	26	3	58	138	138	25
Mindanao	2024	9	26	4	57	138	138	25
Mindanao	2024	9	26	5	59	138	138	25
Mindanao	2024	9	26	6	63	138	138	25
Mindanao	2024	9	26	7	58	138	138	25
Mindanao	2024	9	26	8	67	138	138	25
Mindanao	2024	9	26	9	79	138	138	25
Mindanao	2024	9	26	10	83	138	138	25
Mindanao	2024	9	26	11	90	138	138	25
Mindanao	2024	9	26	12	89	138	138	25
Mindanao	2024	9	26	13	92	138	138	25
Mindanao	2024	9	26	14	96	138	138	25
Mindanao	2024	9	26	15	93	138	138	25
Mindanao	2024	9	26	16	91	138	138	25
Mindanao	2024	9	26	17	86	138	138	25
Mindanao	2024	9	26	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	26	19	88	138	138	25
Mindanao	2024	9	26	20	85	138	138	25
Mindanao	2024	9	26	21	80	138	138	25
Mindanao	2024	9	26	22	76	138	138	25
Mindanao	2024	9	26	23	72	138	138	25
Mindanao	2024	9	26	24	65	138	138	25
Mindanao	2024	9	27	1	63	138	138	25
Mindanao	2024	9	27	2	62	138	138	25
Mindanao	2024	9	27	3	59	138	138	25
Mindanao	2024	9	27	4	58	138	138	25
Mindanao	2024	9	27	5	62	138	138	25
Mindanao	2024	9	27	6	65	138	138	25
Mindanao	2024	9	27	7	60	138	138	25
Mindanao	2024	9	27	8	68	138	138	25
Mindanao	2024	9	27	9	79	138	138	25
Mindanao	2024	9	27	10	87	138	138	25
Mindanao	2024	9	27	11	90	138	138	25
Mindanao	2024	9	27	12	89	138	138	25
Mindanao	2024	9	27	13	90	138	138	25
Mindanao	2024	9	27	14	91	138	138	25
Mindanao	2024	9	27	15	89	138	138	25
Mindanao	2024	9	27	16	86	138	138	25
Mindanao	2024	9	27	17	82	138	138	25
Mindanao	2024	9	27	18	88	138	138	25
Mindanao	2024	9	27	19	85	138	138	25
Mindanao	2024	9	27	20	83	138	138	25
Mindanao	2024	9	27	21	79	138	138	25
Mindanao	2024	9	27	22	74	138	138	25
Mindanao	2024	9	27	23	70	138	138	25
Mindanao	2024	9	27	24	66	138	138	25
Mindanao	2024	9	28	1	62	138	138	25
Mindanao	2024	9	28	2	60	138	138	25
Mindanao	2024	9	28	3	57	138	138	25
Mindanao	2024	9	28	4	57	138	138	25
Mindanao	2024	9	28	5	57	138	138	25
Mindanao	2024	9	28	6	59	138	138	25
Mindanao	2024	9	28	7	58	138	138	25
Mindanao	2024	9	28	8	62	138	138	25
Mindanao	2024	9	28	9	71	138	138	25
Mindanao	2024	9	28	10	77	138	138	25
Mindanao	2024	9	28	11	83	138	138	25
Mindanao	2024	9	28	12	82	138	138	25
Mindanao	2024	9	28	13	81	138	138	25
Mindanao	2024	9	28	14	84	138	138	25
Mindanao	2024	9	28	15	83	138	138	25
Mindanao	2024	9	28	16	80	138	138	25
Mindanao	2024	9	28	17	80	138	138	25
Mindanao	2024	9	28	18	88	138	138	25
Mindanao	2024	9	28	19	83	138	138	25
Mindanao	2024	9	28	20	81	138	138	25
Mindanao	2024	9	28	21	79	138	138	25
Mindanao	2024	9	28	22	73	138	138	25
Mindanao	2024	9	28	23	69	138	138	25
Mindanao	2024	9	28	24	63	138	138	25
Mindanao	2024	9	29	1	60	138	138	25
Mindanao	2024	9	29	2	58	138	138	25
Mindanao	2024	9	29	3	55	138	138	25
Mindanao	2024	9	29	4	52	138	138	25
Mindanao	2024	9	29	5	52	138	138	25
Mindanao	2024	9	29	6	53	138	138	25
Mindanao	2024	9	29	7	51	138	138	25
Mindanao	2024	9	29	8	54	138	138	25
Mindanao	2024	9	29	9	62	138	138	25
Mindanao	2024	9	29	10	66	138	138	25
Mindanao	2024	9	29	11	70	138	138	25
Mindanao	2024	9	29	12	71	138	138	25
Mindanao	2024	9	29	13	71	138	138	25
Mindanao	2024	9	29	14	68	138	138	25
Mindanao	2024	9	29	15	71	138	138	25
Mindanao	2024	9	29	16	69	138	138	25
Mindanao	2024	9	29	17	67	138	138	25
Mindanao	2024	9	29	18	78	138	138	25
Mindanao	2024	9	29	19	75	138	138	25
Mindanao	2024	9	29	20	77	138	138	25
Mindanao	2024	9	29	21	74	138	138	25
Mindanao	2024	9	29	22	69	138	138	25
Mindanao	2024	9	29	23	64	138	138	25
Mindanao	2024	9	29	24	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	9	30	1	58	138	138	25
Mindanao	2024	9	30	2	57	138	138	25
Mindanao	2024	9	30	3	54	138	138	25
Mindanao	2024	9	30	4	54	138	138	25
Mindanao	2024	9	30	5	58	138	138	25
Mindanao	2024	9	30	6	60	138	138	25
Mindanao	2024	9	30	7	55	138	138	25
Mindanao	2024	9	30	8	65	138	138	25
Mindanao	2024	9	30	9	77	138	138	25
Mindanao	2024	9	30	10	85	138	138	25
Mindanao	2024	9	30	11	87	138	138	25
Mindanao	2024	9	30	12	86	138	138	25
Mindanao	2024	9	30	13	84	138	138	25
Mindanao	2024	9	30	14	89	138	138	25
Mindanao	2024	9	30	15	90	138	138	25
Mindanao	2024	9	30	16	87	138	138	25
Mindanao	2024	9	30	17	83	138	138	25
Mindanao	2024	9	30	18	92	138	138	25
Mindanao	2024	9	30	19	86	138	138	25
Mindanao	2024	9	30	20	84	138	138	25
Mindanao	2024	9	30	21	80	138	138	25
Mindanao	2024	9	30	22	74	138	138	25
Mindanao	2024	9	30	23	68	138	138	25
Mindanao	2024	9	30	24	63	138	138	25
Mindanao	2024	10	1	1	61	138	138	25
Mindanao	2024	10	1	2	59	138	138	25
Mindanao	2024	10	1	3	56	138	138	25
Mindanao	2024	10	1	4	55	138	138	25
Mindanao	2024	10	1	5	61	138	138	25
Mindanao	2024	10	1	6	62	138	138	25
Mindanao	2024	10	1	7	57	138	138	25
Mindanao	2024	10	1	8	67	138	138	25
Mindanao	2024	10	1	9	79	138	138	25
Mindanao	2024	10	1	10	87	138	138	25
Mindanao	2024	10	1	11	92	138	138	25
Mindanao	2024	10	1	12	89	138	138	25
Mindanao	2024	10	1	13	92	138	138	25
Mindanao	2024	10	1	14	95	138	138	25
Mindanao	2024	10	1	15	91	138	138	25
Mindanao	2024	10	1	16	85	138	138	25
Mindanao	2024	10	1	17	77	138	138	25
Mindanao	2024	10	1	18	85	138	138	25
Mindanao	2024	10	1	19	79	138	138	25
Mindanao	2024	10	1	20	78	138	138	25
Mindanao	2024	10	1	21	74	138	138	25
Mindanao	2024	10	1	22	70	138	138	25
Mindanao	2024	10	1	23	66	138	138	25
Mindanao	2024	10	1	24	59	138	138	25
Mindanao	2024	10	2	1	58	138	138	25
Mindanao	2024	10	2	2	56	138	138	25
Mindanao	2024	10	2	3	55	138	138	25
Mindanao	2024	10	2	4	53	138	138	25
Mindanao	2024	10	2	5	58	138	138	25
Mindanao	2024	10	2	6	62	138	138	25
Mindanao	2024	10	2	7	56	138	138	25
Mindanao	2024	10	2	8	65	138	138	25
Mindanao	2024	10	2	9	76	138	138	25
Mindanao	2024	10	2	10	81	138	138	25
Mindanao	2024	10	2	11	84	138	138	25
Mindanao	2024	10	2	12	77	138	138	25
Mindanao	2024	10	2	13	81	138	138	25
Mindanao	2024	10	2	14	84	138	138	25
Mindanao	2024	10	2	15	85	138	138	25
Mindanao	2024	10	2	16	84	138	138	25
Mindanao	2024	10	2	17	81	138	138	25
Mindanao	2024	10	2	18	88	138	138	25
Mindanao	2024	10	2	19	81	138	138	25
Mindanao	2024	10	2	20	78	138	138	25
Mindanao	2024	10	2	21	75	138	138	25
Mindanao	2024	10	2	22	69	138	138	25
Mindanao	2024	10	2	23	65	138	138	25
Mindanao	2024	10	2	24	59	138	138	25
Mindanao	2024	10	3	1	57	138	138	25
Mindanao	2024	10	3	2	55	138	138	25
Mindanao	2024	10	3	3	55	138	138	25
Mindanao	2024	10	3	4	54	138	138	25
Mindanao	2024	10	3	5	59	138	138	25
Mindanao	2024	10	3	6	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	3	7	57	138	138	25
Mindanao	2024	10	3	8	65	138	138	25
Mindanao	2024	10	3	9	76	138	138	25
Mindanao	2024	10	3	10	85	138	138	25
Mindanao	2024	10	3	11	90	138	138	25
Mindanao	2024	10	3	12	89	138	138	25
Mindanao	2024	10	3	13	91	138	138	25
Mindanao	2024	10	3	14	95	138	138	25
Mindanao	2024	10	3	15	93	138	138	25
Mindanao	2024	10	3	16	92	138	138	25
Mindanao	2024	10	3	17	86	138	138	25
Mindanao	2024	10	3	18	95	138	138	25
Mindanao	2024	10	3	19	89	138	138	25
Mindanao	2024	10	3	20	85	138	138	25
Mindanao	2024	10	3	21	79	138	138	25
Mindanao	2024	10	3	22	73	138	138	25
Mindanao	2024	10	3	23	69	138	138	25
Mindanao	2024	10	3	24	64	138	138	25
Mindanao	2024	10	4	1	60	138	138	25
Mindanao	2024	10	4	2	58	138	138	25
Mindanao	2024	10	4	3	55	138	138	25
Mindanao	2024	10	4	4	57	138	138	25
Mindanao	2024	10	4	5	60	138	138	25
Mindanao	2024	10	4	6	64	138	138	25
Mindanao	2024	10	4	7	59	138	138	25
Mindanao	2024	10	4	8	68	138	138	25
Mindanao	2024	10	4	9	81	138	138	25
Mindanao	2024	10	4	10	88	138	138	25
Mindanao	2024	10	4	11	92	138	138	25
Mindanao	2024	10	4	12	92	138	138	25
Mindanao	2024	10	4	13	95	138	138	25
Mindanao	2024	10	4	14	99	138	138	25
Mindanao	2024	10	4	15	96	138	138	25
Mindanao	2024	10	4	16	93	138	138	25
Mindanao	2024	10	4	17	86	138	138	25
Mindanao	2024	10	4	18	94	138	138	25
Mindanao	2024	10	4	19	89	138	138	25
Mindanao	2024	10	4	20	87	138	138	25
Mindanao	2024	10	4	21	83	138	138	25
Mindanao	2024	10	4	22	76	138	138	25
Mindanao	2024	10	4	23	73	138	138	25
Mindanao	2024	10	4	24	68	138	138	25
Mindanao	2024	10	5	1	64	138	138	25
Mindanao	2024	10	5	2	61	138	138	25
Mindanao	2024	10	5	3	59	138	138	25
Mindanao	2024	10	5	4	58	138	138	25
Mindanao	2024	10	5	5	60	138	138	25
Mindanao	2024	10	5	6	60	138	138	25
Mindanao	2024	10	5	7	59	138	138	25
Mindanao	2024	10	5	8	62	138	138	25
Mindanao	2024	10	5	9	72	138	138	25
Mindanao	2024	10	5	10	79	138	138	25
Mindanao	2024	10	5	11	82	138	138	25
Mindanao	2024	10	5	12	82	138	138	25
Mindanao	2024	10	5	13	85	138	138	25
Mindanao	2024	10	5	14	87	138	138	25
Mindanao	2024	10	5	15	86	138	138	25
Mindanao	2024	10	5	16	80	138	138	25
Mindanao	2024	10	5	17	78	138	138	25
Mindanao	2024	10	5	18	92	138	138	25
Mindanao	2024	10	5	19	88	138	138	25
Mindanao	2024	10	5	20	85	138	138	25
Mindanao	2024	10	5	21	82	138	138	25
Mindanao	2024	10	5	22	77	138	138	25
Mindanao	2024	10	5	23	72	138	138	25
Mindanao	2024	10	5	24	67	138	138	25
Mindanao	2024	10	6	1	64	138	138	25
Mindanao	2024	10	6	2	60	138	138	25
Mindanao	2024	10	6	3	58	138	138	25
Mindanao	2024	10	6	4	57	138	138	25
Mindanao	2024	10	6	5	58	138	138	25
Mindanao	2024	10	6	6	56	138	138	25
Mindanao	2024	10	6	7	55	138	138	25
Mindanao	2024	10	6	8	57	138	138	25
Mindanao	2024	10	6	9	62	138	138	25
Mindanao	2024	10	6	10	67	138	138	25
Mindanao	2024	10	6	11	70	138	138	25
Mindanao	2024	10	6	12	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	6	13	72	138	138	25
Mindanao	2024	10	6	14	72	138	138	25
Mindanao	2024	10	6	15	69	138	138	25
Mindanao	2024	10	6	16	71	138	138	25
Mindanao	2024	10	6	17	71	138	138	25
Mindanao	2024	10	6	18	81	138	138	25
Mindanao	2024	10	6	19	80	138	138	25
Mindanao	2024	10	6	20	77	138	138	25
Mindanao	2024	10	6	21	74	138	138	25
Mindanao	2024	10	6	22	70	138	138	25
Mindanao	2024	10	6	23	66	138	138	25
Mindanao	2024	10	6	24	62	138	138	25
Mindanao	2024	10	7	1	59	138	138	25
Mindanao	2024	10	7	2	56	138	138	25
Mindanao	2024	10	7	3	54	138	138	25
Mindanao	2024	10	7	4	55	138	138	25
Mindanao	2024	10	7	5	60	138	138	25
Mindanao	2024	10	7	6	61	138	138	25
Mindanao	2024	10	7	7	54	138	138	25
Mindanao	2024	10	7	8	67	138	138	25
Mindanao	2024	10	7	9	80	138	138	25
Mindanao	2024	10	7	10	88	138	138	25
Mindanao	2024	10	7	11	94	138	138	25
Mindanao	2024	10	7	12	93	138	138	25
Mindanao	2024	10	7	13	93	138	138	25
Mindanao	2024	10	7	14	100	138	138	25
Mindanao	2024	10	7	15	97	138	138	25
Mindanao	2024	10	7	16	95	138	138	25
Mindanao	2024	10	7	17	89	138	138	25
Mindanao	2024	10	7	18	96	138	138	25
Mindanao	2024	10	7	19	91	138	138	25
Mindanao	2024	10	7	20	86	138	138	25
Mindanao	2024	10	7	21	83	138	138	25
Mindanao	2024	10	7	22	75	138	138	25
Mindanao	2024	10	7	23	72	138	138	25
Mindanao	2024	10	7	24	67	138	138	25
Mindanao	2024	10	8	1	64	138	138	25
Mindanao	2024	10	8	2	60	138	138	25
Mindanao	2024	10	8	3	59	138	138	25
Mindanao	2024	10	8	4	58	138	138	25
Mindanao	2024	10	8	5	62	138	138	25
Mindanao	2024	10	8	6	64	138	138	25
Mindanao	2024	10	8	7	59	138	138	25
Mindanao	2024	10	8	8	68	138	138	25
Mindanao	2024	10	8	9	81	138	138	25
Mindanao	2024	10	8	10	90	138	138	25
Mindanao	2024	10	8	11	95	138	138	25
Mindanao	2024	10	8	12	93	138	138	25
Mindanao	2024	10	8	13	94	138	138	25
Mindanao	2024	10	8	14	100	138	138	25
Mindanao	2024	10	8	15	98	138	138	25
Mindanao	2024	10	8	16	94	138	138	25
Mindanao	2024	10	8	17	89	138	138	25
Mindanao	2024	10	8	18	96	138	138	25
Mindanao	2024	10	8	19	90	138	138	25
Mindanao	2024	10	8	20	87	138	138	25
Mindanao	2024	10	8	21	83	138	138	25
Mindanao	2024	10	8	22	77	138	138	25
Mindanao	2024	10	8	23	73	138	138	25
Mindanao	2024	10	8	24	68	138	138	25
Mindanao	2024	10	9	1	65	138	138	25
Mindanao	2024	10	9	2	62	138	138	25
Mindanao	2024	10	9	3	61	138	138	25
Mindanao	2024	10	9	4	60	138	138	25
Mindanao	2024	10	9	5	63	138	138	25
Mindanao	2024	10	9	6	65	138	138	25
Mindanao	2024	10	9	7	58	138	138	25
Mindanao	2024	10	9	8	69	138	138	25
Mindanao	2024	10	9	9	81	138	138	25
Mindanao	2024	10	9	10	90	138	138	25
Mindanao	2024	10	9	11	93	138	138	25
Mindanao	2024	10	9	12	91	138	138	25
Mindanao	2024	10	9	13	92	138	138	25
Mindanao	2024	10	9	14	96	138	138	25
Mindanao	2024	10	9	15	94	138	138	25
Mindanao	2024	10	9	16	92	138	138	25
Mindanao	2024	10	9	17	87	138	138	25
Mindanao	2024	10	9	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	9	19	89	138	138	25
Mindanao	2024	10	9	20	85	138	138	25
Mindanao	2024	10	9	21	82	138	138	25
Mindanao	2024	10	9	22	77	138	138	25
Mindanao	2024	10	9	23	71	138	138	25
Mindanao	2024	10	9	24	68	138	138	25
Mindanao	2024	10	10	1	64	138	138	25
Mindanao	2024	10	10	2	62	138	138	25
Mindanao	2024	10	10	3	59	138	138	25
Mindanao	2024	10	10	4	60	138	138	25
Mindanao	2024	10	10	5	63	138	138	25
Mindanao	2024	10	10	6	65	138	138	25
Mindanao	2024	10	10	7	58	138	138	25
Mindanao	2024	10	10	8	71	138	138	25
Mindanao	2024	10	10	9	81	138	138	25
Mindanao	2024	10	10	10	89	138	138	25
Mindanao	2024	10	10	11	94	138	138	25
Mindanao	2024	10	10	12	94	138	138	25
Mindanao	2024	10	10	13	96	138	138	25
Mindanao	2024	10	10	14	99	138	138	25
Mindanao	2024	10	10	15	91	138	138	25
Mindanao	2024	10	10	16	91	138	138	25
Mindanao	2024	10	10	17	91	138	138	25
Mindanao	2024	10	10	18	96	138	138	25
Mindanao	2024	10	10	19	93	138	138	25
Mindanao	2024	10	10	20	88	138	138	25
Mindanao	2024	10	10	21	85	138	138	25
Mindanao	2024	10	10	22	78	138	138	25
Mindanao	2024	10	10	23	73	138	138	25
Mindanao	2024	10	10	24	68	138	138	25
Mindanao	2024	10	11	1	65	138	138	25
Mindanao	2024	10	11	2	62	138	138	25
Mindanao	2024	10	11	3	59	138	138	25
Mindanao	2024	10	11	4	57	138	138	25
Mindanao	2024	10	11	5	62	138	138	25
Mindanao	2024	10	11	6	63	138	138	25
Mindanao	2024	10	11	7	59	138	138	25
Mindanao	2024	10	11	8	70	138	138	25
Mindanao	2024	10	11	9	80	138	138	25
Mindanao	2024	10	11	10	90	138	138	25
Mindanao	2024	10	11	11	95	138	138	25
Mindanao	2024	10	11	12	92	138	138	25
Mindanao	2024	10	11	13	94	138	138	25
Mindanao	2024	10	11	14	97	138	138	25
Mindanao	2024	10	11	15	95	138	138	25
Mindanao	2024	10	11	16	90	138	138	25
Mindanao	2024	10	11	17	84	138	138	25
Mindanao	2024	10	11	18	89	138	138	25
Mindanao	2024	10	11	19	84	138	138	25
Mindanao	2024	10	11	20	82	138	138	25
Mindanao	2024	10	11	21	79	138	138	25
Mindanao	2024	10	11	22	73	138	138	25
Mindanao	2024	10	11	23	69	138	138	25
Mindanao	2024	10	11	24	66	138	138	25
Mindanao	2024	10	12	1	62	138	138	25
Mindanao	2024	10	12	2	61	138	138	25
Mindanao	2024	10	12	3	57	138	138	25
Mindanao	2024	10	12	4	56	138	138	25
Mindanao	2024	10	12	5	57	138	138	25
Mindanao	2024	10	12	6	58	138	138	25
Mindanao	2024	10	12	7	53	138	138	25
Mindanao	2024	10	12	8	59	138	138	25
Mindanao	2024	10	12	9	66	138	138	25
Mindanao	2024	10	12	10	72	138	138	25
Mindanao	2024	10	12	11	76	138	138	25
Mindanao	2024	10	12	12	75	138	138	25
Mindanao	2024	10	12	13	77	138	138	25
Mindanao	2024	10	12	14	78	138	138	25
Mindanao	2024	10	12	15	77	138	138	25
Mindanao	2024	10	12	16	76	138	138	25
Mindanao	2024	10	12	17	78	138	138	25
Mindanao	2024	10	12	18	86	138	138	25
Mindanao	2024	10	12	19	85	138	138	25
Mindanao	2024	10	12	20	83	138	138	25
Mindanao	2024	10	12	21	79	138	138	25
Mindanao	2024	10	12	22	76	138	138	25
Mindanao	2024	10	12	23	69	138	138	25
Mindanao	2024	10	12	24	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	13	1	63	138	138	25
Mindanao	2024	10	13	2	60	138	138	25
Mindanao	2024	10	13	3	58	138	138	25
Mindanao	2024	10	13	4	57	138	138	25
Mindanao	2024	10	13	5	56	138	138	25
Mindanao	2024	10	13	6	56	138	138	25
Mindanao	2024	10	13	7	54	138	138	25
Mindanao	2024	10	13	8	55	138	138	25
Mindanao	2024	10	13	9	60	138	138	25
Mindanao	2024	10	13	10	67	138	138	25
Mindanao	2024	10	13	11	73	138	138	25
Mindanao	2024	10	13	12	73	138	138	25
Mindanao	2024	10	13	13	74	138	138	25
Mindanao	2024	10	13	14	75	138	138	25
Mindanao	2024	10	13	15	74	138	138	25
Mindanao	2024	10	13	16	71	138	138	25
Mindanao	2024	10	13	17	74	138	138	25
Mindanao	2024	10	13	18	83	138	138	25
Mindanao	2024	10	13	19	80	138	138	25
Mindanao	2024	10	13	20	77	138	138	25
Mindanao	2024	10	13	21	75	138	138	25
Mindanao	2024	10	13	22	67	138	138	25
Mindanao	2024	10	13	23	65	138	138	25
Mindanao	2024	10	13	24	61	138	138	25
Mindanao	2024	10	14	1	59	138	138	25
Mindanao	2024	10	14	2	56	138	138	25
Mindanao	2024	10	14	3	55	138	138	25
Mindanao	2024	10	14	4	55	138	138	25
Mindanao	2024	10	14	5	59	138	138	25
Mindanao	2024	10	14	6	62	138	138	25
Mindanao	2024	10	14	7	56	138	138	25
Mindanao	2024	10	14	8	65	138	138	25
Mindanao	2024	10	14	9	76	138	138	25
Mindanao	2024	10	14	10	84	138	138	25
Mindanao	2024	10	14	11	90	138	138	25
Mindanao	2024	10	14	12	89	138	138	25
Mindanao	2024	10	14	13	89	138	138	25
Mindanao	2024	10	14	14	94	138	138	25
Mindanao	2024	10	14	15	91	138	138	25
Mindanao	2024	10	14	16	88	138	138	25
Mindanao	2024	10	14	17	86	138	138	25
Mindanao	2024	10	14	18	91	138	138	25
Mindanao	2024	10	14	19	86	138	138	25
Mindanao	2024	10	14	20	82	138	138	25
Mindanao	2024	10	14	21	78	138	138	25
Mindanao	2024	10	14	22	72	138	138	25
Mindanao	2024	10	14	23	69	138	138	25
Mindanao	2024	10	14	24	64	138	138	25
Mindanao	2024	10	15	1	60	138	138	25
Mindanao	2024	10	15	2	58	138	138	25
Mindanao	2024	10	15	3	56	138	138	25
Mindanao	2024	10	15	4	56	138	138	25
Mindanao	2024	10	15	5	60	138	138	25
Mindanao	2024	10	15	6	64	138	138	25
Mindanao	2024	10	15	7	60	138	138	25
Mindanao	2024	10	15	8	67	138	138	25
Mindanao	2024	10	15	9	79	138	138	25
Mindanao	2024	10	15	10	86	138	138	25
Mindanao	2024	10	15	11	88	138	138	25
Mindanao	2024	10	15	12	89	138	138	25
Mindanao	2024	10	15	13	92	138	138	25
Mindanao	2024	10	15	14	96	138	138	25
Mindanao	2024	10	15	15	95	138	138	25
Mindanao	2024	10	15	16	91	138	138	25
Mindanao	2024	10	15	17	88	138	138	25
Mindanao	2024	10	15	18	94	138	138	25
Mindanao	2024	10	15	19	89	138	138	25
Mindanao	2024	10	15	20	87	138	138	25
Mindanao	2024	10	15	21	84	138	138	25
Mindanao	2024	10	15	22	77	138	138	25
Mindanao	2024	10	15	23	71	138	138	25
Mindanao	2024	10	15	24	68	138	138	25
Mindanao	2024	10	16	1	64	138	138	25
Mindanao	2024	10	16	2	61	138	138	25
Mindanao	2024	10	16	3	60	138	138	25
Mindanao	2024	10	16	4	59	138	138	25
Mindanao	2024	10	16	5	63	138	138	25
Mindanao	2024	10	16	6	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	16	7	58	138	138	25
Mindanao	2024	10	16	8	67	138	138	25
Mindanao	2024	10	16	9	79	138	138	25
Mindanao	2024	10	16	10	87	138	138	25
Mindanao	2024	10	16	11	92	138	138	25
Mindanao	2024	10	16	12	91	138	138	25
Mindanao	2024	10	16	13	93	138	138	25
Mindanao	2024	10	16	14	97	138	138	25
Mindanao	2024	10	16	15	95	138	138	25
Mindanao	2024	10	16	16	92	138	138	25
Mindanao	2024	10	16	17	87	138	138	25
Mindanao	2024	10	16	18	92	138	138	25
Mindanao	2024	10	16	19	87	138	138	25
Mindanao	2024	10	16	20	84	138	138	25
Mindanao	2024	10	16	21	78	138	138	25
Mindanao	2024	10	16	22	74	138	138	25
Mindanao	2024	10	16	23	68	138	138	25
Mindanao	2024	10	16	24	63	138	138	25
Mindanao	2024	10	17	1	61	138	138	25
Mindanao	2024	10	17	2	59	138	138	25
Mindanao	2024	10	17	3	56	138	138	25
Mindanao	2024	10	17	4	56	138	138	25
Mindanao	2024	10	17	5	62	138	138	25
Mindanao	2024	10	17	6	64	138	138	25
Mindanao	2024	10	17	7	58	138	138	25
Mindanao	2024	10	17	8	67	138	138	25
Mindanao	2024	10	17	9	79	138	138	25
Mindanao	2024	10	17	10	87	138	138	25
Mindanao	2024	10	17	11	93	138	138	25
Mindanao	2024	10	17	12	90	138	138	25
Mindanao	2024	10	17	13	89	138	138	25
Mindanao	2024	10	17	14	93	138	138	25
Mindanao	2024	10	17	15	92	138	138	25
Mindanao	2024	10	17	16	90	138	138	25
Mindanao	2024	10	17	17	85	138	138	25
Mindanao	2024	10	17	18	95	138	138	25
Mindanao	2024	10	17	19	89	138	138	25
Mindanao	2024	10	17	20	86	138	138	25
Mindanao	2024	10	17	21	82	138	138	25
Mindanao	2024	10	17	22	75	138	138	25
Mindanao	2024	10	17	23	70	138	138	25
Mindanao	2024	10	17	24	67	138	138	25
Mindanao	2024	10	18	1	63	138	138	25
Mindanao	2024	10	18	2	60	138	138	25
Mindanao	2024	10	18	3	58	138	138	25
Mindanao	2024	10	18	4	57	138	138	25
Mindanao	2024	10	18	5	61	138	138	25
Mindanao	2024	10	18	6	63	138	138	25
Mindanao	2024	10	18	7	60	138	138	25
Mindanao	2024	10	18	8	67	138	138	25
Mindanao	2024	10	18	9	81	138	138	25
Mindanao	2024	10	18	10	89	138	138	25
Mindanao	2024	10	18	11	93	138	138	25
Mindanao	2024	10	18	12	89	138	138	25
Mindanao	2024	10	18	13	93	138	138	25
Mindanao	2024	10	18	14	97	138	138	25
Mindanao	2024	10	18	15	95	138	138	25
Mindanao	2024	10	18	16	93	138	138	25
Mindanao	2024	10	18	17	93	138	138	25
Mindanao	2024	10	18	18	99	138	138	25
Mindanao	2024	10	18	19	95	138	138	25
Mindanao	2024	10	18	20	91	138	138	25
Mindanao	2024	10	18	21	89	138	138	25
Mindanao	2024	10	18	22	82	138	138	25
Mindanao	2024	10	18	23	76	138	138	25
Mindanao	2024	10	18	24	67	138	138	25
Mindanao	2024	10	19	1	63	138	138	25
Mindanao	2024	10	19	2	61	138	138	25
Mindanao	2024	10	19	3	59	138	138	25
Mindanao	2024	10	19	4	57	138	138	25
Mindanao	2024	10	19	5	58	138	138	25
Mindanao	2024	10	19	6	62	138	138	25
Mindanao	2024	10	19	7	60	138	138	25
Mindanao	2024	10	19	8	64	138	138	25
Mindanao	2024	10	19	9	73	138	138	25
Mindanao	2024	10	19	10	77	138	138	25
Mindanao	2024	10	19	11	84	138	138	25
Mindanao	2024	10	19	12	83	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	19	13	83	138	138	25
Mindanao	2024	10	19	14	86	138	138	25
Mindanao	2024	10	19	15	86	138	138	25
Mindanao	2024	10	19	16	83	138	138	25
Mindanao	2024	10	19	17	82	138	138	25
Mindanao	2024	10	19	18	88	138	138	25
Mindanao	2024	10	19	19	85	138	138	25
Mindanao	2024	10	19	20	82	138	138	25
Mindanao	2024	10	19	21	78	138	138	25
Mindanao	2024	10	19	22	74	138	138	25
Mindanao	2024	10	19	23	68	138	138	25
Mindanao	2024	10	19	24	63	138	138	25
Mindanao	2024	10	20	1	60	138	138	25
Mindanao	2024	10	20	2	59	138	138	25
Mindanao	2024	10	20	3	55	138	138	25
Mindanao	2024	10	20	4	53	138	138	25
Mindanao	2024	10	20	5	54	138	138	25
Mindanao	2024	10	20	6	55	138	138	25
Mindanao	2024	10	20	7	54	138	138	25
Mindanao	2024	10	20	8	56	138	138	25
Mindanao	2024	10	20	9	59	138	138	25
Mindanao	2024	10	20	10	64	138	138	25
Mindanao	2024	10	20	11	68	138	138	25
Mindanao	2024	10	20	12	68	138	138	25
Mindanao	2024	10	20	13	67	138	138	25
Mindanao	2024	10	20	14	70	138	138	25
Mindanao	2024	10	20	15	69	138	138	25
Mindanao	2024	10	20	16	69	138	138	25
Mindanao	2024	10	20	17	70	138	138	25
Mindanao	2024	10	20	18	80	138	138	25
Mindanao	2024	10	20	19	79	138	138	25
Mindanao	2024	10	20	20	77	138	138	25
Mindanao	2024	10	20	21	73	138	138	25
Mindanao	2024	10	20	22	69	138	138	25
Mindanao	2024	10	20	23	64	138	138	25
Mindanao	2024	10	20	24	60	138	138	25
Mindanao	2024	10	21	1	57	138	138	25
Mindanao	2024	10	21	2	55	138	138	25
Mindanao	2024	10	21	3	53	138	138	25
Mindanao	2024	10	21	4	54	138	138	25
Mindanao	2024	10	21	5	59	138	138	25
Mindanao	2024	10	21	6	63	138	138	25
Mindanao	2024	10	21	7	56	138	138	25
Mindanao	2024	10	21	8	67	138	138	25
Mindanao	2024	10	21	9	80	138	138	25
Mindanao	2024	10	21	10	87	138	138	25
Mindanao	2024	10	21	11	91	138	138	25
Mindanao	2024	10	21	12	88	138	138	25
Mindanao	2024	10	21	13	91	138	138	25
Mindanao	2024	10	21	14	94	138	138	25
Mindanao	2024	10	21	15	94	138	138	25
Mindanao	2024	10	21	16	92	138	138	25
Mindanao	2024	10	21	17	80	138	138	25
Mindanao	2024	10	21	18	86	138	138	25
Mindanao	2024	10	21	19	83	138	138	25
Mindanao	2024	10	21	20	79	138	138	25
Mindanao	2024	10	21	21	78	138	138	25
Mindanao	2024	10	21	22	72	138	138	25
Mindanao	2024	10	21	23	68	138	138	25
Mindanao	2024	10	21	24	65	138	138	25
Mindanao	2024	10	22	1	62	138	138	25
Mindanao	2024	10	22	2	59	138	138	25
Mindanao	2024	10	22	3	58	138	138	25
Mindanao	2024	10	22	4	58	138	138	25
Mindanao	2024	10	22	5	61	138	138	25
Mindanao	2024	10	22	6	64	138	138	25
Mindanao	2024	10	22	7	58	138	138	25
Mindanao	2024	10	22	8	66	138	138	25
Mindanao	2024	10	22	9	74	138	138	25
Mindanao	2024	10	22	10	81	138	138	25
Mindanao	2024	10	22	11	86	138	138	25
Mindanao	2024	10	22	12	83	138	138	25
Mindanao	2024	10	22	13	85	138	138	25
Mindanao	2024	10	22	14	88	138	138	25
Mindanao	2024	10	22	15	87	138	138	25
Mindanao	2024	10	22	16	83	138	138	25
Mindanao	2024	10	22	17	80	138	138	25
Mindanao	2024	10	22	18	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	22	19	79	138	138	25
Mindanao	2024	10	22	20	78	138	138	25
Mindanao	2024	10	22	21	74	138	138	25
Mindanao	2024	10	22	22	70	138	138	25
Mindanao	2024	10	22	23	68	138	138	25
Mindanao	2024	10	22	24	63	138	138	25
Mindanao	2024	10	23	1	61	138	138	25
Mindanao	2024	10	23	2	59	138	138	25
Mindanao	2024	10	23	3	57	138	138	25
Mindanao	2024	10	23	4	57	138	138	25
Mindanao	2024	10	23	5	62	138	138	25
Mindanao	2024	10	23	6	64	138	138	25
Mindanao	2024	10	23	7	59	138	138	25
Mindanao	2024	10	23	8	67	138	138	25
Mindanao	2024	10	23	9	78	138	138	25
Mindanao	2024	10	23	10	85	138	138	25
Mindanao	2024	10	23	11	89	138	138	25
Mindanao	2024	10	23	12	86	138	138	25
Mindanao	2024	10	23	13	87	138	138	25
Mindanao	2024	10	23	14	92	138	138	25
Mindanao	2024	10	23	15	89	138	138	25
Mindanao	2024	10	23	16	88	138	138	25
Mindanao	2024	10	23	17	87	138	138	25
Mindanao	2024	10	23	18	94	138	138	25
Mindanao	2024	10	23	19	88	138	138	25
Mindanao	2024	10	23	20	84	138	138	25
Mindanao	2024	10	23	21	80	138	138	25
Mindanao	2024	10	23	22	73	138	138	25
Mindanao	2024	10	23	23	70	138	138	25
Mindanao	2024	10	23	24	65	138	138	25
Mindanao	2024	10	24	1	62	138	138	25
Mindanao	2024	10	24	2	60	138	138	25
Mindanao	2024	10	24	3	59	138	138	25
Mindanao	2024	10	24	4	58	138	138	25
Mindanao	2024	10	24	5	61	138	138	25
Mindanao	2024	10	24	6	66	138	138	25
Mindanao	2024	10	24	7	60	138	138	25
Mindanao	2024	10	24	8	69	138	138	25
Mindanao	2024	10	24	9	80	138	138	25
Mindanao	2024	10	24	10	87	138	138	25
Mindanao	2024	10	24	11	91	138	138	25
Mindanao	2024	10	24	12	89	138	138	25
Mindanao	2024	10	24	13	90	138	138	25
Mindanao	2024	10	24	14	93	138	138	25
Mindanao	2024	10	24	15	93	138	138	25
Mindanao	2024	10	24	16	90	138	138	25
Mindanao	2024	10	24	17	88	138	138	25
Mindanao	2024	10	24	18	95	138	138	25
Mindanao	2024	10	24	19	88	138	138	25
Mindanao	2024	10	24	20	84	138	138	25
Mindanao	2024	10	24	21	80	138	138	25
Mindanao	2024	10	24	22	74	138	138	25
Mindanao	2024	10	24	23	69	138	138	25
Mindanao	2024	10	24	24	65	138	138	25
Mindanao	2024	10	25	1	62	138	138	25
Mindanao	2024	10	25	2	58	138	138	25
Mindanao	2024	10	25	3	56	138	138	25
Mindanao	2024	10	25	4	56	138	138	25
Mindanao	2024	10	25	5	58	138	138	25
Mindanao	2024	10	25	6	63	138	138	25
Mindanao	2024	10	25	7	57	138	138	25
Mindanao	2024	10	25	8	65	138	138	25
Mindanao	2024	10	25	9	73	138	138	25
Mindanao	2024	10	25	10	78	138	138	25
Mindanao	2024	10	25	11	80	138	138	25
Mindanao	2024	10	25	12	75	138	138	25
Mindanao	2024	10	25	13	76	138	138	25
Mindanao	2024	10	25	14	78	138	138	25
Mindanao	2024	10	25	15	78	138	138	25
Mindanao	2024	10	25	16	79	138	138	25
Mindanao	2024	10	25	17	78	138	138	25
Mindanao	2024	10	25	18	81	138	138	25
Mindanao	2024	10	25	19	76	138	138	25
Mindanao	2024	10	25	20	70	138	138	25
Mindanao	2024	10	25	21	68	138	138	25
Mindanao	2024	10	25	22	62	138	138	25
Mindanao	2024	10	25	23	58	138	138	25
Mindanao	2024	10	25	24	56	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	26	1	54	138	138	25
Mindanao	2024	10	26	2	53	138	138	25
Mindanao	2024	10	26	3	52	138	138	25
Mindanao	2024	10	26	4	51	138	138	25
Mindanao	2024	10	26	5	51	138	138	25
Mindanao	2024	10	26	6	53	138	138	25
Mindanao	2024	10	26	7	53	138	138	25
Mindanao	2024	10	26	8	58	138	138	25
Mindanao	2024	10	26	9	68	138	138	25
Mindanao	2024	10	26	10	73	138	138	25
Mindanao	2024	10	26	11	78	138	138	25
Mindanao	2024	10	26	12	76	138	138	25
Mindanao	2024	10	26	13	76	138	138	25
Mindanao	2024	10	26	14	75	138	138	25
Mindanao	2024	10	26	15	73	138	138	25
Mindanao	2024	10	26	16	75	138	138	25
Mindanao	2024	10	26	17	77	138	138	25
Mindanao	2024	10	26	18	85	138	138	25
Mindanao	2024	10	26	19	77	138	138	25
Mindanao	2024	10	26	20	73	138	138	25
Mindanao	2024	10	26	21	72	138	138	25
Mindanao	2024	10	26	22	68	138	138	25
Mindanao	2024	10	26	23	64	138	138	25
Mindanao	2024	10	26	24	61	138	138	25
Mindanao	2024	10	27	1	56	138	138	25
Mindanao	2024	10	27	2	52	138	138	25
Mindanao	2024	10	27	3	52	138	138	25
Mindanao	2024	10	27	4	51	138	138	25
Mindanao	2024	10	27	5	53	138	138	25
Mindanao	2024	10	27	6	54	138	138	25
Mindanao	2024	10	27	7	53	138	138	25
Mindanao	2024	10	27	8	55	138	138	25
Mindanao	2024	10	27	9	60	138	138	25
Mindanao	2024	10	27	10	66	138	138	25
Mindanao	2024	10	27	11	69	138	138	25
Mindanao	2024	10	27	12	71	138	138	25
Mindanao	2024	10	27	13	72	138	138	25
Mindanao	2024	10	27	14	74	138	138	25
Mindanao	2024	10	27	15	73	138	138	25
Mindanao	2024	10	27	16	72	138	138	25
Mindanao	2024	10	27	17	71	138	138	25
Mindanao	2024	10	27	18	84	138	138	25
Mindanao	2024	10	27	19	79	138	138	25
Mindanao	2024	10	27	20	77	138	138	25
Mindanao	2024	10	27	21	75	138	138	25
Mindanao	2024	10	27	22	70	138	138	25
Mindanao	2024	10	27	23	65	138	138	25
Mindanao	2024	10	27	24	62	138	138	25
Mindanao	2024	10	28	1	57	138	138	25
Mindanao	2024	10	28	2	56	138	138	25
Mindanao	2024	10	28	3	52	138	138	25
Mindanao	2024	10	28	4	51	138	138	25
Mindanao	2024	10	28	5	52	138	138	25
Mindanao	2024	10	28	6	53	138	138	25
Mindanao	2024	10	28	7	53	138	138	25
Mindanao	2024	10	28	8	58	138	138	25
Mindanao	2024	10	28	9	65	138	138	25
Mindanao	2024	10	28	10	72	138	138	25
Mindanao	2024	10	28	11	75	138	138	25
Mindanao	2024	10	28	12	69	138	138	25
Mindanao	2024	10	28	13	72	138	138	25
Mindanao	2024	10	28	14	79	138	138	25
Mindanao	2024	10	28	15	79	138	138	25
Mindanao	2024	10	28	16	77	138	138	25
Mindanao	2024	10	28	17	76	138	138	25
Mindanao	2024	10	28	18	88	138	138	25
Mindanao	2024	10	28	19	83	138	138	25
Mindanao	2024	10	28	20	81	138	138	25
Mindanao	2024	10	28	21	78	138	138	25
Mindanao	2024	10	28	22	72	138	138	25
Mindanao	2024	10	28	23	69	138	138	25
Mindanao	2024	10	28	24	65	138	138	25
Mindanao	2024	10	29	1	62	138	138	25
Mindanao	2024	10	29	2	59	138	138	25
Mindanao	2024	10	29	3	58	138	138	25
Mindanao	2024	10	29	4	58	138	138	25
Mindanao	2024	10	29	5	61	138	138	25
Mindanao	2024	10	29	6	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	10	29	7	58	138	138	25
Mindanao	2024	10	29	8	66	138	138	25
Mindanao	2024	10	29	9	74	138	138	25
Mindanao	2024	10	29	10	81	138	138	25
Mindanao	2024	10	29	11	86	138	138	25
Mindanao	2024	10	29	12	83	138	138	25
Mindanao	2024	10	29	13	85	138	138	25
Mindanao	2024	10	29	14	88	138	138	25
Mindanao	2024	10	29	15	87	138	138	25
Mindanao	2024	10	29	16	83	138	138	25
Mindanao	2024	10	29	17	80	138	138	25
Mindanao	2024	10	29	18	85	138	138	25
Mindanao	2024	10	29	19	79	138	138	25
Mindanao	2024	10	29	20	78	138	138	25
Mindanao	2024	10	29	21	74	138	138	25
Mindanao	2024	10	29	22	70	138	138	25
Mindanao	2024	10	29	23	68	138	138	25
Mindanao	2024	10	29	24	63	138	138	25
Mindanao	2024	10	30	1	57	138	138	25
Mindanao	2024	10	30	2	55	138	138	25
Mindanao	2024	10	30	3	54	138	138	25
Mindanao	2024	10	30	4	53	138	138	25
Mindanao	2024	10	30	5	54	138	138	25
Mindanao	2024	10	30	6	57	138	138	25
Mindanao	2024	10	30	7	56	138	138	25
Mindanao	2024	10	30	8	63	138	138	25
Mindanao	2024	10	30	9	72	138	138	25
Mindanao	2024	10	30	10	77	138	138	25
Mindanao	2024	10	30	11	84	138	138	25
Mindanao	2024	10	30	12	83	138	138	25
Mindanao	2024	10	30	13	84	138	138	25
Mindanao	2024	10	30	14	83	138	138	25
Mindanao	2024	10	30	15	80	138	138	25
Mindanao	2024	10	30	16	81	138	138	25
Mindanao	2024	10	30	17	81	138	138	25
Mindanao	2024	10	30	18	86	138	138	25
Mindanao	2024	10	30	19	82	138	138	25
Mindanao	2024	10	30	20	79	138	138	25
Mindanao	2024	10	30	21	77	138	138	25
Mindanao	2024	10	30	22	71	138	138	25
Mindanao	2024	10	30	23	67	138	138	25
Mindanao	2024	10	30	24	63	138	138	25
Mindanao	2024	10	31	1	61	138	138	25
Mindanao	2024	10	31	2	59	138	138	25
Mindanao	2024	10	31	3	57	138	138	25
Mindanao	2024	10	31	4	56	138	138	25
Mindanao	2024	10	31	5	59	138	138	25
Mindanao	2024	10	31	6	64	138	138	25
Mindanao	2024	10	31	7	59	138	138	25
Mindanao	2024	10	31	8	64	138	138	25
Mindanao	2024	10	31	9	74	138	138	25
Mindanao	2024	10	31	10	81	138	138	25
Mindanao	2024	10	31	11	84	138	138	25
Mindanao	2024	10	31	12	80	138	138	25
Mindanao	2024	10	31	13	82	138	138	25
Mindanao	2024	10	31	14	85	138	138	25
Mindanao	2024	10	31	15	83	138	138	25
Mindanao	2024	10	31	16	82	138	138	25
Mindanao	2024	10	31	17	81	138	138	25
Mindanao	2024	10	31	18	89	138	138	25
Mindanao	2024	10	31	19	85	138	138	25
Mindanao	2024	10	31	20	80	138	138	25
Mindanao	2024	10	31	21	76	138	138	25
Mindanao	2024	10	31	22	70	138	138	25
Mindanao	2024	10	31	23	66	138	138	25
Mindanao	2024	10	31	24	62	138	138	25
Mindanao	2024	11	1	1	60	138	138	25
Mindanao	2024	11	1	2	58	138	138	25
Mindanao	2024	11	1	3	54	138	138	25
Mindanao	2024	11	1	4	53	138	138	25
Mindanao	2024	11	1	5	54	138	138	25
Mindanao	2024	11	1	6	54	138	138	25
Mindanao	2024	11	1	7	53	138	138	25
Mindanao	2024	11	1	8	53	138	138	25
Mindanao	2024	11	1	9	56	138	138	25
Mindanao	2024	11	1	10	63	138	138	25
Mindanao	2024	11	1	11	66	138	138	25
Mindanao	2024	11	1	12	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	1	13	66	138	138	25
Mindanao	2024	11	1	14	67	138	138	25
Mindanao	2024	11	1	15	67	138	138	25
Mindanao	2024	11	1	16	65	138	138	25
Mindanao	2024	11	1	17	68	138	138	25
Mindanao	2024	11	1	18	78	138	138	25
Mindanao	2024	11	1	19	75	138	138	25
Mindanao	2024	11	1	20	73	138	138	25
Mindanao	2024	11	1	21	73	138	138	25
Mindanao	2024	11	1	22	68	138	138	25
Mindanao	2024	11	1	23	61	138	138	25
Mindanao	2024	11	1	24	58	138	138	25
Mindanao	2024	11	2	1	64	138	138	25
Mindanao	2024	11	2	2	61	138	138	25
Mindanao	2024	11	2	3	59	138	138	25
Mindanao	2024	11	2	4	57	138	138	25
Mindanao	2024	11	2	5	59	138	138	25
Mindanao	2024	11	2	6	61	138	138	25
Mindanao	2024	11	2	7	58	138	138	25
Mindanao	2024	11	2	8	63	138	138	25
Mindanao	2024	11	2	9	67	138	138	25
Mindanao	2024	11	2	10	74	138	138	25
Mindanao	2024	11	2	11	78	138	138	25
Mindanao	2024	11	2	12	76	138	138	25
Mindanao	2024	11	2	13	78	138	138	25
Mindanao	2024	11	2	14	82	138	138	25
Mindanao	2024	11	2	15	81	138	138	25
Mindanao	2024	11	2	16	79	138	138	25
Mindanao	2024	11	2	17	79	138	138	25
Mindanao	2024	11	2	18	87	138	138	25
Mindanao	2024	11	2	19	88	138	138	25
Mindanao	2024	11	2	20	83	138	138	25
Mindanao	2024	11	2	21	81	138	138	25
Mindanao	2024	11	2	22	75	138	138	25
Mindanao	2024	11	2	23	71	138	138	25
Mindanao	2024	11	2	24	66	138	138	25
Mindanao	2024	11	3	1	62	138	138	25
Mindanao	2024	11	3	2	59	138	138	25
Mindanao	2024	11	3	3	58	138	138	25
Mindanao	2024	11	3	4	57	138	138	25
Mindanao	2024	11	3	5	57	138	138	25
Mindanao	2024	11	3	6	57	138	138	25
Mindanao	2024	11	3	7	52	138	138	25
Mindanao	2024	11	3	8	51	138	138	25
Mindanao	2024	11	3	9	56	138	138	25
Mindanao	2024	11	3	10	66	138	138	25
Mindanao	2024	11	3	11	68	138	138	25
Mindanao	2024	11	3	12	71	138	138	25
Mindanao	2024	11	3	13	73	138	138	25
Mindanao	2024	11	3	14	74	138	138	25
Mindanao	2024	11	3	15	72	138	138	25
Mindanao	2024	11	3	16	66	138	138	25
Mindanao	2024	11	3	17	69	138	138	25
Mindanao	2024	11	3	18	83	138	138	25
Mindanao	2024	11	3	19	84	138	138	25
Mindanao	2024	11	3	20	83	138	138	25
Mindanao	2024	11	3	21	80	138	138	25
Mindanao	2024	11	3	22	74	138	138	25
Mindanao	2024	11	3	23	69	138	138	25
Mindanao	2024	11	3	24	64	138	138	25
Mindanao	2024	11	4	1	61	138	138	25
Mindanao	2024	11	4	2	58	138	138	25
Mindanao	2024	11	4	3	57	138	138	25
Mindanao	2024	11	4	4	57	138	138	25
Mindanao	2024	11	4	5	60	138	138	25
Mindanao	2024	11	4	6	63	138	138	25
Mindanao	2024	11	4	7	57	138	138	25
Mindanao	2024	11	4	8	67	138	138	25
Mindanao	2024	11	4	9	80	138	138	25
Mindanao	2024	11	4	10	88	138	138	25
Mindanao	2024	11	4	11	95	138	138	25
Mindanao	2024	11	4	12	92	138	138	25
Mindanao	2024	11	4	13	92	138	138	25
Mindanao	2024	11	4	14	98	138	138	25
Mindanao	2024	11	4	15	97	138	138	25
Mindanao	2024	11	4	16	92	138	138	25
Mindanao	2024	11	4	17	90	138	138	25
Mindanao	2024	11	4	18	96	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	4	19	92	138	138	25
Mindanao	2024	11	4	20	90	138	138	25
Mindanao	2024	11	4	21	85	138	138	25
Mindanao	2024	11	4	22	77	138	138	25
Mindanao	2024	11	4	23	73	138	138	25
Mindanao	2024	11	4	24	70	138	138	25
Mindanao	2024	11	5	1	65	138	138	25
Mindanao	2024	11	5	2	63	138	138	25
Mindanao	2024	11	5	3	60	138	138	25
Mindanao	2024	11	5	4	60	138	138	25
Mindanao	2024	11	5	5	63	138	138	25
Mindanao	2024	11	5	6	67	138	138	25
Mindanao	2024	11	5	7	59	138	138	25
Mindanao	2024	11	5	8	71	138	138	25
Mindanao	2024	11	5	9	83	138	138	25
Mindanao	2024	11	5	10	90	138	138	25
Mindanao	2024	11	5	11	95	138	138	25
Mindanao	2024	11	5	12	92	138	138	25
Mindanao	2024	11	5	13	93	138	138	25
Mindanao	2024	11	5	14	97	138	138	25
Mindanao	2024	11	5	15	95	138	138	25
Mindanao	2024	11	5	16	92	138	138	25
Mindanao	2024	11	5	17	87	138	138	25
Mindanao	2024	11	5	18	94	138	138	25
Mindanao	2024	11	5	19	90	138	138	25
Mindanao	2024	11	5	20	86	138	138	25
Mindanao	2024	11	5	21	84	138	138	25
Mindanao	2024	11	5	22	78	138	138	25
Mindanao	2024	11	5	23	73	138	138	25
Mindanao	2024	11	5	24	67	138	138	25
Mindanao	2024	11	6	1	65	138	138	25
Mindanao	2024	11	6	2	62	138	138	25
Mindanao	2024	11	6	3	61	138	138	25
Mindanao	2024	11	6	4	61	138	138	25
Mindanao	2024	11	6	5	64	138	138	25
Mindanao	2024	11	6	6	68	138	138	25
Mindanao	2024	11	6	7	61	138	138	25
Mindanao	2024	11	6	8	69	138	138	25
Mindanao	2024	11	6	9	81	138	138	25
Mindanao	2024	11	6	10	85	138	138	25
Mindanao	2024	11	6	11	90	138	138	25
Mindanao	2024	11	6	12	90	138	138	25
Mindanao	2024	11	6	13	90	138	138	25
Mindanao	2024	11	6	14	95	138	138	25
Mindanao	2024	11	6	15	95	138	138	25
Mindanao	2024	11	6	16	93	138	138	25
Mindanao	2024	11	6	17	90	138	138	25
Mindanao	2024	11	6	18	97	138	138	25
Mindanao	2024	11	6	19	90	138	138	25
Mindanao	2024	11	6	20	88	138	138	25
Mindanao	2024	11	6	21	80	138	138	25
Mindanao	2024	11	6	22	75	138	138	25
Mindanao	2024	11	6	23	72	138	138	25
Mindanao	2024	11	6	24	68	138	138	25
Mindanao	2024	11	7	1	65	138	138	25
Mindanao	2024	11	7	2	62	138	138	25
Mindanao	2024	11	7	3	58	138	138	25
Mindanao	2024	11	7	4	60	138	138	25
Mindanao	2024	11	7	5	63	138	138	25
Mindanao	2024	11	7	6	66	138	138	25
Mindanao	2024	11	7	7	61	138	138	25
Mindanao	2024	11	7	8	70	138	138	25
Mindanao	2024	11	7	9	80	138	138	25
Mindanao	2024	11	7	10	90	138	138	25
Mindanao	2024	11	7	11	94	138	138	25
Mindanao	2024	11	7	12	92	138	138	25
Mindanao	2024	11	7	13	93	138	138	25
Mindanao	2024	11	7	14	96	138	138	25
Mindanao	2024	11	7	15	96	138	138	25
Mindanao	2024	11	7	16	91	138	138	25
Mindanao	2024	11	7	17	88	138	138	25
Mindanao	2024	11	7	18	93	138	138	25
Mindanao	2024	11	7	19	87	138	138	25
Mindanao	2024	11	7	20	83	138	138	25
Mindanao	2024	11	7	21	79	138	138	25
Mindanao	2024	11	7	22	75	138	138	25
Mindanao	2024	11	7	23	69	138	138	25
Mindanao	2024	11	7	24	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	8	1	64	138	138	25
Mindanao	2024	11	8	2	61	138	138	25
Mindanao	2024	11	8	3	59	138	138	25
Mindanao	2024	11	8	4	59	138	138	25
Mindanao	2024	11	8	5	62	138	138	25
Mindanao	2024	11	8	6	66	138	138	25
Mindanao	2024	11	8	7	59	138	138	25
Mindanao	2024	11	8	8	67	138	138	25
Mindanao	2024	11	8	9	77	138	138	25
Mindanao	2024	11	8	10	85	138	138	25
Mindanao	2024	11	8	11	90	138	138	25
Mindanao	2024	11	8	12	88	138	138	25
Mindanao	2024	11	8	13	88	138	138	25
Mindanao	2024	11	8	14	92	138	138	25
Mindanao	2024	11	8	15	90	138	138	25
Mindanao	2024	11	8	16	86	138	138	25
Mindanao	2024	11	8	17	86	138	138	25
Mindanao	2024	11	8	18	90	138	138	25
Mindanao	2024	11	8	19	84	138	138	25
Mindanao	2024	11	8	20	81	138	138	25
Mindanao	2024	11	8	21	78	138	138	25
Mindanao	2024	11	8	22	71	138	138	25
Mindanao	2024	11	8	23	66	138	138	25
Mindanao	2024	11	8	24	63	138	138	25
Mindanao	2024	11	9	1	61	138	138	25
Mindanao	2024	11	9	2	59	138	138	25
Mindanao	2024	11	9	3	55	138	138	25
Mindanao	2024	11	9	4	54	138	138	25
Mindanao	2024	11	9	5	57	138	138	25
Mindanao	2024	11	9	6	60	138	138	25
Mindanao	2024	11	9	7	58	138	138	25
Mindanao	2024	11	9	8	64	138	138	25
Mindanao	2024	11	9	9	71	138	138	25
Mindanao	2024	11	9	10	79	138	138	25
Mindanao	2024	11	9	11	82	138	138	25
Mindanao	2024	11	9	12	81	138	138	25
Mindanao	2024	11	9	13	82	138	138	25
Mindanao	2024	11	9	14	84	138	138	25
Mindanao	2024	11	9	15	84	138	138	25
Mindanao	2024	11	9	16	81	138	138	25
Mindanao	2024	11	9	17	81	138	138	25
Mindanao	2024	11	9	18	92	138	138	25
Mindanao	2024	11	9	19	87	138	138	25
Mindanao	2024	11	9	20	83	138	138	25
Mindanao	2024	11	9	21	81	138	138	25
Mindanao	2024	11	9	22	75	138	138	25
Mindanao	2024	11	9	23	70	138	138	25
Mindanao	2024	11	9	24	65	138	138	25
Mindanao	2024	11	10	1	63	138	138	25
Mindanao	2024	11	10	2	58	138	138	25
Mindanao	2024	11	10	3	57	138	138	25
Mindanao	2024	11	10	4	56	138	138	25
Mindanao	2024	11	10	5	56	138	138	25
Mindanao	2024	11	10	6	57	138	138	25
Mindanao	2024	11	10	7	55	138	138	25
Mindanao	2024	11	10	8	56	138	138	25
Mindanao	2024	11	10	9	59	138	138	25
Mindanao	2024	11	10	10	64	138	138	25
Mindanao	2024	11	10	11	69	138	138	25
Mindanao	2024	11	10	12	70	138	138	25
Mindanao	2024	11	10	13	73	138	138	25
Mindanao	2024	11	10	14	74	138	138	25
Mindanao	2024	11	10	15	74	138	138	25
Mindanao	2024	11	10	16	71	138	138	25
Mindanao	2024	11	10	17	73	138	138	25
Mindanao	2024	11	10	18	84	138	138	25
Mindanao	2024	11	10	19	80	138	138	25
Mindanao	2024	11	10	20	78	138	138	25
Mindanao	2024	11	10	21	78	138	138	25
Mindanao	2024	11	10	22	72	138	138	25
Mindanao	2024	11	10	23	67	138	138	25
Mindanao	2024	11	10	24	62	138	138	25
Mindanao	2024	11	11	1	59	138	138	25
Mindanao	2024	11	11	2	55	138	138	25
Mindanao	2024	11	11	3	55	138	138	25
Mindanao	2024	11	11	4	55	138	138	25
Mindanao	2024	11	11	5	60	138	138	25
Mindanao	2024	11	11	6	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	11	7	55	138	138	25
Mindanao	2024	11	11	8	67	138	138	25
Mindanao	2024	11	11	9	81	138	138	25
Mindanao	2024	11	11	10	88	138	138	25
Mindanao	2024	11	11	11	78	138	138	25
Mindanao	2024	11	11	12	90	138	138	25
Mindanao	2024	11	11	13	92	138	138	25
Mindanao	2024	11	11	14	97	138	138	25
Mindanao	2024	11	11	15	98	138	138	25
Mindanao	2024	11	11	16	93	138	138	25
Mindanao	2024	11	11	17	90	138	138	25
Mindanao	2024	11	11	18	96	138	138	25
Mindanao	2024	11	11	19	88	138	138	25
Mindanao	2024	11	11	20	86	138	138	25
Mindanao	2024	11	11	21	84	138	138	25
Mindanao	2024	11	11	22	77	138	138	25
Mindanao	2024	11	11	23	71	138	138	25
Mindanao	2024	11	11	24	66	138	138	25
Mindanao	2024	11	12	1	65	138	138	25
Mindanao	2024	11	12	2	62	138	138	25
Mindanao	2024	11	12	3	60	138	138	25
Mindanao	2024	11	12	4	60	138	138	25
Mindanao	2024	11	12	5	64	138	138	25
Mindanao	2024	11	12	6	67	138	138	25
Mindanao	2024	11	12	7	58	138	138	25
Mindanao	2024	11	12	8	70	138	138	25
Mindanao	2024	11	12	9	82	138	138	25
Mindanao	2024	11	12	10	85	138	138	25
Mindanao	2024	11	12	11	86	138	138	25
Mindanao	2024	11	12	12	84	138	138	25
Mindanao	2024	11	12	13	91	138	138	25
Mindanao	2024	11	12	14	93	138	138	25
Mindanao	2024	11	12	15	89	138	138	25
Mindanao	2024	11	12	16	88	138	138	25
Mindanao	2024	11	12	17	87	138	138	25
Mindanao	2024	11	12	18	90	138	138	25
Mindanao	2024	11	12	19	86	138	138	25
Mindanao	2024	11	12	20	87	138	138	25
Mindanao	2024	11	12	21	83	138	138	25
Mindanao	2024	11	12	22	78	138	138	25
Mindanao	2024	11	12	23	73	138	138	25
Mindanao	2024	11	12	24	70	138	138	25
Mindanao	2024	11	13	1	66	138	138	25
Mindanao	2024	11	13	2	62	138	138	25
Mindanao	2024	11	13	3	61	138	138	25
Mindanao	2024	11	13	4	62	138	138	25
Mindanao	2024	11	13	5	64	138	138	25
Mindanao	2024	11	13	6	66	138	138	25
Mindanao	2024	11	13	7	59	138	138	25
Mindanao	2024	11	13	8	69	138	138	25
Mindanao	2024	11	13	9	80	138	138	25
Mindanao	2024	11	13	10	88	138	138	25
Mindanao	2024	11	13	11	91	138	138	25
Mindanao	2024	11	13	12	89	138	138	25
Mindanao	2024	11	13	13	92	138	138	25
Mindanao	2024	11	13	14	94	138	138	25
Mindanao	2024	11	13	15	87	138	138	25
Mindanao	2024	11	13	16	85	138	138	25
Mindanao	2024	11	13	17	80	138	138	25
Mindanao	2024	11	13	18	88	138	138	25
Mindanao	2024	11	13	19	85	138	138	25
Mindanao	2024	11	13	20	81	138	138	25
Mindanao	2024	11	13	21	77	138	138	25
Mindanao	2024	11	13	22	72	138	138	25
Mindanao	2024	11	13	23	67	138	138	25
Mindanao	2024	11	13	24	64	138	138	25
Mindanao	2024	11	14	1	61	138	138	25
Mindanao	2024	11	14	2	60	138	138	25
Mindanao	2024	11	14	3	57	138	138	25
Mindanao	2024	11	14	4	57	138	138	25
Mindanao	2024	11	14	5	58	138	138	25
Mindanao	2024	11	14	6	60	138	138	25
Mindanao	2024	11	14	7	57	138	138	25
Mindanao	2024	11	14	8	66	138	138	25
Mindanao	2024	11	14	9	74	138	138	25
Mindanao	2024	11	14	10	80	138	138	25
Mindanao	2024	11	14	11	81	138	138	25
Mindanao	2024	11	14	12	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	14	13	77	138	138	25
Mindanao	2024	11	14	14	81	138	138	25
Mindanao	2024	11	14	15	81	138	138	25
Mindanao	2024	11	14	16	81	138	138	25
Mindanao	2024	11	14	17	79	138	138	25
Mindanao	2024	11	14	18	89	138	138	25
Mindanao	2024	11	14	19	85	138	138	25
Mindanao	2024	11	14	20	81	138	138	25
Mindanao	2024	11	14	21	77	138	138	25
Mindanao	2024	11	14	22	70	138	138	25
Mindanao	2024	11	14	23	68	138	138	25
Mindanao	2024	11	14	24	64	138	138	25
Mindanao	2024	11	15	1	61	138	138	25
Mindanao	2024	11	15	2	59	138	138	25
Mindanao	2024	11	15	3	56	138	138	25
Mindanao	2024	11	15	4	56	138	138	25
Mindanao	2024	11	15	5	57	138	138	25
Mindanao	2024	11	15	6	65	138	138	25
Mindanao	2024	11	15	7	58	138	138	25
Mindanao	2024	11	15	8	63	138	138	25
Mindanao	2024	11	15	9	75	138	138	25
Mindanao	2024	11	15	10	79	138	138	25
Mindanao	2024	11	15	11	83	138	138	25
Mindanao	2024	11	15	12	80	138	138	25
Mindanao	2024	11	15	13	78	138	138	25
Mindanao	2024	11	15	14	80	138	138	25
Mindanao	2024	11	15	15	83	138	138	25
Mindanao	2024	11	15	16	85	138	138	25
Mindanao	2024	11	15	17	82	138	138	25
Mindanao	2024	11	15	18	86	138	138	25
Mindanao	2024	11	15	19	81	138	138	25
Mindanao	2024	11	15	20	79	138	138	25
Mindanao	2024	11	15	21	75	138	138	25
Mindanao	2024	11	15	22	68	138	138	25
Mindanao	2024	11	15	23	64	138	138	25
Mindanao	2024	11	15	24	62	138	138	25
Mindanao	2024	11	16	1	61	138	138	25
Mindanao	2024	11	16	2	59	138	138	25
Mindanao	2024	11	16	3	57	138	138	25
Mindanao	2024	11	16	4	57	138	138	25
Mindanao	2024	11	16	5	57	138	138	25
Mindanao	2024	11	16	6	62	138	138	25
Mindanao	2024	11	16	7	62	138	138	25
Mindanao	2024	11	16	8	58	138	138	25
Mindanao	2024	11	16	9	64	138	138	25
Mindanao	2024	11	16	10	69	138	138	25
Mindanao	2024	11	16	11	72	138	138	25
Mindanao	2024	11	16	12	71	138	138	25
Mindanao	2024	11	16	13	70	138	138	25
Mindanao	2024	11	16	14	73	138	138	25
Mindanao	2024	11	16	15	73	138	138	25
Mindanao	2024	11	16	16	72	138	138	25
Mindanao	2024	11	16	17	74	138	138	25
Mindanao	2024	11	16	18	82	138	138	25
Mindanao	2024	11	16	19	77	138	138	25
Mindanao	2024	11	16	20	77	138	138	25
Mindanao	2024	11	16	21	73	138	138	25
Mindanao	2024	11	16	22	67	138	138	25
Mindanao	2024	11	16	23	64	138	138	25
Mindanao	2024	11	16	24	57	138	138	25
Mindanao	2024	11	17	1	55	138	138	25
Mindanao	2024	11	17	2	55	138	138	25
Mindanao	2024	11	17	3	54	138	138	25
Mindanao	2024	11	17	4	52	138	138	25
Mindanao	2024	11	17	5	53	138	138	25
Mindanao	2024	11	17	6	56	138	138	25
Mindanao	2024	11	17	7	53	138	138	25
Mindanao	2024	11	17	8	56	138	138	25
Mindanao	2024	11	17	9	56	138	138	25
Mindanao	2024	11	17	10	57	138	138	25
Mindanao	2024	11	17	11	60	138	138	25
Mindanao	2024	11	17	12	61	138	138	25
Mindanao	2024	11	17	13	61	138	138	25
Mindanao	2024	11	17	14	62	138	138	25
Mindanao	2024	11	17	15	63	138	138	25
Mindanao	2024	11	17	16	65	138	138	25
Mindanao	2024	11	17	17	69	138	138	25
Mindanao	2024	11	17	18	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	17	19	76	138	138	25
Mindanao	2024	11	17	20	74	138	138	25
Mindanao	2024	11	17	21	72	138	138	25
Mindanao	2024	11	17	22	66	138	138	25
Mindanao	2024	11	17	23	61	138	138	25
Mindanao	2024	11	17	24	57	138	138	25
Mindanao	2024	11	18	1	56	138	138	25
Mindanao	2024	11	18	2	54	138	138	25
Mindanao	2024	11	18	3	53	138	138	25
Mindanao	2024	11	18	4	53	138	138	25
Mindanao	2024	11	18	5	59	138	138	25
Mindanao	2024	11	18	6	61	138	138	25
Mindanao	2024	11	18	7	56	138	138	25
Mindanao	2024	11	18	8	65	138	138	25
Mindanao	2024	11	18	9	75	138	138	25
Mindanao	2024	11	18	10	83	138	138	25
Mindanao	2024	11	18	11	85	138	138	25
Mindanao	2024	11	18	12	85	138	138	25
Mindanao	2024	11	18	13	86	138	138	25
Mindanao	2024	11	18	14	88	138	138	25
Mindanao	2024	11	18	15	88	138	138	25
Mindanao	2024	11	18	16	87	138	138	25
Mindanao	2024	11	18	17	81	138	138	25
Mindanao	2024	11	18	18	85	138	138	25
Mindanao	2024	11	18	19	82	138	138	25
Mindanao	2024	11	18	20	79	138	138	25
Mindanao	2024	11	18	21	73	138	138	25
Mindanao	2024	11	18	22	68	138	138	25
Mindanao	2024	11	18	23	64	138	138	25
Mindanao	2024	11	18	24	61	138	138	25
Mindanao	2024	11	19	1	59	138	138	25
Mindanao	2024	11	19	2	56	138	138	25
Mindanao	2024	11	19	3	55	138	138	25
Mindanao	2024	11	19	4	55	138	138	25
Mindanao	2024	11	19	5	60	138	138	25
Mindanao	2024	11	19	6	65	138	138	25
Mindanao	2024	11	19	7	57	138	138	25
Mindanao	2024	11	19	8	66	138	138	25
Mindanao	2024	11	19	9	77	138	138	25
Mindanao	2024	11	19	10	84	138	138	25
Mindanao	2024	11	19	11	88	138	138	25
Mindanao	2024	11	19	12	83	138	138	25
Mindanao	2024	11	19	13	87	138	138	25
Mindanao	2024	11	19	14	93	138	138	25
Mindanao	2024	11	19	15	92	138	138	25
Mindanao	2024	11	19	16	92	138	138	25
Mindanao	2024	11	19	17	88	138	138	25
Mindanao	2024	11	19	18	92	138	138	25
Mindanao	2024	11	19	19	86	138	138	25
Mindanao	2024	11	19	20	84	138	138	25
Mindanao	2024	11	19	21	82	138	138	25
Mindanao	2024	11	19	22	75	138	138	25
Mindanao	2024	11	19	23	69	138	138	25
Mindanao	2024	11	19	24	64	138	138	25
Mindanao	2024	11	20	1	61	138	138	25
Mindanao	2024	11	20	2	60	138	138	25
Mindanao	2024	11	20	3	58	138	138	25
Mindanao	2024	11	20	4	57	138	138	25
Mindanao	2024	11	20	5	62	138	138	25
Mindanao	2024	11	20	6	67	138	138	25
Mindanao	2024	11	20	7	58	138	138	25
Mindanao	2024	11	20	8	65	138	138	25
Mindanao	2024	11	20	9	79	138	138	25
Mindanao	2024	11	20	10	83	138	138	25
Mindanao	2024	11	20	11	89	138	138	25
Mindanao	2024	11	20	12	88	138	138	25
Mindanao	2024	11	20	13	90	138	138	25
Mindanao	2024	11	20	14	93	138	138	25
Mindanao	2024	11	20	15	90	138	138	25
Mindanao	2024	11	20	16	88	138	138	25
Mindanao	2024	11	20	17	86	138	138	25
Mindanao	2024	11	20	18	91	138	138	25
Mindanao	2024	11	20	19	83	138	138	25
Mindanao	2024	11	20	20	83	138	138	25
Mindanao	2024	11	20	21	78	138	138	25
Mindanao	2024	11	20	22	73	138	138	25
Mindanao	2024	11	20	23	67	138	138	25
Mindanao	2024	11	20	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	21	1	59	138	138	25
Mindanao	2024	11	21	2	57	138	138	25
Mindanao	2024	11	21	3	56	138	138	25
Mindanao	2024	11	21	4	57	138	138	25
Mindanao	2024	11	21	5	62	138	138	25
Mindanao	2024	11	21	6	65	138	138	25
Mindanao	2024	11	21	7	59	138	138	25
Mindanao	2024	11	21	8	67	138	138	25
Mindanao	2024	11	21	9	78	138	138	25
Mindanao	2024	11	21	10	82	138	138	25
Mindanao	2024	11	21	11	87	138	138	25
Mindanao	2024	11	21	12	85	138	138	25
Mindanao	2024	11	21	13	84	138	138	25
Mindanao	2024	11	21	14	92	138	138	25
Mindanao	2024	11	21	15	91	138	138	25
Mindanao	2024	11	21	16	90	138	138	25
Mindanao	2024	11	21	17	86	138	138	25
Mindanao	2024	11	21	18	94	138	138	25
Mindanao	2024	11	21	19	89	138	138	25
Mindanao	2024	11	21	20	83	138	138	25
Mindanao	2024	11	21	21	82	138	138	25
Mindanao	2024	11	21	22	76	138	138	25
Mindanao	2024	11	21	23	72	138	138	25
Mindanao	2024	11	21	24	67	138	138	25
Mindanao	2024	11	22	1	62	138	138	25
Mindanao	2024	11	22	2	61	138	138	25
Mindanao	2024	11	22	3	58	138	138	25
Mindanao	2024	11	22	4	59	138	138	25
Mindanao	2024	11	22	5	63	138	138	25
Mindanao	2024	11	22	6	66	138	138	25
Mindanao	2024	11	22	7	59	138	138	25
Mindanao	2024	11	22	8	68	138	138	25
Mindanao	2024	11	22	9	81	138	138	25
Mindanao	2024	11	22	10	85	138	138	25
Mindanao	2024	11	22	11	91	138	138	25
Mindanao	2024	11	22	12	90	138	138	25
Mindanao	2024	11	22	13	90	138	138	25
Mindanao	2024	11	22	14	93	138	138	25
Mindanao	2024	11	22	15	91	138	138	25
Mindanao	2024	11	22	16	89	138	138	25
Mindanao	2024	11	22	17	84	138	138	25
Mindanao	2024	11	22	18	89	138	138	25
Mindanao	2024	11	22	19	83	138	138	25
Mindanao	2024	11	22	20	80	138	138	25
Mindanao	2024	11	22	21	77	138	138	25
Mindanao	2024	11	22	22	73	138	138	25
Mindanao	2024	11	22	23	68	138	138	25
Mindanao	2024	11	22	24	64	138	138	25
Mindanao	2024	11	23	1	61	138	138	25
Mindanao	2024	11	23	2	58	138	138	25
Mindanao	2024	11	23	3	55	138	138	25
Mindanao	2024	11	23	4	56	138	138	25
Mindanao	2024	11	23	5	56	138	138	25
Mindanao	2024	11	23	6	59	138	138	25
Mindanao	2024	11	23	7	57	138	138	25
Mindanao	2024	11	23	8	63	138	138	25
Mindanao	2024	11	23	9	68	138	138	25
Mindanao	2024	11	23	10	75	138	138	25
Mindanao	2024	11	23	11	79	138	138	25
Mindanao	2024	11	23	12	77	138	138	25
Mindanao	2024	11	23	13	79	138	138	25
Mindanao	2024	11	23	14	85	138	138	25
Mindanao	2024	11	23	15	84	138	138	25
Mindanao	2024	11	23	16	82	138	138	25
Mindanao	2024	11	23	17	78	138	138	25
Mindanao	2024	11	23	18	91	138	138	25
Mindanao	2024	11	23	19	87	138	138	25
Mindanao	2024	11	23	20	83	138	138	25
Mindanao	2024	11	23	21	79	138	138	25
Mindanao	2024	11	23	22	74	138	138	25
Mindanao	2024	11	23	23	69	138	138	25
Mindanao	2024	11	23	24	64	138	138	25
Mindanao	2024	11	24	1	60	138	138	25
Mindanao	2024	11	24	2	58	138	138	25
Mindanao	2024	11	24	3	54	138	138	25
Mindanao	2024	11	24	4	53	138	138	25
Mindanao	2024	11	24	5	53	138	138	25
Mindanao	2024	11	24	6	54	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	24	7	51	138	138	25
Mindanao	2024	11	24	8	53	138	138	25
Mindanao	2024	11	24	9	56	138	138	25
Mindanao	2024	11	24	10	63	138	138	25
Mindanao	2024	11	24	11	66	138	138	25
Mindanao	2024	11	24	12	68	138	138	25
Mindanao	2024	11	24	13	68	138	138	25
Mindanao	2024	11	24	14	71	138	138	25
Mindanao	2024	11	24	15	71	138	138	25
Mindanao	2024	11	24	16	69	138	138	25
Mindanao	2024	11	24	17	69	138	138	25
Mindanao	2024	11	24	18	81	138	138	25
Mindanao	2024	11	24	19	79	138	138	25
Mindanao	2024	11	24	20	77	138	138	25
Mindanao	2024	11	24	21	74	138	138	25
Mindanao	2024	11	24	22	68	138	138	25
Mindanao	2024	11	24	23	63	138	138	25
Mindanao	2024	11	24	24	59	138	138	25
Mindanao	2024	11	25	1	56	138	138	25
Mindanao	2024	11	25	2	54	138	138	25
Mindanao	2024	11	25	3	52	138	138	25
Mindanao	2024	11	25	4	52	138	138	25
Mindanao	2024	11	25	5	55	138	138	25
Mindanao	2024	11	25	6	60	138	138	25
Mindanao	2024	11	25	7	54	138	138	25
Mindanao	2024	11	25	8	65	138	138	25
Mindanao	2024	11	25	9	78	138	138	25
Mindanao	2024	11	25	10	85	138	138	25
Mindanao	2024	11	25	11	91	138	138	25
Mindanao	2024	11	25	12	89	138	138	25
Mindanao	2024	11	25	13	94	138	138	25
Mindanao	2024	11	25	14	98	138	138	25
Mindanao	2024	11	25	15	97	138	138	25
Mindanao	2024	11	25	16	96	138	138	25
Mindanao	2024	11	25	17	91	138	138	25
Mindanao	2024	11	25	18	97	138	138	25
Mindanao	2024	11	25	19	92	138	138	25
Mindanao	2024	11	25	20	90	138	138	25
Mindanao	2024	11	25	21	86	138	138	25
Mindanao	2024	11	25	22	80	138	138	25
Mindanao	2024	11	25	23	73	138	138	25
Mindanao	2024	11	25	24	69	138	138	25
Mindanao	2024	11	26	1	66	138	138	25
Mindanao	2024	11	26	2	63	138	138	25
Mindanao	2024	11	26	3	62	138	138	25
Mindanao	2024	11	26	4	60	138	138	25
Mindanao	2024	11	26	5	64	138	138	25
Mindanao	2024	11	26	6	66	138	138	25
Mindanao	2024	11	26	7	60	138	138	25
Mindanao	2024	11	26	8	69	138	138	25
Mindanao	2024	11	26	9	81	138	138	25
Mindanao	2024	11	26	10	88	138	138	25
Mindanao	2024	11	26	11	93	138	138	25
Mindanao	2024	11	26	12	90	138	138	25
Mindanao	2024	11	26	13	91	138	138	25
Mindanao	2024	11	26	14	94	138	138	25
Mindanao	2024	11	26	15	94	138	138	25
Mindanao	2024	11	26	16	85	138	138	25
Mindanao	2024	11	26	17	82	138	138	25
Mindanao	2024	11	26	18	93	138	138	25
Mindanao	2024	11	26	19	89	138	138	25
Mindanao	2024	11	26	20	86	138	138	25
Mindanao	2024	11	26	21	82	138	138	25
Mindanao	2024	11	26	22	77	138	138	25
Mindanao	2024	11	26	23	72	138	138	25
Mindanao	2024	11	26	24	68	138	138	25
Mindanao	2024	11	27	1	61	138	138	25
Mindanao	2024	11	27	2	60	138	138	25
Mindanao	2024	11	27	3	58	138	138	25
Mindanao	2024	11	27	4	57	138	138	25
Mindanao	2024	11	27	5	62	138	138	25
Mindanao	2024	11	27	6	67	138	138	25
Mindanao	2024	11	27	7	58	138	138	25
Mindanao	2024	11	27	8	65	138	138	25
Mindanao	2024	11	27	9	79	138	138	25
Mindanao	2024	11	27	10	83	138	138	25
Mindanao	2024	11	27	11	89	138	138	25
Mindanao	2024	11	27	12	88	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	27	13	90	138	138	25
Mindanao	2024	11	27	14	93	138	138	25
Mindanao	2024	11	27	15	90	138	138	25
Mindanao	2024	11	27	16	88	138	138	25
Mindanao	2024	11	27	17	86	138	138	25
Mindanao	2024	11	27	18	91	138	138	25
Mindanao	2024	11	27	19	83	138	138	25
Mindanao	2024	11	27	20	83	138	138	25
Mindanao	2024	11	27	21	78	138	138	25
Mindanao	2024	11	27	22	73	138	138	25
Mindanao	2024	11	27	23	67	138	138	25
Mindanao	2024	11	27	24	64	138	138	25
Mindanao	2024	11	28	1	54	138	138	25
Mindanao	2024	11	28	2	54	138	138	25
Mindanao	2024	11	28	3	53	138	138	25
Mindanao	2024	11	28	4	53	138	138	25
Mindanao	2024	11	28	5	57	138	138	25
Mindanao	2024	11	28	6	62	138	138	25
Mindanao	2024	11	28	7	56	138	138	25
Mindanao	2024	11	28	8	64	138	138	25
Mindanao	2024	11	28	9	74	138	138	25
Mindanao	2024	11	28	10	82	138	138	25
Mindanao	2024	11	28	11	87	138	138	25
Mindanao	2024	11	28	12	84	138	138	25
Mindanao	2024	11	28	13	85	138	138	25
Mindanao	2024	11	28	14	88	138	138	25
Mindanao	2024	11	28	15	87	138	138	25
Mindanao	2024	11	28	16	85	138	138	25
Mindanao	2024	11	28	17	84	138	138	25
Mindanao	2024	11	28	18	91	138	138	25
Mindanao	2024	11	28	19	86	138	138	25
Mindanao	2024	11	28	20	83	138	138	25
Mindanao	2024	11	28	21	76	138	138	25
Mindanao	2024	11	28	22	72	138	138	25
Mindanao	2024	11	28	23	68	138	138	25
Mindanao	2024	11	28	24	63	138	138	25
Mindanao	2024	11	29	1	60	138	138	25
Mindanao	2024	11	29	2	57	138	138	25
Mindanao	2024	11	29	3	56	138	138	25
Mindanao	2024	11	29	4	56	138	138	25
Mindanao	2024	11	29	5	59	138	138	25
Mindanao	2024	11	29	6	65	138	138	25
Mindanao	2024	11	29	7	59	138	138	25
Mindanao	2024	11	29	8	65	138	138	25
Mindanao	2024	11	29	9	78	138	138	25
Mindanao	2024	11	29	10	85	138	138	25
Mindanao	2024	11	29	11	90	138	138	25
Mindanao	2024	11	29	12	87	138	138	25
Mindanao	2024	11	29	13	90	138	138	25
Mindanao	2024	11	29	14	93	138	138	25
Mindanao	2024	11	29	15	91	138	138	25
Mindanao	2024	11	29	16	88	138	138	25
Mindanao	2024	11	29	17	84	138	138	25
Mindanao	2024	11	29	18	94	138	138	25
Mindanao	2024	11	29	19	87	138	138	25
Mindanao	2024	11	29	20	86	138	138	25
Mindanao	2024	11	29	21	81	138	138	25
Mindanao	2024	11	29	22	75	138	138	25
Mindanao	2024	11	29	23	69	138	138	25
Mindanao	2024	11	29	24	66	138	138	25
Mindanao	2024	11	30	1	63	138	138	25
Mindanao	2024	11	30	2	62	138	138	25
Mindanao	2024	11	30	3	59	138	138	25
Mindanao	2024	11	30	4	57	138	138	25
Mindanao	2024	11	30	5	57	138	138	25
Mindanao	2024	11	30	6	61	138	138	25
Mindanao	2024	11	30	7	58	138	138	25
Mindanao	2024	11	30	8	59	138	138	25
Mindanao	2024	11	30	9	69	138	138	25
Mindanao	2024	11	30	10	72	138	138	25
Mindanao	2024	11	30	11	76	138	138	25
Mindanao	2024	11	30	12	75	138	138	25
Mindanao	2024	11	30	13	76	138	138	25
Mindanao	2024	11	30	14	77	138	138	25
Mindanao	2024	11	30	15	75	138	138	25
Mindanao	2024	11	30	16	73	138	138	25
Mindanao	2024	11	30	17	76	138	138	25
Mindanao	2024	11	30	18	82	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	11	30	19	79	138	138	25
Mindanao	2024	11	30	20	73	138	138	25
Mindanao	2024	11	30	21	68	138	138	25
Mindanao	2024	11	30	22	64	138	138	25
Mindanao	2024	11	30	23	60	138	138	25
Mindanao	2024	11	30	24	57	138	138	25
Mindanao	2024	12	1	1	61	138	138	25
Mindanao	2024	12	1	2	59	138	138	25
Mindanao	2024	12	1	3	56	138	138	25
Mindanao	2024	12	1	4	55	138	138	25
Mindanao	2024	12	1	5	56	138	138	25
Mindanao	2024	12	1	6	57	138	138	25
Mindanao	2024	12	1	7	52	138	138	25
Mindanao	2024	12	1	8	54	138	138	25
Mindanao	2024	12	1	9	57	138	138	25
Mindanao	2024	12	1	10	62	138	138	25
Mindanao	2024	12	1	11	66	138	138	25
Mindanao	2024	12	1	12	69	138	138	25
Mindanao	2024	12	1	13	70	138	138	25
Mindanao	2024	12	1	14	70	138	138	25
Mindanao	2024	12	1	15	69	138	138	25
Mindanao	2024	12	1	16	68	138	138	25
Mindanao	2024	12	1	17	71	138	138	25
Mindanao	2024	12	1	18	83	138	138	25
Mindanao	2024	12	1	19	81	138	138	25
Mindanao	2024	12	1	20	79	138	138	25
Mindanao	2024	12	1	21	76	138	138	25
Mindanao	2024	12	1	22	70	138	138	25
Mindanao	2024	12	1	23	67	138	138	25
Mindanao	2024	12	1	24	63	138	138	25
Mindanao	2024	12	2	1	59	138	138	25
Mindanao	2024	12	2	2	57	138	138	25
Mindanao	2024	12	2	3	54	138	138	25
Mindanao	2024	12	2	4	54	138	138	25
Mindanao	2024	12	2	5	59	138	138	25
Mindanao	2024	12	2	6	63	138	138	25
Mindanao	2024	12	2	7	58	138	138	25
Mindanao	2024	12	2	8	63	138	138	25
Mindanao	2024	12	2	9	75	138	138	25
Mindanao	2024	12	2	10	77	138	138	25
Mindanao	2024	12	2	11	82	138	138	25
Mindanao	2024	12	2	12	79	138	138	25
Mindanao	2024	12	2	13	81	138	138	25
Mindanao	2024	12	2	14	85	138	138	25
Mindanao	2024	12	2	15	85	138	138	25
Mindanao	2024	12	2	16	81	138	138	25
Mindanao	2024	12	2	17	79	138	138	25
Mindanao	2024	12	2	18	91	138	138	25
Mindanao	2024	12	2	19	86	138	138	25
Mindanao	2024	12	2	20	82	138	138	25
Mindanao	2024	12	2	21	79	138	138	25
Mindanao	2024	12	2	22	72	138	138	25
Mindanao	2024	12	2	23	66	138	138	25
Mindanao	2024	12	2	24	61	138	138	25
Mindanao	2024	12	3	1	59	138	138	25
Mindanao	2024	12	3	2	57	138	138	25
Mindanao	2024	12	3	3	55	138	138	25
Mindanao	2024	12	3	4	54	138	138	25
Mindanao	2024	12	3	5	59	138	138	25
Mindanao	2024	12	3	6	64	138	138	25
Mindanao	2024	12	3	7	56	138	138	25
Mindanao	2024	12	3	8	64	138	138	25
Mindanao	2024	12	3	9	76	138	138	25
Mindanao	2024	12	3	10	84	138	138	25
Mindanao	2024	12	3	11	89	138	138	25
Mindanao	2024	12	3	12	86	138	138	25
Mindanao	2024	12	3	13	87	138	138	25
Mindanao	2024	12	3	14	92	138	138	25
Mindanao	2024	12	3	15	92	138	138	25
Mindanao	2024	12	3	16	87	138	138	25
Mindanao	2024	12	3	17	84	138	138	25
Mindanao	2024	12	3	18	94	138	138	25
Mindanao	2024	12	3	19	89	138	138	25
Mindanao	2024	12	3	20	85	138	138	25
Mindanao	2024	12	3	21	81	138	138	25
Mindanao	2024	12	3	22	74	138	138	25
Mindanao	2024	12	3	23	69	138	138	25
Mindanao	2024	12	3	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	4	1	61	138	138	25
Mindanao	2024	12	4	2	58	138	138	25
Mindanao	2024	12	4	3	56	138	138	25
Mindanao	2024	12	4	4	55	138	138	25
Mindanao	2024	12	4	5	61	138	138	25
Mindanao	2024	12	4	6	65	138	138	25
Mindanao	2024	12	4	7	57	138	138	25
Mindanao	2024	12	4	8	65	138	138	25
Mindanao	2024	12	4	9	77	138	138	25
Mindanao	2024	12	4	10	86	138	138	25
Mindanao	2024	12	4	11	89	138	138	25
Mindanao	2024	12	4	12	87	138	138	25
Mindanao	2024	12	4	13	90	138	138	25
Mindanao	2024	12	4	14	94	138	138	25
Mindanao	2024	12	4	15	94	138	138	25
Mindanao	2024	12	4	16	91	138	138	25
Mindanao	2024	12	4	17	88	138	138	25
Mindanao	2024	12	4	18	96	138	138	25
Mindanao	2024	12	4	19	89	138	138	25
Mindanao	2024	12	4	20	86	138	138	25
Mindanao	2024	12	4	21	81	138	138	25
Mindanao	2024	12	4	22	77	138	138	25
Mindanao	2024	12	4	23	71	138	138	25
Mindanao	2024	12	4	24	67	138	138	25
Mindanao	2024	12	5	1	54	138	138	25
Mindanao	2024	12	5	2	54	138	138	25
Mindanao	2024	12	5	3	53	138	138	25
Mindanao	2024	12	5	4	53	138	138	25
Mindanao	2024	12	5	5	57	138	138	25
Mindanao	2024	12	5	6	62	138	138	25
Mindanao	2024	12	5	7	56	138	138	25
Mindanao	2024	12	5	8	64	138	138	25
Mindanao	2024	12	5	9	74	138	138	25
Mindanao	2024	12	5	10	82	138	138	25
Mindanao	2024	12	5	11	87	138	138	25
Mindanao	2024	12	5	12	84	138	138	25
Mindanao	2024	12	5	13	85	138	138	25
Mindanao	2024	12	5	14	88	138	138	25
Mindanao	2024	12	5	15	87	138	138	25
Mindanao	2024	12	5	16	85	138	138	25
Mindanao	2024	12	5	17	84	138	138	25
Mindanao	2024	12	5	18	91	138	138	25
Mindanao	2024	12	5	19	86	138	138	25
Mindanao	2024	12	5	20	83	138	138	25
Mindanao	2024	12	5	21	76	138	138	25
Mindanao	2024	12	5	22	72	138	138	25
Mindanao	2024	12	5	23	68	138	138	25
Mindanao	2024	12	5	24	63	138	138	25
Mindanao	2024	12	6	1	60	138	138	25
Mindanao	2024	12	6	2	58	138	138	25
Mindanao	2024	12	6	3	57	138	138	25
Mindanao	2024	12	6	4	57	138	138	25
Mindanao	2024	12	6	5	60	138	138	25
Mindanao	2024	12	6	6	65	138	138	25
Mindanao	2024	12	6	7	58	138	138	25
Mindanao	2024	12	6	8	66	138	138	25
Mindanao	2024	12	6	9	75	138	138	25
Mindanao	2024	12	6	10	83	138	138	25
Mindanao	2024	12	6	11	87	138	138	25
Mindanao	2024	12	6	12	83	138	138	25
Mindanao	2024	12	6	13	84	138	138	25
Mindanao	2024	12	6	14	88	138	138	25
Mindanao	2024	12	6	15	85	138	138	25
Mindanao	2024	12	6	16	86	138	138	25
Mindanao	2024	12	6	17	83	138	138	25
Mindanao	2024	12	6	18	89	138	138	25
Mindanao	2024	12	6	19	86	138	138	25
Mindanao	2024	12	6	20	82	138	138	25
Mindanao	2024	12	6	21	78	138	138	25
Mindanao	2024	12	6	22	72	138	138	25
Mindanao	2024	12	6	23	66	138	138	25
Mindanao	2024	12	6	24	63	138	138	25
Mindanao	2024	12	7	1	59	138	138	25
Mindanao	2024	12	7	2	57	138	138	25
Mindanao	2024	12	7	3	56	138	138	25
Mindanao	2024	12	7	4	55	138	138	25
Mindanao	2024	12	7	5	56	138	138	25
Mindanao	2024	12	7	6	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	7	7	56	138	138	25
Mindanao	2024	12	7	8	62	138	138	25
Mindanao	2024	12	7	9	70	138	138	25
Mindanao	2024	12	7	10	76	138	138	25
Mindanao	2024	12	7	11	81	138	138	25
Mindanao	2024	12	7	12	80	138	138	25
Mindanao	2024	12	7	13	81	138	138	25
Mindanao	2024	12	7	14	84	138	138	25
Mindanao	2024	12	7	15	83	138	138	25
Mindanao	2024	12	7	16	84	138	138	25
Mindanao	2024	12	7	17	81	138	138	25
Mindanao	2024	12	7	18	92	138	138	25
Mindanao	2024	12	7	19	87	138	138	25
Mindanao	2024	12	7	20	82	138	138	25
Mindanao	2024	12	7	21	80	138	138	25
Mindanao	2024	12	7	22	74	138	138	25
Mindanao	2024	12	7	23	67	138	138	25
Mindanao	2024	12	7	24	64	138	138	25
Mindanao	2024	12	8	1	64	138	138	25
Mindanao	2024	12	8	2	60	138	138	25
Mindanao	2024	12	8	3	59	138	138	25
Mindanao	2024	12	8	4	57	138	138	25
Mindanao	2024	12	8	5	60	138	138	25
Mindanao	2024	12	8	6	62	138	138	25
Mindanao	2024	12	8	7	61	138	138	25
Mindanao	2024	12	8	8	63	138	138	25
Mindanao	2024	12	8	9	70	138	138	25
Mindanao	2024	12	8	10	76	138	138	25
Mindanao	2024	12	8	11	81	138	138	25
Mindanao	2024	12	8	12	80	138	138	25
Mindanao	2024	12	8	13	80	138	138	25
Mindanao	2024	12	8	14	81	138	138	25
Mindanao	2024	12	8	15	79	138	138	25
Mindanao	2024	12	8	16	79	138	138	25
Mindanao	2024	12	8	17	79	138	138	25
Mindanao	2024	12	8	18	88	138	138	25
Mindanao	2024	12	8	19	82	138	138	25
Mindanao	2024	12	8	20	80	138	138	25
Mindanao	2024	12	8	21	76	138	138	25
Mindanao	2024	12	8	22	72	138	138	25
Mindanao	2024	12	8	23	68	138	138	25
Mindanao	2024	12	8	24	64	138	138	25
Mindanao	2024	12	9	1	60	138	138	25
Mindanao	2024	12	9	2	56	138	138	25
Mindanao	2024	12	9	3	55	138	138	25
Mindanao	2024	12	9	4	55	138	138	25
Mindanao	2024	12	9	5	59	138	138	25
Mindanao	2024	12	9	6	62	138	138	25
Mindanao	2024	12	9	7	55	138	138	25
Mindanao	2024	12	9	8	66	138	138	25
Mindanao	2024	12	9	9	78	138	138	25
Mindanao	2024	12	9	10	88	138	138	25
Mindanao	2024	12	9	11	93	138	138	25
Mindanao	2024	12	9	12	91	138	138	25
Mindanao	2024	12	9	13	93	138	138	25
Mindanao	2024	12	9	14	97	138	138	25
Mindanao	2024	12	9	15	96	138	138	25
Mindanao	2024	12	9	16	94	138	138	25
Mindanao	2024	12	9	17	91	138	138	25
Mindanao	2024	12	9	18	97	138	138	25
Mindanao	2024	12	9	19	93	138	138	25
Mindanao	2024	12	9	20	92	138	138	25
Mindanao	2024	12	9	21	88	138	138	25
Mindanao	2024	12	9	22	81	138	138	25
Mindanao	2024	12	9	23	75	138	138	25
Mindanao	2024	12	9	24	70	138	138	25
Mindanao	2024	12	10	1	66	138	138	25
Mindanao	2024	12	10	2	64	138	138	25
Mindanao	2024	12	10	3	62	138	138	25
Mindanao	2024	12	10	4	61	138	138	25
Mindanao	2024	12	10	5	64	138	138	25
Mindanao	2024	12	10	6	67	138	138	25
Mindanao	2024	12	10	7	62	138	138	25
Mindanao	2024	12	10	8	70	138	138	25
Mindanao	2024	12	10	9	84	138	138	25
Mindanao	2024	12	10	10	92	138	138	25
Mindanao	2024	12	10	11	96	138	138	25
Mindanao	2024	12	10	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	10	13	95	138	138	25
Mindanao	2024	12	10	14	97	138	138	25
Mindanao	2024	12	10	15	97	138	138	25
Mindanao	2024	12	10	16	94	138	138	25
Mindanao	2024	12	10	17	88	138	138	25
Mindanao	2024	12	10	18	95	138	138	25
Mindanao	2024	12	10	19	89	138	138	25
Mindanao	2024	12	10	20	88	138	138	25
Mindanao	2024	12	10	21	86	138	138	25
Mindanao	2024	12	10	22	78	138	138	25
Mindanao	2024	12	10	23	73	138	138	25
Mindanao	2024	12	10	24	70	138	138	25
Mindanao	2024	12	11	1	66	138	138	25
Mindanao	2024	12	11	2	64	138	138	25
Mindanao	2024	12	11	3	60	138	138	25
Mindanao	2024	12	11	4	61	138	138	25
Mindanao	2024	12	11	5	63	138	138	25
Mindanao	2024	12	11	6	67	138	138	25
Mindanao	2024	12	11	7	60	138	138	25
Mindanao	2024	12	11	8	67	138	138	25
Mindanao	2024	12	11	9	78	138	138	25
Mindanao	2024	12	11	10	86	138	138	25
Mindanao	2024	12	11	11	91	138	138	25
Mindanao	2024	12	11	12	87	138	138	25
Mindanao	2024	12	11	13	88	138	138	25
Mindanao	2024	12	11	14	91	138	138	25
Mindanao	2024	12	11	15	92	138	138	25
Mindanao	2024	12	11	16	89	138	138	25
Mindanao	2024	12	11	17	88	138	138	25
Mindanao	2024	12	11	18	95	138	138	25
Mindanao	2024	12	11	19	89	138	138	25
Mindanao	2024	12	11	20	87	138	138	25
Mindanao	2024	12	11	21	84	138	138	25
Mindanao	2024	12	11	22	77	138	138	25
Mindanao	2024	12	11	23	72	138	138	25
Mindanao	2024	12	11	24	67	138	138	25
Mindanao	2024	12	12	1	64	138	138	25
Mindanao	2024	12	12	2	61	138	138	25
Mindanao	2024	12	12	3	59	138	138	25
Mindanao	2024	12	12	4	59	138	138	25
Mindanao	2024	12	12	5	61	138	138	25
Mindanao	2024	12	12	6	65	138	138	25
Mindanao	2024	12	12	7	60	138	138	25
Mindanao	2024	12	12	8	66	138	138	25
Mindanao	2024	12	12	9	78	138	138	25
Mindanao	2024	12	12	10	85	138	138	25
Mindanao	2024	12	12	11	89	138	138	25
Mindanao	2024	12	12	12	87	138	138	25
Mindanao	2024	12	12	13	86	138	138	25
Mindanao	2024	12	12	14	91	138	138	25
Mindanao	2024	12	12	15	90	138	138	25
Mindanao	2024	12	12	16	88	138	138	25
Mindanao	2024	12	12	17	86	138	138	25
Mindanao	2024	12	12	18	92	138	138	25
Mindanao	2024	12	12	19	86	138	138	25
Mindanao	2024	12	12	20	83	138	138	25
Mindanao	2024	12	12	21	80	138	138	25
Mindanao	2024	12	12	22	74	138	138	25
Mindanao	2024	12	12	23	68	138	138	25
Mindanao	2024	12	12	24	65	138	138	25
Mindanao	2024	12	13	1	62	138	138	25
Mindanao	2024	12	13	2	59	138	138	25
Mindanao	2024	12	13	3	58	138	138	25
Mindanao	2024	12	13	4	57	138	138	25
Mindanao	2024	12	13	5	60	138	138	25
Mindanao	2024	12	13	6	64	138	138	25
Mindanao	2024	12	13	7	62	138	138	25
Mindanao	2024	12	13	8	67	138	138	25
Mindanao	2024	12	13	9	76	138	138	25
Mindanao	2024	12	13	10	82	138	138	25
Mindanao	2024	12	13	11	87	138	138	25
Mindanao	2024	12	13	12	85	138	138	25
Mindanao	2024	12	13	13	87	138	138	25
Mindanao	2024	12	13	14	93	138	138	25
Mindanao	2024	12	13	15	90	138	138	25
Mindanao	2024	12	13	16	89	138	138	25
Mindanao	2024	12	13	17	85	138	138	25
Mindanao	2024	12	13	18	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	13	19	89	138	138	25
Mindanao	2024	12	13	20	85	138	138	25
Mindanao	2024	12	13	21	82	138	138	25
Mindanao	2024	12	13	22	77	138	138	25
Mindanao	2024	12	13	23	72	138	138	25
Mindanao	2024	12	13	24	67	138	138	25
Mindanao	2024	12	14	1	63	138	138	25
Mindanao	2024	12	14	2	60	138	138	25
Mindanao	2024	12	14	3	59	138	138	25
Mindanao	2024	12	14	4	57	138	138	25
Mindanao	2024	12	14	5	57	138	138	25
Mindanao	2024	12	14	6	60	138	138	25
Mindanao	2024	12	14	7	59	138	138	25
Mindanao	2024	12	14	8	62	138	138	25
Mindanao	2024	12	14	9	71	138	138	25
Mindanao	2024	12	14	10	77	138	138	25
Mindanao	2024	12	14	11	80	138	138	25
Mindanao	2024	12	14	12	79	138	138	25
Mindanao	2024	12	14	13	82	138	138	25
Mindanao	2024	12	14	14	85	138	138	25
Mindanao	2024	12	14	15	85	138	138	25
Mindanao	2024	12	14	16	82	138	138	25
Mindanao	2024	12	14	17	79	138	138	25
Mindanao	2024	12	14	18	91	138	138	25
Mindanao	2024	12	14	19	88	138	138	25
Mindanao	2024	12	14	20	84	138	138	25
Mindanao	2024	12	14	21	80	138	138	25
Mindanao	2024	12	14	22	76	138	138	25
Mindanao	2024	12	14	23	71	138	138	25
Mindanao	2024	12	14	24	65	138	138	25
Mindanao	2024	12	15	1	62	138	138	25
Mindanao	2024	12	15	2	59	138	138	25
Mindanao	2024	12	15	3	58	138	138	25
Mindanao	2024	12	15	4	56	138	138	25
Mindanao	2024	12	15	5	56	138	138	25
Mindanao	2024	12	15	6	58	138	138	25
Mindanao	2024	12	15	7	56	138	138	25
Mindanao	2024	12	15	8	56	138	138	25
Mindanao	2024	12	15	9	60	138	138	25
Mindanao	2024	12	15	10	66	138	138	25
Mindanao	2024	12	15	11	70	138	138	25
Mindanao	2024	12	15	12	70	138	138	25
Mindanao	2024	12	15	13	71	138	138	25
Mindanao	2024	12	15	14	72	138	138	25
Mindanao	2024	12	15	15	71	138	138	25
Mindanao	2024	12	15	16	69	138	138	25
Mindanao	2024	12	15	17	67	138	138	25
Mindanao	2024	12	15	18	80	138	138	25
Mindanao	2024	12	15	19	76	138	138	25
Mindanao	2024	12	15	20	75	138	138	25
Mindanao	2024	12	15	21	73	138	138	25
Mindanao	2024	12	15	22	68	138	138	25
Mindanao	2024	12	15	23	62	138	138	25
Mindanao	2024	12	15	24	59	138	138	25
Mindanao	2024	12	16	1	57	138	138	25
Mindanao	2024	12	16	2	54	138	138	25
Mindanao	2024	12	16	3	53	138	138	25
Mindanao	2024	12	16	4	54	138	138	25
Mindanao	2024	12	16	5	54	138	138	25
Mindanao	2024	12	16	6	58	138	138	25
Mindanao	2024	12	16	7	59	138	138	25
Mindanao	2024	12	16	8	64	138	138	25
Mindanao	2024	12	16	9	74	138	138	25
Mindanao	2024	12	16	10	80	138	138	25
Mindanao	2024	12	16	11	83	138	138	25
Mindanao	2024	12	16	12	80	138	138	25
Mindanao	2024	12	16	13	80	138	138	25
Mindanao	2024	12	16	14	83	138	138	25
Mindanao	2024	12	16	15	85	138	138	25
Mindanao	2024	12	16	16	84	138	138	25
Mindanao	2024	12	16	17	82	138	138	25
Mindanao	2024	12	16	18	90	138	138	25
Mindanao	2024	12	16	19	85	138	138	25
Mindanao	2024	12	16	20	81	138	138	25
Mindanao	2024	12	16	21	77	138	138	25
Mindanao	2024	12	16	22	73	138	138	25
Mindanao	2024	12	16	23	67	138	138	25
Mindanao	2024	12	16	24	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	17	1	59	138	138	25
Mindanao	2024	12	17	2	57	138	138	25
Mindanao	2024	12	17	3	55	138	138	25
Mindanao	2024	12	17	4	55	138	138	25
Mindanao	2024	12	17	5	55	138	138	25
Mindanao	2024	12	17	6	60	138	138	25
Mindanao	2024	12	17	7	58	138	138	25
Mindanao	2024	12	17	8	65	138	138	25
Mindanao	2024	12	17	9	76	138	138	25
Mindanao	2024	12	17	10	81	138	138	25
Mindanao	2024	12	17	11	87	138	138	25
Mindanao	2024	12	17	12	83	138	138	25
Mindanao	2024	12	17	13	87	138	138	25
Mindanao	2024	12	17	14	90	138	138	25
Mindanao	2024	12	17	15	89	138	138	25
Mindanao	2024	12	17	16	87	138	138	25
Mindanao	2024	12	17	17	85	138	138	25
Mindanao	2024	12	17	18	92	138	138	25
Mindanao	2024	12	17	19	86	138	138	25
Mindanao	2024	12	17	20	83	138	138	25
Mindanao	2024	12	17	21	78	138	138	25
Mindanao	2024	12	17	22	72	138	138	25
Mindanao	2024	12	17	23	68	138	138	25
Mindanao	2024	12	17	24	63	138	138	25
Mindanao	2024	12	18	1	60	138	138	25
Mindanao	2024	12	18	2	59	138	138	25
Mindanao	2024	12	18	3	55	138	138	25
Mindanao	2024	12	18	4	54	138	138	25
Mindanao	2024	12	18	5	56	138	138	25
Mindanao	2024	12	18	6	58	138	138	25
Mindanao	2024	12	18	7	60	138	138	25
Mindanao	2024	12	18	8	64	138	138	25
Mindanao	2024	12	18	9	75	138	138	25
Mindanao	2024	12	18	10	82	138	138	25
Mindanao	2024	12	18	11	87	138	138	25
Mindanao	2024	12	18	12	85	138	138	25
Mindanao	2024	12	18	13	87	138	138	25
Mindanao	2024	12	18	14	91	138	138	25
Mindanao	2024	12	18	15	90	138	138	25
Mindanao	2024	12	18	16	89	138	138	25
Mindanao	2024	12	18	17	85	138	138	25
Mindanao	2024	12	18	18	93	138	138	25
Mindanao	2024	12	18	19	88	138	138	25
Mindanao	2024	12	18	20	85	138	138	25
Mindanao	2024	12	18	21	81	138	138	25
Mindanao	2024	12	18	22	75	138	138	25
Mindanao	2024	12	18	23	69	138	138	25
Mindanao	2024	12	18	24	65	138	138	25
Mindanao	2024	12	19	1	60	138	138	25
Mindanao	2024	12	19	2	59	138	138	25
Mindanao	2024	12	19	3	57	138	138	25
Mindanao	2024	12	19	4	56	138	138	25
Mindanao	2024	12	19	5	57	138	138	25
Mindanao	2024	12	19	6	60	138	138	25
Mindanao	2024	12	19	7	58	138	138	25
Mindanao	2024	12	19	8	65	138	138	25
Mindanao	2024	12	19	9	78	138	138	25
Mindanao	2024	12	19	10	83	138	138	25
Mindanao	2024	12	19	11	89	138	138	25
Mindanao	2024	12	19	12	88	138	138	25
Mindanao	2024	12	19	13	89	138	138	25
Mindanao	2024	12	19	14	93	138	138	25
Mindanao	2024	12	19	15	93	138	138	25
Mindanao	2024	12	19	16	90	138	138	25
Mindanao	2024	12	19	17	85	138	138	25
Mindanao	2024	12	19	18	94	138	138	25
Mindanao	2024	12	19	19	88	138	138	25
Mindanao	2024	12	19	20	85	138	138	25
Mindanao	2024	12	19	21	81	138	138	25
Mindanao	2024	12	19	22	78	138	138	25
Mindanao	2024	12	19	23	73	138	138	25
Mindanao	2024	12	19	24	68	138	138	25
Mindanao	2024	12	20	1	65	138	138	25
Mindanao	2024	12	20	2	61	138	138	25
Mindanao	2024	12	20	3	58	138	138	25
Mindanao	2024	12	20	4	54	138	138	25
Mindanao	2024	12	20	5	56	138	138	25
Mindanao	2024	12	20	6	58	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	20	7	59	138	138	25
Mindanao	2024	12	20	8	66	138	138	25
Mindanao	2024	12	20	9	74	138	138	25
Mindanao	2024	12	20	10	79	138	138	25
Mindanao	2024	12	20	11	84	138	138	25
Mindanao	2024	12	20	12	83	138	138	25
Mindanao	2024	12	20	13	82	138	138	25
Mindanao	2024	12	20	14	89	138	138	25
Mindanao	2024	12	20	15	87	138	138	25
Mindanao	2024	12	20	16	85	138	138	25
Mindanao	2024	12	20	17	81	138	138	25
Mindanao	2024	12	20	18	90	138	138	25
Mindanao	2024	12	20	19	85	138	138	25
Mindanao	2024	12	20	20	82	138	138	25
Mindanao	2024	12	20	21	79	138	138	25
Mindanao	2024	12	20	22	75	138	138	25
Mindanao	2024	12	20	23	70	138	138	25
Mindanao	2024	12	20	24	65	138	138	25
Mindanao	2024	12	21	1	63	138	138	25
Mindanao	2024	12	21	2	60	138	138	25
Mindanao	2024	12	21	3	59	138	138	25
Mindanao	2024	12	21	4	57	138	138	25
Mindanao	2024	12	21	5	57	138	138	25
Mindanao	2024	12	21	6	60	138	138	25
Mindanao	2024	12	21	7	59	138	138	25
Mindanao	2024	12	21	8	62	138	138	25
Mindanao	2024	12	21	9	71	138	138	25
Mindanao	2024	12	21	10	77	138	138	25
Mindanao	2024	12	21	11	80	138	138	25
Mindanao	2024	12	21	12	79	138	138	25
Mindanao	2024	12	21	13	82	138	138	25
Mindanao	2024	12	21	14	85	138	138	25
Mindanao	2024	12	21	15	85	138	138	25
Mindanao	2024	12	21	16	82	138	138	25
Mindanao	2024	12	21	17	79	138	138	25
Mindanao	2024	12	21	18	91	138	138	25
Mindanao	2024	12	21	19	88	138	138	25
Mindanao	2024	12	21	20	84	138	138	25
Mindanao	2024	12	21	21	80	138	138	25
Mindanao	2024	12	21	22	76	138	138	25
Mindanao	2024	12	21	23	71	138	138	25
Mindanao	2024	12	21	24	65	138	138	25
Mindanao	2024	12	22	1	62	138	138	25
Mindanao	2024	12	22	2	59	138	138	25
Mindanao	2024	12	22	3	58	138	138	25
Mindanao	2024	12	22	4	56	138	138	25
Mindanao	2024	12	22	5	56	138	138	25
Mindanao	2024	12	22	6	58	138	138	25
Mindanao	2024	12	22	7	56	138	138	25
Mindanao	2024	12	22	8	56	138	138	25
Mindanao	2024	12	22	9	60	138	138	25
Mindanao	2024	12	22	10	66	138	138	25
Mindanao	2024	12	22	11	70	138	138	25
Mindanao	2024	12	22	12	70	138	138	25
Mindanao	2024	12	22	13	71	138	138	25
Mindanao	2024	12	22	14	72	138	138	25
Mindanao	2024	12	22	15	71	138	138	25
Mindanao	2024	12	22	16	69	138	138	25
Mindanao	2024	12	22	17	67	138	138	25
Mindanao	2024	12	22	18	80	138	138	25
Mindanao	2024	12	22	19	76	138	138	25
Mindanao	2024	12	22	20	75	138	138	25
Mindanao	2024	12	22	21	73	138	138	25
Mindanao	2024	12	22	22	68	138	138	25
Mindanao	2024	12	22	23	62	138	138	25
Mindanao	2024	12	22	24	59	138	138	25
Mindanao	2024	12	23	1	46	138	138	25
Mindanao	2024	12	23	2	45	138	138	25
Mindanao	2024	12	23	3	44	138	138	25
Mindanao	2024	12	23	4	43	138	138	25
Mindanao	2024	12	23	5	44	138	138	25
Mindanao	2024	12	23	6	46	138	138	25
Mindanao	2024	12	23	7	46	138	138	25
Mindanao	2024	12	23	8	50	138	138	25
Mindanao	2024	12	23	9	56	138	138	25
Mindanao	2024	12	23	10	61	138	138	25
Mindanao	2024	12	23	11	62	138	138	25
Mindanao	2024	12	23	12	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	23	13	61	138	138	25
Mindanao	2024	12	23	14	63	138	138	25
Mindanao	2024	12	23	15	63	138	138	25
Mindanao	2024	12	23	16	65	138	138	25
Mindanao	2024	12	23	17	67	138	138	25
Mindanao	2024	12	23	18	75	138	138	25
Mindanao	2024	12	23	19	71	138	138	25
Mindanao	2024	12	23	20	68	138	138	25
Mindanao	2024	12	23	21	63	138	138	25
Mindanao	2024	12	23	22	59	138	138	25
Mindanao	2024	12	23	23	55	138	138	25
Mindanao	2024	12	23	24	52	138	138	25
Mindanao	2024	12	24	1	61	138	138	25
Mindanao	2024	12	24	2	58	138	138	25
Mindanao	2024	12	24	3	56	138	138	25
Mindanao	2024	12	24	4	55	138	138	25
Mindanao	2024	12	24	5	54	138	138	25
Mindanao	2024	12	24	6	56	138	138	25
Mindanao	2024	12	24	7	55	138	138	25
Mindanao	2024	12	24	8	58	138	138	25
Mindanao	2024	12	24	9	64	138	138	25
Mindanao	2024	12	24	10	67	138	138	25
Mindanao	2024	12	24	11	70	138	138	25
Mindanao	2024	12	24	12	71	138	138	25
Mindanao	2024	12	24	13	71	138	138	25
Mindanao	2024	12	24	14	73	138	138	25
Mindanao	2024	12	24	15	71	138	138	25
Mindanao	2024	12	24	16	70	138	138	25
Mindanao	2024	12	24	17	70	138	138	25
Mindanao	2024	12	24	18	78	138	138	25
Mindanao	2024	12	24	19	69	138	138	25
Mindanao	2024	12	24	20	67	138	138	25
Mindanao	2024	12	24	21	64	138	138	25
Mindanao	2024	12	24	22	63	138	138	25
Mindanao	2024	12	24	23	60	138	138	25
Mindanao	2024	12	24	24	58	138	138	25
Mindanao	2024	12	25	1	55	138	138	25
Mindanao	2024	12	25	2	51	138	138	25
Mindanao	2024	12	25	3	49	138	138	25
Mindanao	2024	12	25	4	48	138	138	25
Mindanao	2024	12	25	5	48	138	138	25
Mindanao	2024	12	25	6	47	138	138	25
Mindanao	2024	12	25	7	48	138	138	25
Mindanao	2024	12	25	8	48	138	138	25
Mindanao	2024	12	25	9	49	138	138	25
Mindanao	2024	12	25	10	51	138	138	25
Mindanao	2024	12	25	11	52	138	138	25
Mindanao	2024	12	25	12	54	138	138	25
Mindanao	2024	12	25	13	53	138	138	25
Mindanao	2024	12	25	14	51	138	138	25
Mindanao	2024	12	25	15	52	138	138	25
Mindanao	2024	12	25	16	53	138	138	25
Mindanao	2024	12	25	17	55	138	138	25
Mindanao	2024	12	25	18	64	138	138	25
Mindanao	2024	12	25	19	62	138	138	25
Mindanao	2024	12	25	20	60	138	138	25
Mindanao	2024	12	25	21	57	138	138	25
Mindanao	2024	12	25	22	54	138	138	25
Mindanao	2024	12	25	23	50	138	138	25
Mindanao	2024	12	25	24	48	138	138	25
Mindanao	2024	12	26	1	54	138	138	25
Mindanao	2024	12	26	2	52	138	138	25
Mindanao	2024	12	26	3	50	138	138	25
Mindanao	2024	12	26	4	50	138	138	25
Mindanao	2024	12	26	5	50	138	138	25
Mindanao	2024	12	26	6	53	138	138	25
Mindanao	2024	12	26	7	53	138	138	25
Mindanao	2024	12	26	8	56	138	138	25
Mindanao	2024	12	26	9	66	138	138	25
Mindanao	2024	12	26	10	72	138	138	25
Mindanao	2024	12	26	11	75	138	138	25
Mindanao	2024	12	26	12	76	138	138	25
Mindanao	2024	12	26	13	76	138	138	25
Mindanao	2024	12	26	14	84	138	138	25
Mindanao	2024	12	26	15	84	138	138	25
Mindanao	2024	12	26	16	82	138	138	25
Mindanao	2024	12	26	17	78	138	138	25
Mindanao	2024	12	26	18	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	26	19	81	138	138	25
Mindanao	2024	12	26	20	78	138	138	25
Mindanao	2024	12	26	21	75	138	138	25
Mindanao	2024	12	26	22	71	138	138	25
Mindanao	2024	12	26	23	66	138	138	25
Mindanao	2024	12	26	24	61	138	138	25
Mindanao	2024	12	27	1	65	138	138	25
Mindanao	2024	12	27	2	61	138	138	25
Mindanao	2024	12	27	3	58	138	138	25
Mindanao	2024	12	27	4	54	138	138	25
Mindanao	2024	12	27	5	56	138	138	25
Mindanao	2024	12	27	6	58	138	138	25
Mindanao	2024	12	27	7	59	138	138	25
Mindanao	2024	12	27	8	66	138	138	25
Mindanao	2024	12	27	9	74	138	138	25
Mindanao	2024	12	27	10	79	138	138	25
Mindanao	2024	12	27	11	84	138	138	25
Mindanao	2024	12	27	12	83	138	138	25
Mindanao	2024	12	27	13	82	138	138	25
Mindanao	2024	12	27	14	89	138	138	25
Mindanao	2024	12	27	15	87	138	138	25
Mindanao	2024	12	27	16	85	138	138	25
Mindanao	2024	12	27	17	81	138	138	25
Mindanao	2024	12	27	18	90	138	138	25
Mindanao	2024	12	27	19	85	138	138	25
Mindanao	2024	12	27	20	82	138	138	25
Mindanao	2024	12	27	21	79	138	138	25
Mindanao	2024	12	27	22	75	138	138	25
Mindanao	2024	12	27	23	70	138	138	25
Mindanao	2024	12	27	24	65	138	138	25
Mindanao	2024	12	28	1	63	138	138	25
Mindanao	2024	12	28	2	60	138	138	25
Mindanao	2024	12	28	3	59	138	138	25
Mindanao	2024	12	28	4	57	138	138	25
Mindanao	2024	12	28	5	57	138	138	25
Mindanao	2024	12	28	6	60	138	138	25
Mindanao	2024	12	28	7	59	138	138	25
Mindanao	2024	12	28	8	62	138	138	25
Mindanao	2024	12	28	9	71	138	138	25
Mindanao	2024	12	28	10	77	138	138	25
Mindanao	2024	12	28	11	80	138	138	25
Mindanao	2024	12	28	12	79	138	138	25
Mindanao	2024	12	28	13	82	138	138	25
Mindanao	2024	12	28	14	85	138	138	25
Mindanao	2024	12	28	15	85	138	138	25
Mindanao	2024	12	28	16	82	138	138	25
Mindanao	2024	12	28	17	79	138	138	25
Mindanao	2024	12	28	18	91	138	138	25
Mindanao	2024	12	28	19	88	138	138	25
Mindanao	2024	12	28	20	84	138	138	25
Mindanao	2024	12	28	21	80	138	138	25
Mindanao	2024	12	28	22	76	138	138	25
Mindanao	2024	12	28	23	71	138	138	25
Mindanao	2024	12	28	24	65	138	138	25
Mindanao	2024	12	29	1	62	138	138	25
Mindanao	2024	12	29	2	59	138	138	25
Mindanao	2024	12	29	3	58	138	138	25
Mindanao	2024	12	29	4	56	138	138	25
Mindanao	2024	12	29	5	56	138	138	25
Mindanao	2024	12	29	6	58	138	138	25
Mindanao	2024	12	29	7	56	138	138	25
Mindanao	2024	12	29	8	56	138	138	25
Mindanao	2024	12	29	9	60	138	138	25
Mindanao	2024	12	29	10	66	138	138	25
Mindanao	2024	12	29	11	70	138	138	25
Mindanao	2024	12	29	12	70	138	138	25
Mindanao	2024	12	29	13	71	138	138	25
Mindanao	2024	12	29	14	72	138	138	25
Mindanao	2024	12	29	15	71	138	138	25
Mindanao	2024	12	29	16	69	138	138	25
Mindanao	2024	12	29	17	67	138	138	25
Mindanao	2024	12	29	18	80	138	138	25
Mindanao	2024	12	29	19	76	138	138	25
Mindanao	2024	12	29	20	75	138	138	25
Mindanao	2024	12	29	21	73	138	138	25
Mindanao	2024	12	29	22	68	138	138	25
Mindanao	2024	12	29	23	62	138	138	25
Mindanao	2024	12	29	24	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2024	12	30	1	58	138	138	25
Mindanao	2024	12	30	2	55	138	138	25
Mindanao	2024	12	30	3	53	138	138	25
Mindanao	2024	12	30	4	51	138	138	25
Mindanao	2024	12	30	5	52	138	138	25
Mindanao	2024	12	30	6	54	138	138	25
Mindanao	2024	12	30	7	53	138	138	25
Mindanao	2024	12	30	8	55	138	138	25
Mindanao	2024	12	30	9	61	138	138	25
Mindanao	2024	12	30	10	65	138	138	25
Mindanao	2024	12	30	11	70	138	138	25
Mindanao	2024	12	30	12	71	138	138	25
Mindanao	2024	12	30	13	71	138	138	25
Mindanao	2024	12	30	14	73	138	138	25
Mindanao	2024	12	30	15	73	138	138	25
Mindanao	2024	12	30	16	72	138	138	25
Mindanao	2024	12	30	17	71	138	138	25
Mindanao	2024	12	30	18	82	138	138	25
Mindanao	2024	12	30	19	79	138	138	25
Mindanao	2024	12	30	20	76	138	138	25
Mindanao	2024	12	30	21	73	138	138	25
Mindanao	2024	12	30	22	70	138	138	25
Mindanao	2024	12	30	23	65	138	138	25
Mindanao	2024	12	30	24	59	138	138	25
Mindanao	2024	12	31	1	54	138	138	25
Mindanao	2024	12	31	2	52	138	138	25
Mindanao	2024	12	31	3	51	138	138	25
Mindanao	2024	12	31	4	50	138	138	25
Mindanao	2024	12	31	5	50	138	138	25
Mindanao	2024	12	31	6	51	138	138	25
Mindanao	2024	12	31	7	51	138	138	25
Mindanao	2024	12	31	8	53	138	138	25
Mindanao	2024	12	31	9	58	138	138	25
Mindanao	2024	12	31	10	63	138	138	25
Mindanao	2024	12	31	11	66	138	138	25
Mindanao	2024	12	31	12	68	138	138	25
Mindanao	2024	12	31	13	69	138	138	25
Mindanao	2024	12	31	14	71	138	138	25
Mindanao	2024	12	31	15	69	138	138	25
Mindanao	2024	12	31	16	68	138	138	25
Mindanao	2024	12	31	17	69	138	138	25
Mindanao	2024	12	31	18	77	138	138	25
Mindanao	2024	12	31	19	73	138	138	25
Mindanao	2024	12	31	20	68	138	138	25
Mindanao	2024	12	31	21	67	138	138	25
Mindanao	2024	12	31	22	65	138	138	25
Mindanao	2024	12	31	23	64	138	138	25
Mindanao	2024	12	31	24	64	138	138	25
Mindanao	2025	1	1	1	62	138	138	25
Mindanao	2025	1	1	2	57	138	138	25
Mindanao	2025	1	1	3	55	138	138	25
Mindanao	2025	1	1	4	53	138	138	25
Mindanao	2025	1	1	5	53	138	138	25
Mindanao	2025	1	1	6	53	138	138	25
Mindanao	2025	1	1	7	52	138	138	25
Mindanao	2025	1	1	8	51	138	138	25
Mindanao	2025	1	1	9	51	138	138	25
Mindanao	2025	1	1	10	52	138	138	25
Mindanao	2025	1	1	11	54	138	138	25
Mindanao	2025	1	1	12	55	138	138	25
Mindanao	2025	1	1	13	57	138	138	25
Mindanao	2025	1	1	14	59	138	138	25
Mindanao	2025	1	1	15	59	138	138	25
Mindanao	2025	1	1	16	59	138	138	25
Mindanao	2025	1	1	17	61	138	138	25
Mindanao	2025	1	1	18	73	138	138	25
Mindanao	2025	1	1	19	73	138	138	25
Mindanao	2025	1	1	20	71	138	138	25
Mindanao	2025	1	1	21	67	138	138	25
Mindanao	2025	1	1	22	64	138	138	25
Mindanao	2025	1	1	23	59	138	138	25
Mindanao	2025	1	1	24	57	138	138	25
Mindanao	2025	1	2	1	64	138	138	25
Mindanao	2025	1	2	2	61	138	138	25
Mindanao	2025	1	2	3	59	138	138	25
Mindanao	2025	1	2	4	58	138	138	25
Mindanao	2025	1	2	5	60	138	138	25
Mindanao	2025	1	2	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	2	7	64	138	138	25
Mindanao	2025	1	2	8	70	138	138	25
Mindanao	2025	1	2	9	81	138	138	25
Mindanao	2025	1	2	10	88	138	138	25
Mindanao	2025	1	2	11	92	138	138	25
Mindanao	2025	1	2	12	90	138	138	25
Mindanao	2025	1	2	13	93	138	138	25
Mindanao	2025	1	2	14	98	138	138	25
Mindanao	2025	1	2	15	97	138	138	25
Mindanao	2025	1	2	16	96	138	138	25
Mindanao	2025	1	2	17	87	138	138	25
Mindanao	2025	1	2	18	94	138	138	25
Mindanao	2025	1	2	19	90	138	138	25
Mindanao	2025	1	2	20	87	138	138	25
Mindanao	2025	1	2	21	84	138	138	25
Mindanao	2025	1	2	22	78	138	138	25
Mindanao	2025	1	2	23	74	138	138	25
Mindanao	2025	1	2	24	69	138	138	25
Mindanao	2025	1	3	1	66	138	138	25
Mindanao	2025	1	3	2	62	138	138	25
Mindanao	2025	1	3	3	60	138	138	25
Mindanao	2025	1	3	4	58	138	138	25
Mindanao	2025	1	3	5	61	138	138	25
Mindanao	2025	1	3	6	65	138	138	25
Mindanao	2025	1	3	7	64	138	138	25
Mindanao	2025	1	3	8	71	138	138	25
Mindanao	2025	1	3	9	79	138	138	25
Mindanao	2025	1	3	10	86	138	138	25
Mindanao	2025	1	3	11	92	138	138	25
Mindanao	2025	1	3	12	88	138	138	25
Mindanao	2025	1	3	13	93	138	138	25
Mindanao	2025	1	3	14	101	138	138	25
Mindanao	2025	1	3	15	97	138	138	25
Mindanao	2025	1	3	16	91	138	138	25
Mindanao	2025	1	3	17	87	138	138	25
Mindanao	2025	1	3	18	92	138	138	25
Mindanao	2025	1	3	19	91	138	138	25
Mindanao	2025	1	3	20	88	138	138	25
Mindanao	2025	1	3	21	86	138	138	25
Mindanao	2025	1	3	22	79	138	138	25
Mindanao	2025	1	3	23	75	138	138	25
Mindanao	2025	1	3	24	68	138	138	25
Mindanao	2025	1	4	1	65	138	138	25
Mindanao	2025	1	4	2	62	138	138	25
Mindanao	2025	1	4	3	59	138	138	25
Mindanao	2025	1	4	4	58	138	138	25
Mindanao	2025	1	4	5	61	138	138	25
Mindanao	2025	1	4	6	63	138	138	25
Mindanao	2025	1	4	7	62	138	138	25
Mindanao	2025	1	4	8	64	138	138	25
Mindanao	2025	1	4	9	73	138	138	25
Mindanao	2025	1	4	10	79	138	138	25
Mindanao	2025	1	4	11	82	138	138	25
Mindanao	2025	1	4	12	83	138	138	25
Mindanao	2025	1	4	13	84	138	138	25
Mindanao	2025	1	4	14	90	138	138	25
Mindanao	2025	1	4	15	87	138	138	25
Mindanao	2025	1	4	16	86	138	138	25
Mindanao	2025	1	4	17	82	138	138	25
Mindanao	2025	1	4	18	91	138	138	25
Mindanao	2025	1	4	19	90	138	138	25
Mindanao	2025	1	4	20	87	138	138	25
Mindanao	2025	1	4	21	85	138	138	25
Mindanao	2025	1	4	22	78	138	138	25
Mindanao	2025	1	4	23	74	138	138	25
Mindanao	2025	1	4	24	68	138	138	25
Mindanao	2025	1	5	1	54	138	138	25
Mindanao	2025	1	5	2	52	138	138	25
Mindanao	2025	1	5	3	51	138	138	25
Mindanao	2025	1	5	4	50	138	138	25
Mindanao	2025	1	5	5	52	138	138	25
Mindanao	2025	1	5	6	53	138	138	25
Mindanao	2025	1	5	7	54	138	138	25
Mindanao	2025	1	5	8	54	138	138	25
Mindanao	2025	1	5	9	56	138	138	25
Mindanao	2025	1	5	10	60	138	138	25
Mindanao	2025	1	5	11	61	138	138	25
Mindanao	2025	1	5	12	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	5	13	61	138	138	25
Mindanao	2025	1	5	14	62	138	138	25
Mindanao	2025	1	5	15	61	138	138	25
Mindanao	2025	1	5	16	62	138	138	25
Mindanao	2025	1	5	17	62	138	138	25
Mindanao	2025	1	5	18	74	138	138	25
Mindanao	2025	1	5	19	74	138	138	25
Mindanao	2025	1	5	20	72	138	138	25
Mindanao	2025	1	5	21	71	138	138	25
Mindanao	2025	1	5	22	66	138	138	25
Mindanao	2025	1	5	23	61	138	138	25
Mindanao	2025	1	5	24	57	138	138	25
Mindanao	2025	1	6	1	55	138	138	25
Mindanao	2025	1	6	2	54	138	138	25
Mindanao	2025	1	6	3	51	138	138	25
Mindanao	2025	1	6	4	51	138	138	25
Mindanao	2025	1	6	5	54	138	138	25
Mindanao	2025	1	6	6	57	138	138	25
Mindanao	2025	1	6	7	58	138	138	25
Mindanao	2025	1	6	8	66	138	138	25
Mindanao	2025	1	6	9	75	138	138	25
Mindanao	2025	1	6	10	82	138	138	25
Mindanao	2025	1	6	11	88	138	138	25
Mindanao	2025	1	6	12	86	138	138	25
Mindanao	2025	1	6	13	88	138	138	25
Mindanao	2025	1	6	14	91	138	138	25
Mindanao	2025	1	6	15	92	138	138	25
Mindanao	2025	1	6	16	89	138	138	25
Mindanao	2025	1	6	17	85	138	138	25
Mindanao	2025	1	6	18	91	138	138	25
Mindanao	2025	1	6	19	87	138	138	25
Mindanao	2025	1	6	20	83	138	138	25
Mindanao	2025	1	6	21	80	138	138	25
Mindanao	2025	1	6	22	74	138	138	25
Mindanao	2025	1	6	23	71	138	138	25
Mindanao	2025	1	6	24	67	138	138	25
Mindanao	2025	1	7	1	64	138	138	25
Mindanao	2025	1	7	2	62	138	138	25
Mindanao	2025	1	7	3	60	138	138	25
Mindanao	2025	1	7	4	58	138	138	25
Mindanao	2025	1	7	5	61	138	138	25
Mindanao	2025	1	7	6	66	138	138	25
Mindanao	2025	1	7	7	63	138	138	25
Mindanao	2025	1	7	8	67	138	138	25
Mindanao	2025	1	7	9	77	138	138	25
Mindanao	2025	1	7	10	80	138	138	25
Mindanao	2025	1	7	11	92	138	138	25
Mindanao	2025	1	7	12	88	138	138	25
Mindanao	2025	1	7	13	89	138	138	25
Mindanao	2025	1	7	14	96	138	138	25
Mindanao	2025	1	7	15	96	138	138	25
Mindanao	2025	1	7	16	92	138	138	25
Mindanao	2025	1	7	17	86	138	138	25
Mindanao	2025	1	7	18	93	138	138	25
Mindanao	2025	1	7	19	90	138	138	25
Mindanao	2025	1	7	20	86	138	138	25
Mindanao	2025	1	7	21	84	138	138	25
Mindanao	2025	1	7	22	78	138	138	25
Mindanao	2025	1	7	23	72	138	138	25
Mindanao	2025	1	7	24	67	138	138	25
Mindanao	2025	1	8	1	63	138	138	25
Mindanao	2025	1	8	2	61	138	138	25
Mindanao	2025	1	8	3	59	138	138	25
Mindanao	2025	1	8	4	58	138	138	25
Mindanao	2025	1	8	5	59	138	138	25
Mindanao	2025	1	8	6	66	138	138	25
Mindanao	2025	1	8	7	63	138	138	25
Mindanao	2025	1	8	8	71	138	138	25
Mindanao	2025	1	8	9	80	138	138	25
Mindanao	2025	1	8	10	87	138	138	25
Mindanao	2025	1	8	11	91	138	138	25
Mindanao	2025	1	8	12	90	138	138	25
Mindanao	2025	1	8	13	92	138	138	25
Mindanao	2025	1	8	14	98	138	138	25
Mindanao	2025	1	8	15	94	138	138	25
Mindanao	2025	1	8	16	91	138	138	25
Mindanao	2025	1	8	17	85	138	138	25
Mindanao	2025	1	8	18	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	8	19	90	138	138	25
Mindanao	2025	1	8	20	86	138	138	25
Mindanao	2025	1	8	21	83	138	138	25
Mindanao	2025	1	8	22	76	138	138	25
Mindanao	2025	1	8	23	72	138	138	25
Mindanao	2025	1	8	24	66	138	138	25
Mindanao	2025	1	9	1	64	138	138	25
Mindanao	2025	1	9	2	61	138	138	25
Mindanao	2025	1	9	3	59	138	138	25
Mindanao	2025	1	9	4	58	138	138	25
Mindanao	2025	1	9	5	60	138	138	25
Mindanao	2025	1	9	6	65	138	138	25
Mindanao	2025	1	9	7	64	138	138	25
Mindanao	2025	1	9	8	70	138	138	25
Mindanao	2025	1	9	9	81	138	138	25
Mindanao	2025	1	9	10	88	138	138	25
Mindanao	2025	1	9	11	92	138	138	25
Mindanao	2025	1	9	12	90	138	138	25
Mindanao	2025	1	9	13	93	138	138	25
Mindanao	2025	1	9	14	98	138	138	25
Mindanao	2025	1	9	15	97	138	138	25
Mindanao	2025	1	9	16	96	138	138	25
Mindanao	2025	1	9	17	87	138	138	25
Mindanao	2025	1	9	18	94	138	138	25
Mindanao	2025	1	9	19	90	138	138	25
Mindanao	2025	1	9	20	87	138	138	25
Mindanao	2025	1	9	21	84	138	138	25
Mindanao	2025	1	9	22	78	138	138	25
Mindanao	2025	1	9	23	74	138	138	25
Mindanao	2025	1	9	24	69	138	138	25
Mindanao	2025	1	10	1	66	138	138	25
Mindanao	2025	1	10	2	62	138	138	25
Mindanao	2025	1	10	3	60	138	138	25
Mindanao	2025	1	10	4	58	138	138	25
Mindanao	2025	1	10	5	61	138	138	25
Mindanao	2025	1	10	6	65	138	138	25
Mindanao	2025	1	10	7	64	138	138	25
Mindanao	2025	1	10	8	71	138	138	25
Mindanao	2025	1	10	9	79	138	138	25
Mindanao	2025	1	10	10	86	138	138	25
Mindanao	2025	1	10	11	92	138	138	25
Mindanao	2025	1	10	12	88	138	138	25
Mindanao	2025	1	10	13	93	138	138	25
Mindanao	2025	1	10	14	101	138	138	25
Mindanao	2025	1	10	15	97	138	138	25
Mindanao	2025	1	10	16	91	138	138	25
Mindanao	2025	1	10	17	87	138	138	25
Mindanao	2025	1	10	18	92	138	138	25
Mindanao	2025	1	10	19	91	138	138	25
Mindanao	2025	1	10	20	88	138	138	25
Mindanao	2025	1	10	21	86	138	138	25
Mindanao	2025	1	10	22	79	138	138	25
Mindanao	2025	1	10	23	75	138	138	25
Mindanao	2025	1	10	24	68	138	138	25
Mindanao	2025	1	11	1	65	138	138	25
Mindanao	2025	1	11	2	62	138	138	25
Mindanao	2025	1	11	3	59	138	138	25
Mindanao	2025	1	11	4	58	138	138	25
Mindanao	2025	1	11	5	61	138	138	25
Mindanao	2025	1	11	6	63	138	138	25
Mindanao	2025	1	11	7	62	138	138	25
Mindanao	2025	1	11	8	64	138	138	25
Mindanao	2025	1	11	9	73	138	138	25
Mindanao	2025	1	11	10	79	138	138	25
Mindanao	2025	1	11	11	82	138	138	25
Mindanao	2025	1	11	12	83	138	138	25
Mindanao	2025	1	11	13	84	138	138	25
Mindanao	2025	1	11	14	90	138	138	25
Mindanao	2025	1	11	15	87	138	138	25
Mindanao	2025	1	11	16	86	138	138	25
Mindanao	2025	1	11	17	82	138	138	25
Mindanao	2025	1	11	18	91	138	138	25
Mindanao	2025	1	11	19	90	138	138	25
Mindanao	2025	1	11	20	87	138	138	25
Mindanao	2025	1	11	21	85	138	138	25
Mindanao	2025	1	11	22	78	138	138	25
Mindanao	2025	1	11	23	74	138	138	25
Mindanao	2025	1	11	24	68	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	12	1	64	138	138	25
Mindanao	2025	1	12	2	60	138	138	25
Mindanao	2025	1	12	3	59	138	138	25
Mindanao	2025	1	12	4	57	138	138	25
Mindanao	2025	1	12	5	59	138	138	25
Mindanao	2025	1	12	6	59	138	138	25
Mindanao	2025	1	12	7	58	138	138	25
Mindanao	2025	1	12	8	58	138	138	25
Mindanao	2025	1	12	9	62	138	138	25
Mindanao	2025	1	12	10	69	138	138	25
Mindanao	2025	1	12	11	73	138	138	25
Mindanao	2025	1	12	12	74	138	138	25
Mindanao	2025	1	12	13	76	138	138	25
Mindanao	2025	1	12	14	78	138	138	25
Mindanao	2025	1	12	15	78	138	138	25
Mindanao	2025	1	12	16	77	138	138	25
Mindanao	2025	1	12	17	76	138	138	25
Mindanao	2025	1	12	18	86	138	138	25
Mindanao	2025	1	12	19	86	138	138	25
Mindanao	2025	1	12	20	84	138	138	25
Mindanao	2025	1	12	21	82	138	138	25
Mindanao	2025	1	12	22	78	138	138	25
Mindanao	2025	1	12	23	72	138	138	25
Mindanao	2025	1	12	24	68	138	138	25
Mindanao	2025	1	13	1	64	138	138	25
Mindanao	2025	1	13	2	61	138	138	25
Mindanao	2025	1	13	3	58	138	138	25
Mindanao	2025	1	13	4	59	138	138	25
Mindanao	2025	1	13	5	60	138	138	25
Mindanao	2025	1	13	6	65	138	138	25
Mindanao	2025	1	13	7	64	138	138	25
Mindanao	2025	1	13	8	70	138	138	25
Mindanao	2025	1	13	9	81	138	138	25
Mindanao	2025	1	13	10	90	138	138	25
Mindanao	2025	1	13	11	94	138	138	25
Mindanao	2025	1	13	12	94	138	138	25
Mindanao	2025	1	13	13	97	138	138	25
Mindanao	2025	1	13	14	102	138	138	25
Mindanao	2025	1	13	15	102	138	138	25
Mindanao	2025	1	13	16	100	138	138	25
Mindanao	2025	1	13	17	91	138	138	25
Mindanao	2025	1	13	18	96	138	138	25
Mindanao	2025	1	13	19	95	138	138	25
Mindanao	2025	1	13	20	91	138	138	25
Mindanao	2025	1	13	21	89	138	138	25
Mindanao	2025	1	13	22	82	138	138	25
Mindanao	2025	1	13	23	76	138	138	25
Mindanao	2025	1	13	24	71	138	138	25
Mindanao	2025	1	14	1	68	138	138	25
Mindanao	2025	1	14	2	65	138	138	25
Mindanao	2025	1	14	3	61	138	138	25
Mindanao	2025	1	14	4	61	138	138	25
Mindanao	2025	1	14	5	63	138	138	25
Mindanao	2025	1	14	6	67	138	138	25
Mindanao	2025	1	14	7	67	138	138	25
Mindanao	2025	1	14	8	72	138	138	25
Mindanao	2025	1	14	9	84	138	138	25
Mindanao	2025	1	14	10	96	138	138	25
Mindanao	2025	1	14	11	99	138	138	25
Mindanao	2025	1	14	12	99	138	138	25
Mindanao	2025	1	14	13	100	138	138	25
Mindanao	2025	1	14	14	107	138	138	25
Mindanao	2025	1	14	15	103	138	138	25
Mindanao	2025	1	14	16	102	138	138	25
Mindanao	2025	1	14	17	94	138	138	25
Mindanao	2025	1	14	18	98	138	138	25
Mindanao	2025	1	14	19	95	138	138	25
Mindanao	2025	1	14	20	93	138	138	25
Mindanao	2025	1	14	21	90	138	138	25
Mindanao	2025	1	14	22	85	138	138	25
Mindanao	2025	1	14	23	79	138	138	25
Mindanao	2025	1	14	24	74	138	138	25
Mindanao	2025	1	15	1	70	138	138	25
Mindanao	2025	1	15	2	68	138	138	25
Mindanao	2025	1	15	3	65	138	138	25
Mindanao	2025	1	15	4	63	138	138	25
Mindanao	2025	1	15	5	66	138	138	25
Mindanao	2025	1	15	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	15	7	69	138	138	25
Mindanao	2025	1	15	8	74	138	138	25
Mindanao	2025	1	15	9	83	138	138	25
Mindanao	2025	1	15	10	90	138	138	25
Mindanao	2025	1	15	11	95	138	138	25
Mindanao	2025	1	15	12	95	138	138	25
Mindanao	2025	1	15	13	100	138	138	25
Mindanao	2025	1	15	14	103	138	138	25
Mindanao	2025	1	15	15	104	138	138	25
Mindanao	2025	1	15	16	101	138	138	25
Mindanao	2025	1	15	17	93	138	138	25
Mindanao	2025	1	15	18	97	138	138	25
Mindanao	2025	1	15	19	95	138	138	25
Mindanao	2025	1	15	20	92	138	138	25
Mindanao	2025	1	15	21	87	138	138	25
Mindanao	2025	1	15	22	82	138	138	25
Mindanao	2025	1	15	23	77	138	138	25
Mindanao	2025	1	15	24	72	138	138	25
Mindanao	2025	1	16	1	68	138	138	25
Mindanao	2025	1	16	2	65	138	138	25
Mindanao	2025	1	16	3	62	138	138	25
Mindanao	2025	1	16	4	61	138	138	25
Mindanao	2025	1	16	5	64	138	138	25
Mindanao	2025	1	16	6	69	138	138	25
Mindanao	2025	1	16	7	69	138	138	25
Mindanao	2025	1	16	8	72	138	138	25
Mindanao	2025	1	16	9	82	138	138	25
Mindanao	2025	1	16	10	87	138	138	25
Mindanao	2025	1	16	11	92	138	138	25
Mindanao	2025	1	16	12	89	138	138	25
Mindanao	2025	1	16	13	89	138	138	25
Mindanao	2025	1	16	14	94	138	138	25
Mindanao	2025	1	16	15	94	138	138	25
Mindanao	2025	1	16	16	91	138	138	25
Mindanao	2025	1	16	17	86	138	138	25
Mindanao	2025	1	16	18	91	138	138	25
Mindanao	2025	1	16	19	88	138	138	25
Mindanao	2025	1	16	20	84	138	138	25
Mindanao	2025	1	16	21	80	138	138	25
Mindanao	2025	1	16	22	74	138	138	25
Mindanao	2025	1	16	23	69	138	138	25
Mindanao	2025	1	16	24	65	138	138	25
Mindanao	2025	1	17	1	61	138	138	25
Mindanao	2025	1	17	2	57	138	138	25
Mindanao	2025	1	17	3	56	138	138	25
Mindanao	2025	1	17	4	55	138	138	25
Mindanao	2025	1	17	5	57	138	138	25
Mindanao	2025	1	17	6	61	138	138	25
Mindanao	2025	1	17	7	62	138	138	25
Mindanao	2025	1	17	8	67	138	138	25
Mindanao	2025	1	17	9	76	138	138	25
Mindanao	2025	1	17	10	81	138	138	25
Mindanao	2025	1	17	11	84	138	138	25
Mindanao	2025	1	17	12	83	138	138	25
Mindanao	2025	1	17	13	83	138	138	25
Mindanao	2025	1	17	14	85	138	138	25
Mindanao	2025	1	17	15	85	138	138	25
Mindanao	2025	1	17	16	84	138	138	25
Mindanao	2025	1	17	17	82	138	138	25
Mindanao	2025	1	17	18	87	138	138	25
Mindanao	2025	1	17	19	85	138	138	25
Mindanao	2025	1	17	20	81	138	138	25
Mindanao	2025	1	17	21	77	138	138	25
Mindanao	2025	1	17	22	70	138	138	25
Mindanao	2025	1	17	23	66	138	138	25
Mindanao	2025	1	17	24	61	138	138	25
Mindanao	2025	1	18	1	58	138	138	25
Mindanao	2025	1	18	2	57	138	138	25
Mindanao	2025	1	18	3	56	138	138	25
Mindanao	2025	1	18	4	55	138	138	25
Mindanao	2025	1	18	5	57	138	138	25
Mindanao	2025	1	18	6	60	138	138	25
Mindanao	2025	1	18	7	61	138	138	25
Mindanao	2025	1	18	8	63	138	138	25
Mindanao	2025	1	18	9	69	138	138	25
Mindanao	2025	1	18	10	73	138	138	25
Mindanao	2025	1	18	11	77	138	138	25
Mindanao	2025	1	18	12	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	18	13	76	138	138	25
Mindanao	2025	1	18	14	76	138	138	25
Mindanao	2025	1	18	15	78	138	138	25
Mindanao	2025	1	18	16	77	138	138	25
Mindanao	2025	1	18	17	77	138	138	25
Mindanao	2025	1	18	18	84	138	138	25
Mindanao	2025	1	18	19	82	138	138	25
Mindanao	2025	1	18	20	79	138	138	25
Mindanao	2025	1	18	21	75	138	138	25
Mindanao	2025	1	18	22	69	138	138	25
Mindanao	2025	1	18	23	65	138	138	25
Mindanao	2025	1	18	24	62	138	138	25
Mindanao	2025	1	19	1	59	138	138	25
Mindanao	2025	1	19	2	56	138	138	25
Mindanao	2025	1	19	3	54	138	138	25
Mindanao	2025	1	19	4	55	138	138	25
Mindanao	2025	1	19	5	57	138	138	25
Mindanao	2025	1	19	6	58	138	138	25
Mindanao	2025	1	19	7	59	138	138	25
Mindanao	2025	1	19	8	59	138	138	25
Mindanao	2025	1	19	9	61	138	138	25
Mindanao	2025	1	19	10	64	138	138	25
Mindanao	2025	1	19	11	67	138	138	25
Mindanao	2025	1	19	12	64	138	138	25
Mindanao	2025	1	19	13	61	138	138	25
Mindanao	2025	1	19	14	64	138	138	25
Mindanao	2025	1	19	15	64	138	138	25
Mindanao	2025	1	19	16	64	138	138	25
Mindanao	2025	1	19	17	69	138	138	25
Mindanao	2025	1	19	18	76	138	138	25
Mindanao	2025	1	19	19	73	138	138	25
Mindanao	2025	1	19	20	70	138	138	25
Mindanao	2025	1	19	21	66	138	138	25
Mindanao	2025	1	19	22	61	138	138	25
Mindanao	2025	1	19	23	59	138	138	25
Mindanao	2025	1	19	24	55	138	138	25
Mindanao	2025	1	20	1	54	138	138	25
Mindanao	2025	1	20	2	53	138	138	25
Mindanao	2025	1	20	3	52	138	138	25
Mindanao	2025	1	20	4	52	138	138	25
Mindanao	2025	1	20	5	55	138	138	25
Mindanao	2025	1	20	6	60	138	138	25
Mindanao	2025	1	20	7	62	138	138	25
Mindanao	2025	1	20	8	68	138	138	25
Mindanao	2025	1	20	9	76	138	138	25
Mindanao	2025	1	20	10	81	138	138	25
Mindanao	2025	1	20	11	84	138	138	25
Mindanao	2025	1	20	12	82	138	138	25
Mindanao	2025	1	20	13	82	138	138	25
Mindanao	2025	1	20	14	84	138	138	25
Mindanao	2025	1	20	15	85	138	138	25
Mindanao	2025	1	20	16	82	138	138	25
Mindanao	2025	1	20	17	82	138	138	25
Mindanao	2025	1	20	18	87	138	138	25
Mindanao	2025	1	20	19	82	138	138	25
Mindanao	2025	1	20	20	78	138	138	25
Mindanao	2025	1	20	21	74	138	138	25
Mindanao	2025	1	20	22	68	138	138	25
Mindanao	2025	1	20	23	64	138	138	25
Mindanao	2025	1	20	24	60	138	138	25
Mindanao	2025	1	21	1	58	138	138	25
Mindanao	2025	1	21	2	56	138	138	25
Mindanao	2025	1	21	3	55	138	138	25
Mindanao	2025	1	21	4	55	138	138	25
Mindanao	2025	1	21	5	57	138	138	25
Mindanao	2025	1	21	6	63	138	138	25
Mindanao	2025	1	21	7	65	138	138	25
Mindanao	2025	1	21	8	67	138	138	25
Mindanao	2025	1	21	9	74	138	138	25
Mindanao	2025	1	21	10	80	138	138	25
Mindanao	2025	1	21	11	83	138	138	25
Mindanao	2025	1	21	12	82	138	138	25
Mindanao	2025	1	21	13	84	138	138	25
Mindanao	2025	1	21	14	90	138	138	25
Mindanao	2025	1	21	15	89	138	138	25
Mindanao	2025	1	21	16	88	138	138	25
Mindanao	2025	1	21	17	85	138	138	25
Mindanao	2025	1	21	18	88	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	21	19	84	138	138	25
Mindanao	2025	1	21	20	81	138	138	25
Mindanao	2025	1	21	21	78	138	138	25
Mindanao	2025	1	21	22	73	138	138	25
Mindanao	2025	1	21	23	69	138	138	25
Mindanao	2025	1	21	24	63	138	138	25
Mindanao	2025	1	22	1	62	138	138	25
Mindanao	2025	1	22	2	60	138	138	25
Mindanao	2025	1	22	3	58	138	138	25
Mindanao	2025	1	22	4	57	138	138	25
Mindanao	2025	1	22	5	61	138	138	25
Mindanao	2025	1	22	6	65	138	138	25
Mindanao	2025	1	22	7	65	138	138	25
Mindanao	2025	1	22	8	68	138	138	25
Mindanao	2025	1	22	9	76	138	138	25
Mindanao	2025	1	22	10	81	138	138	25
Mindanao	2025	1	22	11	86	138	138	25
Mindanao	2025	1	22	12	85	138	138	25
Mindanao	2025	1	22	13	85	138	138	25
Mindanao	2025	1	22	14	91	138	138	25
Mindanao	2025	1	22	15	90	138	138	25
Mindanao	2025	1	22	16	88	138	138	25
Mindanao	2025	1	22	17	82	138	138	25
Mindanao	2025	1	22	18	87	138	138	25
Mindanao	2025	1	22	19	86	138	138	25
Mindanao	2025	1	22	20	82	138	138	25
Mindanao	2025	1	22	21	79	138	138	25
Mindanao	2025	1	22	22	73	138	138	25
Mindanao	2025	1	22	23	69	138	138	25
Mindanao	2025	1	22	24	64	138	138	25
Mindanao	2025	1	23	1	62	138	138	25
Mindanao	2025	1	23	2	60	138	138	25
Mindanao	2025	1	23	3	58	138	138	25
Mindanao	2025	1	23	4	57	138	138	25
Mindanao	2025	1	23	5	59	138	138	25
Mindanao	2025	1	23	6	63	138	138	25
Mindanao	2025	1	23	7	64	138	138	25
Mindanao	2025	1	23	8	68	138	138	25
Mindanao	2025	1	23	9	76	138	138	25
Mindanao	2025	1	23	10	85	138	138	25
Mindanao	2025	1	23	11	90	138	138	25
Mindanao	2025	1	23	12	90	138	138	25
Mindanao	2025	1	23	13	93	138	138	25
Mindanao	2025	1	23	14	97	138	138	25
Mindanao	2025	1	23	15	96	138	138	25
Mindanao	2025	1	23	16	91	138	138	25
Mindanao	2025	1	23	17	86	138	138	25
Mindanao	2025	1	23	18	91	138	138	25
Mindanao	2025	1	23	19	90	138	138	25
Mindanao	2025	1	23	20	85	138	138	25
Mindanao	2025	1	23	21	82	138	138	25
Mindanao	2025	1	23	22	75	138	138	25
Mindanao	2025	1	23	23	68	138	138	25
Mindanao	2025	1	23	24	63	138	138	25
Mindanao	2025	1	24	1	60	138	138	25
Mindanao	2025	1	24	2	57	138	138	25
Mindanao	2025	1	24	3	56	138	138	25
Mindanao	2025	1	24	4	55	138	138	25
Mindanao	2025	1	24	5	58	138	138	25
Mindanao	2025	1	24	6	62	138	138	25
Mindanao	2025	1	24	7	61	138	138	25
Mindanao	2025	1	24	8	65	138	138	25
Mindanao	2025	1	24	9	74	138	138	25
Mindanao	2025	1	24	10	80	138	138	25
Mindanao	2025	1	24	11	84	138	138	25
Mindanao	2025	1	24	12	84	138	138	25
Mindanao	2025	1	24	13	85	138	138	25
Mindanao	2025	1	24	14	91	138	138	25
Mindanao	2025	1	24	15	91	138	138	25
Mindanao	2025	1	24	16	88	138	138	25
Mindanao	2025	1	24	17	81	138	138	25
Mindanao	2025	1	24	18	86	138	138	25
Mindanao	2025	1	24	19	85	138	138	25
Mindanao	2025	1	24	20	81	138	138	25
Mindanao	2025	1	24	21	81	138	138	25
Mindanao	2025	1	24	22	75	138	138	25
Mindanao	2025	1	24	23	70	138	138	25
Mindanao	2025	1	24	24	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	25	1	64	138	138	25
Mindanao	2025	1	25	2	61	138	138	25
Mindanao	2025	1	25	3	58	138	138	25
Mindanao	2025	1	25	4	57	138	138	25
Mindanao	2025	1	25	5	60	138	138	25
Mindanao	2025	1	25	6	62	138	138	25
Mindanao	2025	1	25	7	60	138	138	25
Mindanao	2025	1	25	8	63	138	138	25
Mindanao	2025	1	25	9	69	138	138	25
Mindanao	2025	1	25	10	75	138	138	25
Mindanao	2025	1	25	11	76	138	138	25
Mindanao	2025	1	25	12	76	138	138	25
Mindanao	2025	1	25	13	78	138	138	25
Mindanao	2025	1	25	14	81	138	138	25
Mindanao	2025	1	25	15	80	138	138	25
Mindanao	2025	1	25	16	79	138	138	25
Mindanao	2025	1	25	17	77	138	138	25
Mindanao	2025	1	25	18	82	138	138	25
Mindanao	2025	1	25	19	83	138	138	25
Mindanao	2025	1	25	20	81	138	138	25
Mindanao	2025	1	25	21	79	138	138	25
Mindanao	2025	1	25	22	74	138	138	25
Mindanao	2025	1	25	23	68	138	138	25
Mindanao	2025	1	25	24	65	138	138	25
Mindanao	2025	1	26	1	61	138	138	25
Mindanao	2025	1	26	2	59	138	138	25
Mindanao	2025	1	26	3	56	138	138	25
Mindanao	2025	1	26	4	55	138	138	25
Mindanao	2025	1	26	5	56	138	138	25
Mindanao	2025	1	26	6	59	138	138	25
Mindanao	2025	1	26	7	58	138	138	25
Mindanao	2025	1	26	8	58	138	138	25
Mindanao	2025	1	26	9	60	138	138	25
Mindanao	2025	1	26	10	64	138	138	25
Mindanao	2025	1	26	11	69	138	138	25
Mindanao	2025	1	26	12	70	138	138	25
Mindanao	2025	1	26	13	72	138	138	25
Mindanao	2025	1	26	14	72	138	138	25
Mindanao	2025	1	26	15	72	138	138	25
Mindanao	2025	1	26	16	71	138	138	25
Mindanao	2025	1	26	17	73	138	138	25
Mindanao	2025	1	26	18	80	138	138	25
Mindanao	2025	1	26	19	81	138	138	25
Mindanao	2025	1	26	20	79	138	138	25
Mindanao	2025	1	26	21	77	138	138	25
Mindanao	2025	1	26	22	72	138	138	25
Mindanao	2025	1	26	23	67	138	138	25
Mindanao	2025	1	26	24	64	138	138	25
Mindanao	2025	1	27	1	59	138	138	25
Mindanao	2025	1	27	2	59	138	138	25
Mindanao	2025	1	27	3	57	138	138	25
Mindanao	2025	1	27	4	56	138	138	25
Mindanao	2025	1	27	5	60	138	138	25
Mindanao	2025	1	27	6	62	138	138	25
Mindanao	2025	1	27	7	65	138	138	25
Mindanao	2025	1	27	8	68	138	138	25
Mindanao	2025	1	27	9	79	138	138	25
Mindanao	2025	1	27	10	82	138	138	25
Mindanao	2025	1	27	11	89	138	138	25
Mindanao	2025	1	27	12	87	138	138	25
Mindanao	2025	1	27	13	86	138	138	25
Mindanao	2025	1	27	14	92	138	138	25
Mindanao	2025	1	27	15	90	138	138	25
Mindanao	2025	1	27	16	89	138	138	25
Mindanao	2025	1	27	17	84	138	138	25
Mindanao	2025	1	27	18	90	138	138	25
Mindanao	2025	1	27	19	90	138	138	25
Mindanao	2025	1	27	20	82	138	138	25
Mindanao	2025	1	27	21	78	138	138	25
Mindanao	2025	1	27	22	73	138	138	25
Mindanao	2025	1	27	23	68	138	138	25
Mindanao	2025	1	27	24	64	138	138	25
Mindanao	2025	1	28	1	60	138	138	25
Mindanao	2025	1	28	2	58	138	138	25
Mindanao	2025	1	28	3	57	138	138	25
Mindanao	2025	1	28	4	55	138	138	25
Mindanao	2025	1	28	5	57	138	138	25
Mindanao	2025	1	28	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	28	7	64	138	138	25
Mindanao	2025	1	28	8	67	138	138	25
Mindanao	2025	1	28	9	76	138	138	25
Mindanao	2025	1	28	10	81	138	138	25
Mindanao	2025	1	28	11	86	138	138	25
Mindanao	2025	1	28	12	82	138	138	25
Mindanao	2025	1	28	13	86	138	138	25
Mindanao	2025	1	28	14	91	138	138	25
Mindanao	2025	1	28	15	86	138	138	25
Mindanao	2025	1	28	16	85	138	138	25
Mindanao	2025	1	28	17	80	138	138	25
Mindanao	2025	1	28	18	84	138	138	25
Mindanao	2025	1	28	19	83	138	138	25
Mindanao	2025	1	28	20	81	138	138	25
Mindanao	2025	1	28	21	77	138	138	25
Mindanao	2025	1	28	22	71	138	138	25
Mindanao	2025	1	28	23	68	138	138	25
Mindanao	2025	1	28	24	63	138	138	25
Mindanao	2025	1	29	1	60	138	138	25
Mindanao	2025	1	29	2	58	138	138	25
Mindanao	2025	1	29	3	56	138	138	25
Mindanao	2025	1	29	4	56	138	138	25
Mindanao	2025	1	29	5	58	138	138	25
Mindanao	2025	1	29	6	62	138	138	25
Mindanao	2025	1	29	7	65	138	138	25
Mindanao	2025	1	29	8	69	138	138	25
Mindanao	2025	1	29	9	79	138	138	25
Mindanao	2025	1	29	10	84	138	138	25
Mindanao	2025	1	29	11	87	138	138	25
Mindanao	2025	1	29	12	91	138	138	25
Mindanao	2025	1	29	13	91	138	138	25
Mindanao	2025	1	29	14	97	138	138	25
Mindanao	2025	1	29	15	96	138	138	25
Mindanao	2025	1	29	16	93	138	138	25
Mindanao	2025	1	29	17	86	138	138	25
Mindanao	2025	1	29	18	91	138	138	25
Mindanao	2025	1	29	19	90	138	138	25
Mindanao	2025	1	29	20	89	138	138	25
Mindanao	2025	1	29	21	85	138	138	25
Mindanao	2025	1	29	22	79	138	138	25
Mindanao	2025	1	29	23	74	138	138	25
Mindanao	2025	1	29	24	69	138	138	25
Mindanao	2025	1	30	1	67	138	138	25
Mindanao	2025	1	30	2	63	138	138	25
Mindanao	2025	1	30	3	62	138	138	25
Mindanao	2025	1	30	4	60	138	138	25
Mindanao	2025	1	30	5	63	138	138	25
Mindanao	2025	1	30	6	67	138	138	25
Mindanao	2025	1	30	7	67	138	138	25
Mindanao	2025	1	30	8	71	138	138	25
Mindanao	2025	1	30	9	83	138	138	25
Mindanao	2025	1	30	10	90	138	138	25
Mindanao	2025	1	30	11	95	138	138	25
Mindanao	2025	1	30	12	93	138	138	25
Mindanao	2025	1	30	13	92	138	138	25
Mindanao	2025	1	30	14	93	138	138	25
Mindanao	2025	1	30	15	92	138	138	25
Mindanao	2025	1	30	16	87	138	138	25
Mindanao	2025	1	30	17	84	138	138	25
Mindanao	2025	1	30	18	87	138	138	25
Mindanao	2025	1	30	19	86	138	138	25
Mindanao	2025	1	30	20	83	138	138	25
Mindanao	2025	1	30	21	79	138	138	25
Mindanao	2025	1	30	22	73	138	138	25
Mindanao	2025	1	30	23	68	138	138	25
Mindanao	2025	1	30	24	64	138	138	25
Mindanao	2025	1	31	1	61	138	138	25
Mindanao	2025	1	31	2	58	138	138	25
Mindanao	2025	1	31	3	57	138	138	25
Mindanao	2025	1	31	4	57	138	138	25
Mindanao	2025	1	31	5	59	138	138	25
Mindanao	2025	1	31	6	65	138	138	25
Mindanao	2025	1	31	7	64	138	138	25
Mindanao	2025	1	31	8	68	138	138	25
Mindanao	2025	1	31	9	78	138	138	25
Mindanao	2025	1	31	10	86	138	138	25
Mindanao	2025	1	31	11	91	138	138	25
Mindanao	2025	1	31	12	89	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	1	31	13	91	138	138	25
Mindanao	2025	1	31	14	98	138	138	25
Mindanao	2025	1	31	15	96	138	138	25
Mindanao	2025	1	31	16	95	138	138	25
Mindanao	2025	1	31	17	86	138	138	25
Mindanao	2025	1	31	18	89	138	138	25
Mindanao	2025	1	31	19	87	138	138	25
Mindanao	2025	1	31	20	84	138	138	25
Mindanao	2025	1	31	21	82	138	138	25
Mindanao	2025	1	31	22	76	138	138	25
Mindanao	2025	1	31	23	71	138	138	25
Mindanao	2025	1	31	24	66	138	138	25
Mindanao	2025	2	1	1	63	138	138	25
Mindanao	2025	2	1	2	63	138	138	25
Mindanao	2025	2	1	3	60	138	138	25
Mindanao	2025	2	1	4	59	138	138	25
Mindanao	2025	2	1	5	62	138	138	25
Mindanao	2025	2	1	6	64	138	138	25
Mindanao	2025	2	1	7	64	138	138	25
Mindanao	2025	2	1	8	66	138	138	25
Mindanao	2025	2	1	9	69	138	138	25
Mindanao	2025	2	1	10	76	138	138	25
Mindanao	2025	2	1	11	80	138	138	25
Mindanao	2025	2	1	12	81	138	138	25
Mindanao	2025	2	1	13	83	138	138	25
Mindanao	2025	2	1	14	87	138	138	25
Mindanao	2025	2	1	15	88	138	138	25
Mindanao	2025	2	1	16	83	138	138	25
Mindanao	2025	2	1	17	78	138	138	25
Mindanao	2025	2	1	18	85	138	138	25
Mindanao	2025	2	1	19	88	138	138	25
Mindanao	2025	2	1	20	86	138	138	25
Mindanao	2025	2	1	21	84	138	138	25
Mindanao	2025	2	1	22	78	138	138	25
Mindanao	2025	2	1	23	74	138	138	25
Mindanao	2025	2	1	24	69	138	138	25
Mindanao	2025	2	2	1	65	138	138	25
Mindanao	2025	2	2	2	62	138	138	25
Mindanao	2025	2	2	3	60	138	138	25
Mindanao	2025	2	2	4	59	138	138	25
Mindanao	2025	2	2	5	59	138	138	25
Mindanao	2025	2	2	6	59	138	138	25
Mindanao	2025	2	2	7	58	138	138	25
Mindanao	2025	2	2	8	59	138	138	25
Mindanao	2025	2	2	9	63	138	138	25
Mindanao	2025	2	2	10	66	138	138	25
Mindanao	2025	2	2	11	69	138	138	25
Mindanao	2025	2	2	12	73	138	138	25
Mindanao	2025	2	2	13	75	138	138	25
Mindanao	2025	2	2	14	76	138	138	25
Mindanao	2025	2	2	15	77	138	138	25
Mindanao	2025	2	2	16	75	138	138	25
Mindanao	2025	2	2	17	74	138	138	25
Mindanao	2025	2	2	18	82	138	138	25
Mindanao	2025	2	2	19	86	138	138	25
Mindanao	2025	2	2	20	83	138	138	25
Mindanao	2025	2	2	21	82	138	138	25
Mindanao	2025	2	2	22	78	138	138	25
Mindanao	2025	2	2	23	73	138	138	25
Mindanao	2025	2	2	24	68	138	138	25
Mindanao	2025	2	3	1	64	138	138	25
Mindanao	2025	2	3	2	61	138	138	25
Mindanao	2025	2	3	3	59	138	138	25
Mindanao	2025	2	3	4	58	138	138	25
Mindanao	2025	2	3	5	60	138	138	25
Mindanao	2025	2	3	6	62	138	138	25
Mindanao	2025	2	3	7	63	138	138	25
Mindanao	2025	2	3	8	69	138	138	25
Mindanao	2025	2	3	9	82	138	138	25
Mindanao	2025	2	3	10	90	138	138	25
Mindanao	2025	2	3	11	95	138	138	25
Mindanao	2025	2	3	12	95	138	138	25
Mindanao	2025	2	3	13	95	138	138	25
Mindanao	2025	2	3	14	101	138	138	25
Mindanao	2025	2	3	15	101	138	138	25
Mindanao	2025	2	3	16	97	138	138	25
Mindanao	2025	2	3	17	88	138	138	25
Mindanao	2025	2	3	18	90	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	3	19	90	138	138	25
Mindanao	2025	2	3	20	86	138	138	25
Mindanao	2025	2	3	21	83	138	138	25
Mindanao	2025	2	3	22	78	138	138	25
Mindanao	2025	2	3	23	73	138	138	25
Mindanao	2025	2	3	24	68	138	138	25
Mindanao	2025	2	4	1	64	138	138	25
Mindanao	2025	2	4	2	61	138	138	25
Mindanao	2025	2	4	3	59	138	138	25
Mindanao	2025	2	4	4	58	138	138	25
Mindanao	2025	2	4	5	60	138	138	25
Mindanao	2025	2	4	6	61	138	138	25
Mindanao	2025	2	4	7	62	138	138	25
Mindanao	2025	2	4	8	64	138	138	25
Mindanao	2025	2	4	9	72	138	138	25
Mindanao	2025	2	4	10	77	138	138	25
Mindanao	2025	2	4	11	82	138	138	25
Mindanao	2025	2	4	12	81	138	138	25
Mindanao	2025	2	4	13	81	138	138	25
Mindanao	2025	2	4	14	84	138	138	25
Mindanao	2025	2	4	15	83	138	138	25
Mindanao	2025	2	4	16	80	138	138	25
Mindanao	2025	2	4	17	78	138	138	25
Mindanao	2025	2	4	18	83	138	138	25
Mindanao	2025	2	4	19	84	138	138	25
Mindanao	2025	2	4	20	80	138	138	25
Mindanao	2025	2	4	21	78	138	138	25
Mindanao	2025	2	4	22	72	138	138	25
Mindanao	2025	2	4	23	68	138	138	25
Mindanao	2025	2	4	24	63	138	138	25
Mindanao	2025	2	5	1	59	138	138	25
Mindanao	2025	2	5	2	57	138	138	25
Mindanao	2025	2	5	3	55	138	138	25
Mindanao	2025	2	5	4	56	138	138	25
Mindanao	2025	2	5	5	58	138	138	25
Mindanao	2025	2	5	6	61	138	138	25
Mindanao	2025	2	5	7	63	138	138	25
Mindanao	2025	2	5	8	70	138	138	25
Mindanao	2025	2	5	9	80	138	138	25
Mindanao	2025	2	5	10	86	138	138	25
Mindanao	2025	2	5	11	89	138	138	25
Mindanao	2025	2	5	12	86	138	138	25
Mindanao	2025	2	5	13	90	138	138	25
Mindanao	2025	2	5	14	92	138	138	25
Mindanao	2025	2	5	15	93	138	138	25
Mindanao	2025	2	5	16	91	138	138	25
Mindanao	2025	2	5	17	86	138	138	25
Mindanao	2025	2	5	18	90	138	138	25
Mindanao	2025	2	5	19	89	138	138	25
Mindanao	2025	2	5	20	87	138	138	25
Mindanao	2025	2	5	21	81	138	138	25
Mindanao	2025	2	5	22	77	138	138	25
Mindanao	2025	2	5	23	72	138	138	25
Mindanao	2025	2	5	24	68	138	138	25
Mindanao	2025	2	6	1	63	138	138	25
Mindanao	2025	2	6	2	61	138	138	25
Mindanao	2025	2	6	3	60	138	138	25
Mindanao	2025	2	6	4	58	138	138	25
Mindanao	2025	2	6	5	62	138	138	25
Mindanao	2025	2	6	6	65	138	138	25
Mindanao	2025	2	6	7	67	138	138	25
Mindanao	2025	2	6	8	71	138	138	25
Mindanao	2025	2	6	9	81	138	138	25
Mindanao	2025	2	6	10	86	138	138	25
Mindanao	2025	2	6	11	90	138	138	25
Mindanao	2025	2	6	12	86	138	138	25
Mindanao	2025	2	6	13	89	138	138	25
Mindanao	2025	2	6	14	93	138	138	25
Mindanao	2025	2	6	15	90	138	138	25
Mindanao	2025	2	6	16	92	138	138	25
Mindanao	2025	2	6	17	85	138	138	25
Mindanao	2025	2	6	18	87	138	138	25
Mindanao	2025	2	6	19	86	138	138	25
Mindanao	2025	2	6	20	84	138	138	25
Mindanao	2025	2	6	21	80	138	138	25
Mindanao	2025	2	6	22	74	138	138	25
Mindanao	2025	2	6	23	69	138	138	25
Mindanao	2025	2	6	24	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	7	1	62	138	138	25
Mindanao	2025	2	7	2	60	138	138	25
Mindanao	2025	2	7	3	58	138	138	25
Mindanao	2025	2	7	4	58	138	138	25
Mindanao	2025	2	7	5	59	138	138	25
Mindanao	2025	2	7	6	64	138	138	25
Mindanao	2025	2	7	7	66	138	138	25
Mindanao	2025	2	7	8	69	138	138	25
Mindanao	2025	2	7	9	76	138	138	25
Mindanao	2025	2	7	10	81	138	138	25
Mindanao	2025	2	7	11	84	138	138	25
Mindanao	2025	2	7	12	81	138	138	25
Mindanao	2025	2	7	13	82	138	138	25
Mindanao	2025	2	7	14	84	138	138	25
Mindanao	2025	2	7	15	84	138	138	25
Mindanao	2025	2	7	16	82	138	138	25
Mindanao	2025	2	7	17	82	138	138	25
Mindanao	2025	2	7	18	85	138	138	25
Mindanao	2025	2	7	19	84	138	138	25
Mindanao	2025	2	7	20	80	138	138	25
Mindanao	2025	2	7	21	76	138	138	25
Mindanao	2025	2	7	22	72	138	138	25
Mindanao	2025	2	7	23	67	138	138	25
Mindanao	2025	2	7	24	60	138	138	25
Mindanao	2025	2	8	1	58	138	138	25
Mindanao	2025	2	8	2	57	138	138	25
Mindanao	2025	2	8	3	56	138	138	25
Mindanao	2025	2	8	4	55	138	138	25
Mindanao	2025	2	8	5	57	138	138	25
Mindanao	2025	2	8	6	59	138	138	25
Mindanao	2025	2	8	7	60	138	138	25
Mindanao	2025	2	8	8	64	138	138	25
Mindanao	2025	2	8	9	69	138	138	25
Mindanao	2025	2	8	10	74	138	138	25
Mindanao	2025	2	8	11	77	138	138	25
Mindanao	2025	2	8	12	75	138	138	25
Mindanao	2025	2	8	13	78	138	138	25
Mindanao	2025	2	8	14	83	138	138	25
Mindanao	2025	2	8	15	82	138	138	25
Mindanao	2025	2	8	16	81	138	138	25
Mindanao	2025	2	8	17	79	138	138	25
Mindanao	2025	2	8	18	87	138	138	25
Mindanao	2025	2	8	19	88	138	138	25
Mindanao	2025	2	8	20	83	138	138	25
Mindanao	2025	2	8	21	81	138	138	25
Mindanao	2025	2	8	22	76	138	138	25
Mindanao	2025	2	8	23	71	138	138	25
Mindanao	2025	2	8	24	67	138	138	25
Mindanao	2025	2	9	1	64	138	138	25
Mindanao	2025	2	9	2	60	138	138	25
Mindanao	2025	2	9	3	58	138	138	25
Mindanao	2025	2	9	4	57	138	138	25
Mindanao	2025	2	9	5	58	138	138	25
Mindanao	2025	2	9	6	61	138	138	25
Mindanao	2025	2	9	7	60	138	138	25
Mindanao	2025	2	9	8	59	138	138	25
Mindanao	2025	2	9	9	60	138	138	25
Mindanao	2025	2	9	10	67	138	138	25
Mindanao	2025	2	9	11	70	138	138	25
Mindanao	2025	2	9	12	70	138	138	25
Mindanao	2025	2	9	13	71	138	138	25
Mindanao	2025	2	9	14	74	138	138	25
Mindanao	2025	2	9	15	70	138	138	25
Mindanao	2025	2	9	16	72	138	138	25
Mindanao	2025	2	9	17	73	138	138	25
Mindanao	2025	2	9	18	82	138	138	25
Mindanao	2025	2	9	19	84	138	138	25
Mindanao	2025	2	9	20	81	138	138	25
Mindanao	2025	2	9	21	80	138	138	25
Mindanao	2025	2	9	22	75	138	138	25
Mindanao	2025	2	9	23	70	138	138	25
Mindanao	2025	2	9	24	63	138	138	25
Mindanao	2025	2	10	1	61	138	138	25
Mindanao	2025	2	10	2	58	138	138	25
Mindanao	2025	2	10	3	56	138	138	25
Mindanao	2025	2	10	4	55	138	138	25
Mindanao	2025	2	10	5	58	138	138	25
Mindanao	2025	2	10	6	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	10	7	62	138	138	25
Mindanao	2025	2	10	8	69	138	138	25
Mindanao	2025	2	10	9	80	138	138	25
Mindanao	2025	2	10	10	86	138	138	25
Mindanao	2025	2	10	11	91	138	138	25
Mindanao	2025	2	10	12	92	138	138	25
Mindanao	2025	2	10	13	93	138	138	25
Mindanao	2025	2	10	14	97	138	138	25
Mindanao	2025	2	10	15	96	138	138	25
Mindanao	2025	2	10	16	92	138	138	25
Mindanao	2025	2	10	17	88	138	138	25
Mindanao	2025	2	10	18	91	138	138	25
Mindanao	2025	2	10	19	91	138	138	25
Mindanao	2025	2	10	20	89	138	138	25
Mindanao	2025	2	10	21	86	138	138	25
Mindanao	2025	2	10	22	80	138	138	25
Mindanao	2025	2	10	23	75	138	138	25
Mindanao	2025	2	10	24	70	138	138	25
Mindanao	2025	2	11	1	66	138	138	25
Mindanao	2025	2	11	2	64	138	138	25
Mindanao	2025	2	11	3	61	138	138	25
Mindanao	2025	2	11	4	61	138	138	25
Mindanao	2025	2	11	5	60	138	138	25
Mindanao	2025	2	11	6	66	138	138	25
Mindanao	2025	2	11	7	66	138	138	25
Mindanao	2025	2	11	8	71	138	138	25
Mindanao	2025	2	11	9	81	138	138	25
Mindanao	2025	2	11	10	87	138	138	25
Mindanao	2025	2	11	11	91	138	138	25
Mindanao	2025	2	11	12	89	138	138	25
Mindanao	2025	2	11	13	91	138	138	25
Mindanao	2025	2	11	14	94	138	138	25
Mindanao	2025	2	11	15	95	138	138	25
Mindanao	2025	2	11	16	93	138	138	25
Mindanao	2025	2	11	17	88	138	138	25
Mindanao	2025	2	11	18	90	138	138	25
Mindanao	2025	2	11	19	92	138	138	25
Mindanao	2025	2	11	20	87	138	138	25
Mindanao	2025	2	11	21	84	138	138	25
Mindanao	2025	2	11	22	79	138	138	25
Mindanao	2025	2	11	23	73	138	138	25
Mindanao	2025	2	11	24	69	138	138	25
Mindanao	2025	2	12	1	64	138	138	25
Mindanao	2025	2	12	2	63	138	138	25
Mindanao	2025	2	12	3	60	138	138	25
Mindanao	2025	2	12	4	60	138	138	25
Mindanao	2025	2	12	5	61	138	138	25
Mindanao	2025	2	12	6	66	138	138	25
Mindanao	2025	2	12	7	66	138	138	25
Mindanao	2025	2	12	8	71	138	138	25
Mindanao	2025	2	12	9	80	138	138	25
Mindanao	2025	2	12	10	86	138	138	25
Mindanao	2025	2	12	11	93	138	138	25
Mindanao	2025	2	12	12	92	138	138	25
Mindanao	2025	2	12	13	90	138	138	25
Mindanao	2025	2	12	14	96	138	138	25
Mindanao	2025	2	12	15	94	138	138	25
Mindanao	2025	2	12	16	90	138	138	25
Mindanao	2025	2	12	17	87	138	138	25
Mindanao	2025	2	12	18	91	138	138	25
Mindanao	2025	2	12	19	90	138	138	25
Mindanao	2025	2	12	20	84	138	138	25
Mindanao	2025	2	12	21	81	138	138	25
Mindanao	2025	2	12	22	75	138	138	25
Mindanao	2025	2	12	23	71	138	138	25
Mindanao	2025	2	12	24	65	138	138	25
Mindanao	2025	2	13	1	63	138	138	25
Mindanao	2025	2	13	2	61	138	138	25
Mindanao	2025	2	13	3	59	138	138	25
Mindanao	2025	2	13	4	59	138	138	25
Mindanao	2025	2	13	5	60	138	138	25
Mindanao	2025	2	13	6	64	138	138	25
Mindanao	2025	2	13	7	66	138	138	25
Mindanao	2025	2	13	8	70	138	138	25
Mindanao	2025	2	13	9	80	138	138	25
Mindanao	2025	2	13	10	86	138	138	25
Mindanao	2025	2	13	11	90	138	138	25
Mindanao	2025	2	13	12	89	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	13	13	89	138	138	25
Mindanao	2025	2	13	14	95	138	138	25
Mindanao	2025	2	13	15	94	138	138	25
Mindanao	2025	2	13	16	91	138	138	25
Mindanao	2025	2	13	17	87	138	138	25
Mindanao	2025	2	13	18	90	138	138	25
Mindanao	2025	2	13	19	90	138	138	25
Mindanao	2025	2	13	20	87	138	138	25
Mindanao	2025	2	13	21	83	138	138	25
Mindanao	2025	2	13	22	78	138	138	25
Mindanao	2025	2	13	23	73	138	138	25
Mindanao	2025	2	13	24	68	138	138	25
Mindanao	2025	2	14	1	65	138	138	25
Mindanao	2025	2	14	2	63	138	138	25
Mindanao	2025	2	14	3	61	138	138	25
Mindanao	2025	2	14	4	61	138	138	25
Mindanao	2025	2	14	5	62	138	138	25
Mindanao	2025	2	14	6	66	138	138	25
Mindanao	2025	2	14	7	67	138	138	25
Mindanao	2025	2	14	8	73	138	138	25
Mindanao	2025	2	14	9	82	138	138	25
Mindanao	2025	2	14	10	90	138	138	25
Mindanao	2025	2	14	11	96	138	138	25
Mindanao	2025	2	14	12	92	138	138	25
Mindanao	2025	2	14	13	93	138	138	25
Mindanao	2025	2	14	14	97	138	138	25
Mindanao	2025	2	14	15	98	138	138	25
Mindanao	2025	2	14	16	95	138	138	25
Mindanao	2025	2	14	17	90	138	138	25
Mindanao	2025	2	14	18	92	138	138	25
Mindanao	2025	2	14	19	91	138	138	25
Mindanao	2025	2	14	20	88	138	138	25
Mindanao	2025	2	14	21	85	138	138	25
Mindanao	2025	2	14	22	80	138	138	25
Mindanao	2025	2	14	23	73	138	138	25
Mindanao	2025	2	14	24	70	138	138	25
Mindanao	2025	2	15	1	66	138	138	25
Mindanao	2025	2	15	2	64	138	138	25
Mindanao	2025	2	15	3	62	138	138	25
Mindanao	2025	2	15	4	62	138	138	25
Mindanao	2025	2	15	5	62	138	138	25
Mindanao	2025	2	15	6	65	138	138	25
Mindanao	2025	2	15	7	65	138	138	25
Mindanao	2025	2	15	8	66	138	138	25
Mindanao	2025	2	15	9	72	138	138	25
Mindanao	2025	2	15	10	76	138	138	25
Mindanao	2025	2	15	11	80	138	138	25
Mindanao	2025	2	15	12	79	138	138	25
Mindanao	2025	2	15	13	81	138	138	25
Mindanao	2025	2	15	14	83	138	138	25
Mindanao	2025	2	15	15	84	138	138	25
Mindanao	2025	2	15	16	81	138	138	25
Mindanao	2025	2	15	17	81	138	138	25
Mindanao	2025	2	15	18	86	138	138	25
Mindanao	2025	2	15	19	87	138	138	25
Mindanao	2025	2	15	20	85	138	138	25
Mindanao	2025	2	15	21	82	138	138	25
Mindanao	2025	2	15	22	77	138	138	25
Mindanao	2025	2	15	23	71	138	138	25
Mindanao	2025	2	15	24	65	138	138	25
Mindanao	2025	2	16	1	62	138	138	25
Mindanao	2025	2	16	2	60	138	138	25
Mindanao	2025	2	16	3	57	138	138	25
Mindanao	2025	2	16	4	57	138	138	25
Mindanao	2025	2	16	5	57	138	138	25
Mindanao	2025	2	16	6	60	138	138	25
Mindanao	2025	2	16	7	60	138	138	25
Mindanao	2025	2	16	8	57	138	138	25
Mindanao	2025	2	16	9	59	138	138	25
Mindanao	2025	2	16	10	61	138	138	25
Mindanao	2025	2	16	11	66	138	138	25
Mindanao	2025	2	16	12	66	138	138	25
Mindanao	2025	2	16	13	67	138	138	25
Mindanao	2025	2	16	14	69	138	138	25
Mindanao	2025	2	16	15	69	138	138	25
Mindanao	2025	2	16	16	70	138	138	25
Mindanao	2025	2	16	17	70	138	138	25
Mindanao	2025	2	16	18	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	16	19	82	138	138	25
Mindanao	2025	2	16	20	79	138	138	25
Mindanao	2025	2	16	21	76	138	138	25
Mindanao	2025	2	16	22	73	138	138	25
Mindanao	2025	2	16	23	68	138	138	25
Mindanao	2025	2	16	24	62	138	138	25
Mindanao	2025	2	17	1	60	138	138	25
Mindanao	2025	2	17	2	59	138	138	25
Mindanao	2025	2	17	3	57	138	138	25
Mindanao	2025	2	17	4	55	138	138	25
Mindanao	2025	2	17	5	57	138	138	25
Mindanao	2025	2	17	6	62	138	138	25
Mindanao	2025	2	17	7	62	138	138	25
Mindanao	2025	2	17	8	68	138	138	25
Mindanao	2025	2	17	9	80	138	138	25
Mindanao	2025	2	17	10	87	138	138	25
Mindanao	2025	2	17	11	94	138	138	25
Mindanao	2025	2	17	12	92	138	138	25
Mindanao	2025	2	17	13	96	138	138	25
Mindanao	2025	2	17	14	101	138	138	25
Mindanao	2025	2	17	15	99	138	138	25
Mindanao	2025	2	17	16	97	138	138	25
Mindanao	2025	2	17	17	90	138	138	25
Mindanao	2025	2	17	18	91	138	138	25
Mindanao	2025	2	17	19	91	138	138	25
Mindanao	2025	2	17	20	87	138	138	25
Mindanao	2025	2	17	21	85	138	138	25
Mindanao	2025	2	17	22	82	138	138	25
Mindanao	2025	2	17	23	75	138	138	25
Mindanao	2025	2	17	24	71	138	138	25
Mindanao	2025	2	18	1	67	138	138	25
Mindanao	2025	2	18	2	63	138	138	25
Mindanao	2025	2	18	3	61	138	138	25
Mindanao	2025	2	18	4	62	138	138	25
Mindanao	2025	2	18	5	63	138	138	25
Mindanao	2025	2	18	6	68	138	138	25
Mindanao	2025	2	18	7	67	138	138	25
Mindanao	2025	2	18	8	72	138	138	25
Mindanao	2025	2	18	9	83	138	138	25
Mindanao	2025	2	18	10	90	138	138	25
Mindanao	2025	2	18	11	94	138	138	25
Mindanao	2025	2	18	12	93	138	138	25
Mindanao	2025	2	18	13	93	138	138	25
Mindanao	2025	2	18	14	98	138	138	25
Mindanao	2025	2	18	15	96	138	138	25
Mindanao	2025	2	18	16	93	138	138	25
Mindanao	2025	2	18	17	87	138	138	25
Mindanao	2025	2	18	18	89	138	138	25
Mindanao	2025	2	18	19	90	138	138	25
Mindanao	2025	2	18	20	85	138	138	25
Mindanao	2025	2	18	21	82	138	138	25
Mindanao	2025	2	18	22	77	138	138	25
Mindanao	2025	2	18	23	73	138	138	25
Mindanao	2025	2	18	24	68	138	138	25
Mindanao	2025	2	19	1	65	138	138	25
Mindanao	2025	2	19	2	62	138	138	25
Mindanao	2025	2	19	3	60	138	138	25
Mindanao	2025	2	19	4	60	138	138	25
Mindanao	2025	2	19	5	62	138	138	25
Mindanao	2025	2	19	6	67	138	138	25
Mindanao	2025	2	19	7	68	138	138	25
Mindanao	2025	2	19	8	71	138	138	25
Mindanao	2025	2	19	9	82	138	138	25
Mindanao	2025	2	19	10	90	138	138	25
Mindanao	2025	2	19	11	97	138	138	25
Mindanao	2025	2	19	12	96	138	138	25
Mindanao	2025	2	19	13	96	138	138	25
Mindanao	2025	2	19	14	103	138	138	25
Mindanao	2025	2	19	15	102	138	138	25
Mindanao	2025	2	19	16	101	138	138	25
Mindanao	2025	2	19	17	93	138	138	25
Mindanao	2025	2	19	18	93	138	138	25
Mindanao	2025	2	19	19	96	138	138	25
Mindanao	2025	2	19	20	90	138	138	25
Mindanao	2025	2	19	21	87	138	138	25
Mindanao	2025	2	19	22	82	138	138	25
Mindanao	2025	2	19	23	76	138	138	25
Mindanao	2025	2	19	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	20	1	67	138	138	25
Mindanao	2025	2	20	2	65	138	138	25
Mindanao	2025	2	20	3	62	138	138	25
Mindanao	2025	2	20	4	61	138	138	25
Mindanao	2025	2	20	5	64	138	138	25
Mindanao	2025	2	20	6	67	138	138	25
Mindanao	2025	2	20	7	66	138	138	25
Mindanao	2025	2	20	8	72	138	138	25
Mindanao	2025	2	20	9	83	138	138	25
Mindanao	2025	2	20	10	88	138	138	25
Mindanao	2025	2	20	11	95	138	138	25
Mindanao	2025	2	20	12	92	138	138	25
Mindanao	2025	2	20	13	94	138	138	25
Mindanao	2025	2	20	14	99	138	138	25
Mindanao	2025	2	20	15	95	138	138	25
Mindanao	2025	2	20	16	95	138	138	25
Mindanao	2025	2	20	17	88	138	138	25
Mindanao	2025	2	20	18	89	138	138	25
Mindanao	2025	2	20	19	92	138	138	25
Mindanao	2025	2	20	20	89	138	138	25
Mindanao	2025	2	20	21	86	138	138	25
Mindanao	2025	2	20	22	80	138	138	25
Mindanao	2025	2	20	23	75	138	138	25
Mindanao	2025	2	20	24	69	138	138	25
Mindanao	2025	2	21	1	65	138	138	25
Mindanao	2025	2	21	2	63	138	138	25
Mindanao	2025	2	21	3	59	138	138	25
Mindanao	2025	2	21	4	59	138	138	25
Mindanao	2025	2	21	5	61	138	138	25
Mindanao	2025	2	21	6	67	138	138	25
Mindanao	2025	2	21	7	67	138	138	25
Mindanao	2025	2	21	8	72	138	138	25
Mindanao	2025	2	21	9	83	138	138	25
Mindanao	2025	2	21	10	89	138	138	25
Mindanao	2025	2	21	11	93	138	138	25
Mindanao	2025	2	21	12	89	138	138	25
Mindanao	2025	2	21	13	90	138	138	25
Mindanao	2025	2	21	14	96	138	138	25
Mindanao	2025	2	21	15	93	138	138	25
Mindanao	2025	2	21	16	91	138	138	25
Mindanao	2025	2	21	17	86	138	138	25
Mindanao	2025	2	21	18	89	138	138	25
Mindanao	2025	2	21	19	91	138	138	25
Mindanao	2025	2	21	20	87	138	138	25
Mindanao	2025	2	21	21	85	138	138	25
Mindanao	2025	2	21	22	79	138	138	25
Mindanao	2025	2	21	23	74	138	138	25
Mindanao	2025	2	21	24	70	138	138	25
Mindanao	2025	2	22	1	67	138	138	25
Mindanao	2025	2	22	2	63	138	138	25
Mindanao	2025	2	22	3	62	138	138	25
Mindanao	2025	2	22	4	61	138	138	25
Mindanao	2025	2	22	5	62	138	138	25
Mindanao	2025	2	22	6	65	138	138	25
Mindanao	2025	2	22	7	60	138	138	25
Mindanao	2025	2	22	8	64	138	138	25
Mindanao	2025	2	22	9	70	138	138	25
Mindanao	2025	2	22	10	74	138	138	25
Mindanao	2025	2	22	11	77	138	138	25
Mindanao	2025	2	22	12	75	138	138	25
Mindanao	2025	2	22	13	74	138	138	25
Mindanao	2025	2	22	14	74	138	138	25
Mindanao	2025	2	22	15	75	138	138	25
Mindanao	2025	2	22	16	75	138	138	25
Mindanao	2025	2	22	17	75	138	138	25
Mindanao	2025	2	22	18	78	138	138	25
Mindanao	2025	2	22	19	84	138	138	25
Mindanao	2025	2	22	20	79	138	138	25
Mindanao	2025	2	22	21	76	138	138	25
Mindanao	2025	2	22	22	72	138	138	25
Mindanao	2025	2	22	23	66	138	138	25
Mindanao	2025	2	22	24	63	138	138	25
Mindanao	2025	2	23	1	58	138	138	25
Mindanao	2025	2	23	2	57	138	138	25
Mindanao	2025	2	23	3	56	138	138	25
Mindanao	2025	2	23	4	55	138	138	25
Mindanao	2025	2	23	5	56	138	138	25
Mindanao	2025	2	23	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	23	7	59	138	138	25
Mindanao	2025	2	23	8	58	138	138	25
Mindanao	2025	2	23	9	56	138	138	25
Mindanao	2025	2	23	10	61	138	138	25
Mindanao	2025	2	23	11	66	138	138	25
Mindanao	2025	2	23	12	64	138	138	25
Mindanao	2025	2	23	13	64	138	138	25
Mindanao	2025	2	23	14	64	138	138	25
Mindanao	2025	2	23	15	64	138	138	25
Mindanao	2025	2	23	16	64	138	138	25
Mindanao	2025	2	23	17	68	138	138	25
Mindanao	2025	2	23	18	77	138	138	25
Mindanao	2025	2	23	19	75	138	138	25
Mindanao	2025	2	23	20	73	138	138	25
Mindanao	2025	2	23	21	68	138	138	25
Mindanao	2025	2	23	22	64	138	138	25
Mindanao	2025	2	23	23	58	138	138	25
Mindanao	2025	2	23	24	56	138	138	25
Mindanao	2025	2	24	1	53	138	138	25
Mindanao	2025	2	24	2	52	138	138	25
Mindanao	2025	2	24	3	51	138	138	25
Mindanao	2025	2	24	4	51	138	138	25
Mindanao	2025	2	24	5	53	138	138	25
Mindanao	2025	2	24	6	59	138	138	25
Mindanao	2025	2	24	7	59	138	138	25
Mindanao	2025	2	24	8	65	138	138	25
Mindanao	2025	2	24	9	75	138	138	25
Mindanao	2025	2	24	10	82	138	138	25
Mindanao	2025	2	24	11	87	138	138	25
Mindanao	2025	2	24	12	86	138	138	25
Mindanao	2025	2	24	13	86	138	138	25
Mindanao	2025	2	24	14	90	138	138	25
Mindanao	2025	2	24	15	89	138	138	25
Mindanao	2025	2	24	16	88	138	138	25
Mindanao	2025	2	24	17	83	138	138	25
Mindanao	2025	2	24	18	87	138	138	25
Mindanao	2025	2	24	19	87	138	138	25
Mindanao	2025	2	24	20	82	138	138	25
Mindanao	2025	2	24	21	79	138	138	25
Mindanao	2025	2	24	22	73	138	138	25
Mindanao	2025	2	24	23	68	138	138	25
Mindanao	2025	2	24	24	63	138	138	25
Mindanao	2025	2	25	1	59	138	138	25
Mindanao	2025	2	25	2	57	138	138	25
Mindanao	2025	2	25	3	55	138	138	25
Mindanao	2025	2	25	4	55	138	138	25
Mindanao	2025	2	25	5	57	138	138	25
Mindanao	2025	2	25	6	60	138	138	25
Mindanao	2025	2	25	7	60	138	138	25
Mindanao	2025	2	25	8	61	138	138	25
Mindanao	2025	2	25	9	66	138	138	25
Mindanao	2025	2	25	10	71	138	138	25
Mindanao	2025	2	25	11	72	138	138	25
Mindanao	2025	2	25	12	72	138	138	25
Mindanao	2025	2	25	13	70	138	138	25
Mindanao	2025	2	25	14	73	138	138	25
Mindanao	2025	2	25	15	73	138	138	25
Mindanao	2025	2	25	16	72	138	138	25
Mindanao	2025	2	25	17	74	138	138	25
Mindanao	2025	2	25	18	80	138	138	25
Mindanao	2025	2	25	19	81	138	138	25
Mindanao	2025	2	25	20	79	138	138	25
Mindanao	2025	2	25	21	74	138	138	25
Mindanao	2025	2	25	22	69	138	138	25
Mindanao	2025	2	25	23	65	138	138	25
Mindanao	2025	2	25	24	61	138	138	25
Mindanao	2025	2	26	1	62	138	138	25
Mindanao	2025	2	26	2	59	138	138	25
Mindanao	2025	2	26	3	57	138	138	25
Mindanao	2025	2	26	4	57	138	138	25
Mindanao	2025	2	26	5	59	138	138	25
Mindanao	2025	2	26	6	65	138	138	25
Mindanao	2025	2	26	7	65	138	138	25
Mindanao	2025	2	26	8	69	138	138	25
Mindanao	2025	2	26	9	77	138	138	25
Mindanao	2025	2	26	10	82	138	138	25
Mindanao	2025	2	26	11	87	138	138	25
Mindanao	2025	2	26	12	86	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	2	26	13	87	138	138	25
Mindanao	2025	2	26	14	92	138	138	25
Mindanao	2025	2	26	15	93	138	138	25
Mindanao	2025	2	26	16	91	138	138	25
Mindanao	2025	2	26	17	84	138	138	25
Mindanao	2025	2	26	18	88	138	138	25
Mindanao	2025	2	26	19	89	138	138	25
Mindanao	2025	2	26	20	85	138	138	25
Mindanao	2025	2	26	21	82	138	138	25
Mindanao	2025	2	26	22	76	138	138	25
Mindanao	2025	2	26	23	72	138	138	25
Mindanao	2025	2	26	24	65	138	138	25
Mindanao	2025	2	27	1	62	138	138	25
Mindanao	2025	2	27	2	60	138	138	25
Mindanao	2025	2	27	3	58	138	138	25
Mindanao	2025	2	27	4	56	138	138	25
Mindanao	2025	2	27	5	60	138	138	25
Mindanao	2025	2	27	6	65	138	138	25
Mindanao	2025	2	27	7	65	138	138	25
Mindanao	2025	2	27	8	69	138	138	25
Mindanao	2025	2	27	9	80	138	138	25
Mindanao	2025	2	27	10	86	138	138	25
Mindanao	2025	2	27	11	93	138	138	25
Mindanao	2025	2	27	12	89	138	138	25
Mindanao	2025	2	27	13	90	138	138	25
Mindanao	2025	2	27	14	97	138	138	25
Mindanao	2025	2	27	15	94	138	138	25
Mindanao	2025	2	27	16	93	138	138	25
Mindanao	2025	2	27	17	86	138	138	25
Mindanao	2025	2	27	18	89	138	138	25
Mindanao	2025	2	27	19	83	138	138	25
Mindanao	2025	2	27	20	77	138	138	25
Mindanao	2025	2	27	21	77	138	138	25
Mindanao	2025	2	27	22	73	138	138	25
Mindanao	2025	2	27	23	69	138	138	25
Mindanao	2025	2	27	24	63	138	138	25
Mindanao	2025	2	28	1	67	138	138	25
Mindanao	2025	2	28	2	63	138	138	25
Mindanao	2025	2	28	3	61	138	138	25
Mindanao	2025	2	28	4	60	138	138	25
Mindanao	2025	2	28	5	62	138	138	25
Mindanao	2025	2	28	6	67	138	138	25
Mindanao	2025	2	28	7	66	138	138	25
Mindanao	2025	2	28	8	72	138	138	25
Mindanao	2025	2	28	9	82	138	138	25
Mindanao	2025	2	28	10	91	138	138	25
Mindanao	2025	2	28	11	96	138	138	25
Mindanao	2025	2	28	12	95	138	138	25
Mindanao	2025	2	28	13	97	138	138	25
Mindanao	2025	2	28	14	103	138	138	25
Mindanao	2025	2	28	15	103	138	138	25
Mindanao	2025	2	28	16	99	138	138	25
Mindanao	2025	2	28	17	91	138	138	25
Mindanao	2025	2	28	18	93	138	138	25
Mindanao	2025	2	28	19	96	138	138	25
Mindanao	2025	2	28	20	91	138	138	25
Mindanao	2025	2	28	21	87	138	138	25
Mindanao	2025	2	28	22	82	138	138	25
Mindanao	2025	2	28	23	77	138	138	25
Mindanao	2025	2	28	24	72	138	138	25
Mindanao	2025	3	1	1	58	138	138	25
Mindanao	2025	3	1	2	56	138	138	25
Mindanao	2025	3	1	3	55	138	138	25
Mindanao	2025	3	1	4	55	138	138	25
Mindanao	2025	3	1	5	57	138	138	25
Mindanao	2025	3	1	6	61	138	138	25
Mindanao	2025	3	1	7	61	138	138	25
Mindanao	2025	3	1	8	62	138	138	25
Mindanao	2025	3	1	9	69	138	138	25
Mindanao	2025	3	1	10	74	138	138	25
Mindanao	2025	3	1	11	78	138	138	25
Mindanao	2025	3	1	12	76	138	138	25
Mindanao	2025	3	1	13	77	138	138	25
Mindanao	2025	3	1	14	82	138	138	25
Mindanao	2025	3	1	15	80	138	138	25
Mindanao	2025	3	1	16	78	138	138	25
Mindanao	2025	3	1	17	78	138	138	25
Mindanao	2025	3	1	18	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	1	19	83	138	138	25
Mindanao	2025	3	1	20	80	138	138	25
Mindanao	2025	3	1	21	76	138	138	25
Mindanao	2025	3	1	22	73	138	138	25
Mindanao	2025	3	1	23	69	138	138	25
Mindanao	2025	3	1	24	64	138	138	25
Mindanao	2025	3	2	1	60	138	138	25
Mindanao	2025	3	2	2	58	138	138	25
Mindanao	2025	3	2	3	56	138	138	25
Mindanao	2025	3	2	4	57	138	138	25
Mindanao	2025	3	2	5	58	138	138	25
Mindanao	2025	3	2	6	59	138	138	25
Mindanao	2025	3	2	7	60	138	138	25
Mindanao	2025	3	2	8	59	138	138	25
Mindanao	2025	3	2	9	55	138	138	25
Mindanao	2025	3	2	10	58	138	138	25
Mindanao	2025	3	2	11	61	138	138	25
Mindanao	2025	3	2	12	61	138	138	25
Mindanao	2025	3	2	13	62	138	138	25
Mindanao	2025	3	2	14	62	138	138	25
Mindanao	2025	3	2	15	61	138	138	25
Mindanao	2025	3	2	16	63	138	138	25
Mindanao	2025	3	2	17	65	138	138	25
Mindanao	2025	3	2	18	75	138	138	25
Mindanao	2025	3	2	19	77	138	138	25
Mindanao	2025	3	2	20	74	138	138	25
Mindanao	2025	3	2	21	71	138	138	25
Mindanao	2025	3	2	22	66	138	138	25
Mindanao	2025	3	2	23	62	138	138	25
Mindanao	2025	3	2	24	56	138	138	25
Mindanao	2025	3	3	1	54	138	138	25
Mindanao	2025	3	3	2	53	138	138	25
Mindanao	2025	3	3	3	52	138	138	25
Mindanao	2025	3	3	4	52	138	138	25
Mindanao	2025	3	3	5	54	138	138	25
Mindanao	2025	3	3	6	59	138	138	25
Mindanao	2025	3	3	7	61	138	138	25
Mindanao	2025	3	3	8	65	138	138	25
Mindanao	2025	3	3	9	74	138	138	25
Mindanao	2025	3	3	10	81	138	138	25
Mindanao	2025	3	3	11	85	138	138	25
Mindanao	2025	3	3	12	87	138	138	25
Mindanao	2025	3	3	13	88	138	138	25
Mindanao	2025	3	3	14	91	138	138	25
Mindanao	2025	3	3	15	92	138	138	25
Mindanao	2025	3	3	16	89	138	138	25
Mindanao	2025	3	3	17	86	138	138	25
Mindanao	2025	3	3	18	90	138	138	25
Mindanao	2025	3	3	19	89	138	138	25
Mindanao	2025	3	3	20	84	138	138	25
Mindanao	2025	3	3	21	81	138	138	25
Mindanao	2025	3	3	22	74	138	138	25
Mindanao	2025	3	3	23	70	138	138	25
Mindanao	2025	3	3	24	64	138	138	25
Mindanao	2025	3	4	1	59	138	138	25
Mindanao	2025	3	4	2	59	138	138	25
Mindanao	2025	3	4	3	58	138	138	25
Mindanao	2025	3	4	4	57	138	138	25
Mindanao	2025	3	4	5	60	138	138	25
Mindanao	2025	3	4	6	66	138	138	25
Mindanao	2025	3	4	7	64	138	138	25
Mindanao	2025	3	4	8	68	138	138	25
Mindanao	2025	3	4	9	76	138	138	25
Mindanao	2025	3	4	10	81	138	138	25
Mindanao	2025	3	4	11	86	138	138	25
Mindanao	2025	3	4	12	84	138	138	25
Mindanao	2025	3	4	13	85	138	138	25
Mindanao	2025	3	4	14	90	138	138	25
Mindanao	2025	3	4	15	90	138	138	25
Mindanao	2025	3	4	16	90	138	138	25
Mindanao	2025	3	4	17	85	138	138	25
Mindanao	2025	3	4	18	86	138	138	25
Mindanao	2025	3	4	19	91	138	138	25
Mindanao	2025	3	4	20	86	138	138	25
Mindanao	2025	3	4	21	83	138	138	25
Mindanao	2025	3	4	22	76	138	138	25
Mindanao	2025	3	4	23	71	138	138	25
Mindanao	2025	3	4	24	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	5	1	63	138	138	25
Mindanao	2025	3	5	2	60	138	138	25
Mindanao	2025	3	5	3	58	138	138	25
Mindanao	2025	3	5	4	58	138	138	25
Mindanao	2025	3	5	5	60	138	138	25
Mindanao	2025	3	5	6	67	138	138	25
Mindanao	2025	3	5	7	65	138	138	25
Mindanao	2025	3	5	8	70	138	138	25
Mindanao	2025	3	5	9	81	138	138	25
Mindanao	2025	3	5	10	89	138	138	25
Mindanao	2025	3	5	11	94	138	138	25
Mindanao	2025	3	5	12	91	138	138	25
Mindanao	2025	3	5	13	94	138	138	25
Mindanao	2025	3	5	14	99	138	138	25
Mindanao	2025	3	5	15	101	138	138	25
Mindanao	2025	3	5	16	98	138	138	25
Mindanao	2025	3	5	17	89	138	138	25
Mindanao	2025	3	5	18	89	138	138	25
Mindanao	2025	3	5	19	92	138	138	25
Mindanao	2025	3	5	20	90	138	138	25
Mindanao	2025	3	5	21	85	138	138	25
Mindanao	2025	3	5	22	80	138	138	25
Mindanao	2025	3	5	23	76	138	138	25
Mindanao	2025	3	5	24	71	138	138	25
Mindanao	2025	3	6	1	67	138	138	25
Mindanao	2025	3	6	2	64	138	138	25
Mindanao	2025	3	6	3	62	138	138	25
Mindanao	2025	3	6	4	61	138	138	25
Mindanao	2025	3	6	5	64	138	138	25
Mindanao	2025	3	6	6	68	138	138	25
Mindanao	2025	3	6	7	67	138	138	25
Mindanao	2025	3	6	8	73	138	138	25
Mindanao	2025	3	6	9	84	138	138	25
Mindanao	2025	3	6	10	90	138	138	25
Mindanao	2025	3	6	11	95	138	138	25
Mindanao	2025	3	6	12	95	138	138	25
Mindanao	2025	3	6	13	96	138	138	25
Mindanao	2025	3	6	14	102	138	138	25
Mindanao	2025	3	6	15	100	138	138	25
Mindanao	2025	3	6	16	98	138	138	25
Mindanao	2025	3	6	17	90	138	138	25
Mindanao	2025	3	6	18	93	138	138	25
Mindanao	2025	3	6	19	93	138	138	25
Mindanao	2025	3	6	20	91	138	138	25
Mindanao	2025	3	6	21	86	138	138	25
Mindanao	2025	3	6	22	80	138	138	25
Mindanao	2025	3	6	23	76	138	138	25
Mindanao	2025	3	6	24	70	138	138	25
Mindanao	2025	3	7	1	67	138	138	25
Mindanao	2025	3	7	2	63	138	138	25
Mindanao	2025	3	7	3	61	138	138	25
Mindanao	2025	3	7	4	60	138	138	25
Mindanao	2025	3	7	5	62	138	138	25
Mindanao	2025	3	7	6	67	138	138	25
Mindanao	2025	3	7	7	66	138	138	25
Mindanao	2025	3	7	8	72	138	138	25
Mindanao	2025	3	7	9	82	138	138	25
Mindanao	2025	3	7	10	91	138	138	25
Mindanao	2025	3	7	11	96	138	138	25
Mindanao	2025	3	7	12	95	138	138	25
Mindanao	2025	3	7	13	97	138	138	25
Mindanao	2025	3	7	14	103	138	138	25
Mindanao	2025	3	7	15	103	138	138	25
Mindanao	2025	3	7	16	99	138	138	25
Mindanao	2025	3	7	17	91	138	138	25
Mindanao	2025	3	7	18	93	138	138	25
Mindanao	2025	3	7	19	96	138	138	25
Mindanao	2025	3	7	20	91	138	138	25
Mindanao	2025	3	7	21	87	138	138	25
Mindanao	2025	3	7	22	82	138	138	25
Mindanao	2025	3	7	23	77	138	138	25
Mindanao	2025	3	7	24	72	138	138	25
Mindanao	2025	3	8	1	68	138	138	25
Mindanao	2025	3	8	2	64	138	138	25
Mindanao	2025	3	8	3	61	138	138	25
Mindanao	2025	3	8	4	61	138	138	25
Mindanao	2025	3	8	5	61	138	138	25
Mindanao	2025	3	8	6	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	8	7	61	138	138	25
Mindanao	2025	3	8	8	64	138	138	25
Mindanao	2025	3	8	9	73	138	138	25
Mindanao	2025	3	8	10	79	138	138	25
Mindanao	2025	3	8	11	82	138	138	25
Mindanao	2025	3	8	12	81	138	138	25
Mindanao	2025	3	8	13	82	138	138	25
Mindanao	2025	3	8	14	86	138	138	25
Mindanao	2025	3	8	15	84	138	138	25
Mindanao	2025	3	8	16	82	138	138	25
Mindanao	2025	3	8	17	80	138	138	25
Mindanao	2025	3	8	18	85	138	138	25
Mindanao	2025	3	8	19	85	138	138	25
Mindanao	2025	3	8	20	83	138	138	25
Mindanao	2025	3	8	21	79	138	138	25
Mindanao	2025	3	8	22	74	138	138	25
Mindanao	2025	3	8	23	68	138	138	25
Mindanao	2025	3	8	24	64	138	138	25
Mindanao	2025	3	9	1	61	138	138	25
Mindanao	2025	3	9	2	58	138	138	25
Mindanao	2025	3	9	3	57	138	138	25
Mindanao	2025	3	9	4	55	138	138	25
Mindanao	2025	3	9	5	57	138	138	25
Mindanao	2025	3	9	6	60	138	138	25
Mindanao	2025	3	9	7	59	138	138	25
Mindanao	2025	3	9	8	56	138	138	25
Mindanao	2025	3	9	9	59	138	138	25
Mindanao	2025	3	9	10	62	138	138	25
Mindanao	2025	3	9	11	65	138	138	25
Mindanao	2025	3	9	12	66	138	138	25
Mindanao	2025	3	9	13	65	138	138	25
Mindanao	2025	3	9	14	66	138	138	25
Mindanao	2025	3	9	15	65	138	138	25
Mindanao	2025	3	9	16	64	138	138	25
Mindanao	2025	3	9	17	67	138	138	25
Mindanao	2025	3	9	18	78	138	138	25
Mindanao	2025	3	9	19	79	138	138	25
Mindanao	2025	3	9	20	76	138	138	25
Mindanao	2025	3	9	21	73	138	138	25
Mindanao	2025	3	9	22	68	138	138	25
Mindanao	2025	3	9	23	63	138	138	25
Mindanao	2025	3	9	24	59	138	138	25
Mindanao	2025	3	10	1	56	138	138	25
Mindanao	2025	3	10	2	54	138	138	25
Mindanao	2025	3	10	3	53	138	138	25
Mindanao	2025	3	10	4	54	138	138	25
Mindanao	2025	3	10	5	55	138	138	25
Mindanao	2025	3	10	6	61	138	138	25
Mindanao	2025	3	10	7	61	138	138	25
Mindanao	2025	3	10	8	67	138	138	25
Mindanao	2025	3	10	9	76	138	138	25
Mindanao	2025	3	10	10	83	138	138	25
Mindanao	2025	3	10	11	89	138	138	25
Mindanao	2025	3	10	12	90	138	138	25
Mindanao	2025	3	10	13	91	138	138	25
Mindanao	2025	3	10	14	95	138	138	25
Mindanao	2025	3	10	15	92	138	138	25
Mindanao	2025	3	10	16	90	138	138	25
Mindanao	2025	3	10	17	88	138	138	25
Mindanao	2025	3	10	18	90	138	138	25
Mindanao	2025	3	10	19	87	138	138	25
Mindanao	2025	3	10	20	83	138	138	25
Mindanao	2025	3	10	21	79	138	138	25
Mindanao	2025	3	10	22	73	138	138	25
Mindanao	2025	3	10	23	68	138	138	25
Mindanao	2025	3	10	24	63	138	138	25
Mindanao	2025	3	11	1	61	138	138	25
Mindanao	2025	3	11	2	58	138	138	25
Mindanao	2025	3	11	3	56	138	138	25
Mindanao	2025	3	11	4	56	138	138	25
Mindanao	2025	3	11	5	58	138	138	25
Mindanao	2025	3	11	6	62	138	138	25
Mindanao	2025	3	11	7	62	138	138	25
Mindanao	2025	3	11	8	68	138	138	25
Mindanao	2025	3	11	9	78	138	138	25
Mindanao	2025	3	11	10	85	138	138	25
Mindanao	2025	3	11	11	90	138	138	25
Mindanao	2025	3	11	12	87	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	11	13	88	138	138	25
Mindanao	2025	3	11	14	93	138	138	25
Mindanao	2025	3	11	15	93	138	138	25
Mindanao	2025	3	11	16	91	138	138	25
Mindanao	2025	3	11	17	86	138	138	25
Mindanao	2025	3	11	18	90	138	138	25
Mindanao	2025	3	11	19	89	138	138	25
Mindanao	2025	3	11	20	84	138	138	25
Mindanao	2025	3	11	21	79	138	138	25
Mindanao	2025	3	11	22	74	138	138	25
Mindanao	2025	3	11	23	69	138	138	25
Mindanao	2025	3	11	24	65	138	138	25
Mindanao	2025	3	12	1	61	138	138	25
Mindanao	2025	3	12	2	58	138	138	25
Mindanao	2025	3	12	3	57	138	138	25
Mindanao	2025	3	12	4	56	138	138	25
Mindanao	2025	3	12	5	59	138	138	25
Mindanao	2025	3	12	6	65	138	138	25
Mindanao	2025	3	12	7	65	138	138	25
Mindanao	2025	3	12	8	71	138	138	25
Mindanao	2025	3	12	9	81	138	138	25
Mindanao	2025	3	12	10	85	138	138	25
Mindanao	2025	3	12	11	91	138	138	25
Mindanao	2025	3	12	12	89	138	138	25
Mindanao	2025	3	12	13	88	138	138	25
Mindanao	2025	3	12	14	94	138	138	25
Mindanao	2025	3	12	15	91	138	138	25
Mindanao	2025	3	12	16	90	138	138	25
Mindanao	2025	3	12	17	87	138	138	25
Mindanao	2025	3	12	18	88	138	138	25
Mindanao	2025	3	12	19	88	138	138	25
Mindanao	2025	3	12	20	83	138	138	25
Mindanao	2025	3	12	21	79	138	138	25
Mindanao	2025	3	12	22	73	138	138	25
Mindanao	2025	3	12	23	68	138	138	25
Mindanao	2025	3	12	24	64	138	138	25
Mindanao	2025	3	13	1	61	138	138	25
Mindanao	2025	3	13	2	58	138	138	25
Mindanao	2025	3	13	3	57	138	138	25
Mindanao	2025	3	13	4	57	138	138	25
Mindanao	2025	3	13	5	59	138	138	25
Mindanao	2025	3	13	6	64	138	138	25
Mindanao	2025	3	13	7	64	138	138	25
Mindanao	2025	3	13	8	70	138	138	25
Mindanao	2025	3	13	9	79	138	138	25
Mindanao	2025	3	13	10	87	138	138	25
Mindanao	2025	3	13	11	94	138	138	25
Mindanao	2025	3	13	12	93	138	138	25
Mindanao	2025	3	13	13	92	138	138	25
Mindanao	2025	3	13	14	99	138	138	25
Mindanao	2025	3	13	15	100	138	138	25
Mindanao	2025	3	13	16	98	138	138	25
Mindanao	2025	3	13	17	90	138	138	25
Mindanao	2025	3	13	18	92	138	138	25
Mindanao	2025	3	13	19	93	138	138	25
Mindanao	2025	3	13	20	88	138	138	25
Mindanao	2025	3	13	21	86	138	138	25
Mindanao	2025	3	13	22	80	138	138	25
Mindanao	2025	3	13	23	75	138	138	25
Mindanao	2025	3	13	24	71	138	138	25
Mindanao	2025	3	14	1	66	138	138	25
Mindanao	2025	3	14	2	64	138	138	25
Mindanao	2025	3	14	3	61	138	138	25
Mindanao	2025	3	14	4	61	138	138	25
Mindanao	2025	3	14	5	64	138	138	25
Mindanao	2025	3	14	6	68	138	138	25
Mindanao	2025	3	14	7	66	138	138	25
Mindanao	2025	3	14	8	72	138	138	25
Mindanao	2025	3	14	9	85	138	138	25
Mindanao	2025	3	14	10	92	138	138	25
Mindanao	2025	3	14	11	98	138	138	25
Mindanao	2025	3	14	12	96	138	138	25
Mindanao	2025	3	14	13	97	138	138	25
Mindanao	2025	3	14	14	103	138	138	25
Mindanao	2025	3	14	15	102	138	138	25
Mindanao	2025	3	14	16	99	138	138	25
Mindanao	2025	3	14	17	91	138	138	25
Mindanao	2025	3	14	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	14	19	94	138	138	25
Mindanao	2025	3	14	20	91	138	138	25
Mindanao	2025	3	14	21	87	138	138	25
Mindanao	2025	3	14	22	82	138	138	25
Mindanao	2025	3	14	23	77	138	138	25
Mindanao	2025	3	14	24	72	138	138	25
Mindanao	2025	3	15	1	67	138	138	25
Mindanao	2025	3	15	2	64	138	138	25
Mindanao	2025	3	15	3	61	138	138	25
Mindanao	2025	3	15	4	60	138	138	25
Mindanao	2025	3	15	5	63	138	138	25
Mindanao	2025	3	15	6	66	138	138	25
Mindanao	2025	3	15	7	62	138	138	25
Mindanao	2025	3	15	8	66	138	138	25
Mindanao	2025	3	15	9	73	138	138	25
Mindanao	2025	3	15	10	79	138	138	25
Mindanao	2025	3	15	11	83	138	138	25
Mindanao	2025	3	15	12	83	138	138	25
Mindanao	2025	3	15	13	86	138	138	25
Mindanao	2025	3	15	14	88	138	138	25
Mindanao	2025	3	15	15	86	138	138	25
Mindanao	2025	3	15	16	82	138	138	25
Mindanao	2025	3	15	17	80	138	138	25
Mindanao	2025	3	15	18	85	138	138	25
Mindanao	2025	3	15	19	86	138	138	25
Mindanao	2025	3	15	20	88	138	138	25
Mindanao	2025	3	15	21	84	138	138	25
Mindanao	2025	3	15	22	78	138	138	25
Mindanao	2025	3	15	23	73	138	138	25
Mindanao	2025	3	15	24	68	138	138	25
Mindanao	2025	3	16	1	64	138	138	25
Mindanao	2025	3	16	2	61	138	138	25
Mindanao	2025	3	16	3	59	138	138	25
Mindanao	2025	3	16	4	58	138	138	25
Mindanao	2025	3	16	5	59	138	138	25
Mindanao	2025	3	16	6	62	138	138	25
Mindanao	2025	3	16	7	60	138	138	25
Mindanao	2025	3	16	8	60	138	138	25
Mindanao	2025	3	16	9	62	138	138	25
Mindanao	2025	3	16	10	68	138	138	25
Mindanao	2025	3	16	11	73	138	138	25
Mindanao	2025	3	16	12	74	138	138	25
Mindanao	2025	3	16	13	77	138	138	25
Mindanao	2025	3	16	14	79	138	138	25
Mindanao	2025	3	16	15	75	138	138	25
Mindanao	2025	3	16	16	75	138	138	25
Mindanao	2025	3	16	17	76	138	138	25
Mindanao	2025	3	16	18	82	138	138	25
Mindanao	2025	3	16	19	83	138	138	25
Mindanao	2025	3	16	20	81	138	138	25
Mindanao	2025	3	16	21	80	138	138	25
Mindanao	2025	3	16	22	76	138	138	25
Mindanao	2025	3	16	23	71	138	138	25
Mindanao	2025	3	16	24	66	138	138	25
Mindanao	2025	3	17	1	63	138	138	25
Mindanao	2025	3	17	2	60	138	138	25
Mindanao	2025	3	17	3	58	138	138	25
Mindanao	2025	3	17	4	57	138	138	25
Mindanao	2025	3	17	5	59	138	138	25
Mindanao	2025	3	17	6	66	138	138	25
Mindanao	2025	3	17	7	63	138	138	25
Mindanao	2025	3	17	8	71	138	138	25
Mindanao	2025	3	17	9	83	138	138	25
Mindanao	2025	3	17	10	91	138	138	25
Mindanao	2025	3	17	11	98	138	138	25
Mindanao	2025	3	17	12	98	138	138	25
Mindanao	2025	3	17	13	100	138	138	25
Mindanao	2025	3	17	14	104	138	138	25
Mindanao	2025	3	17	15	103	138	138	25
Mindanao	2025	3	17	16	100	138	138	25
Mindanao	2025	3	17	17	91	138	138	25
Mindanao	2025	3	17	18	92	138	138	25
Mindanao	2025	3	17	19	91	138	138	25
Mindanao	2025	3	17	20	88	138	138	25
Mindanao	2025	3	17	21	84	138	138	25
Mindanao	2025	3	17	22	79	138	138	25
Mindanao	2025	3	17	23	74	138	138	25
Mindanao	2025	3	17	24	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	18	1	65	138	138	25
Mindanao	2025	3	18	2	62	138	138	25
Mindanao	2025	3	18	3	60	138	138	25
Mindanao	2025	3	18	4	59	138	138	25
Mindanao	2025	3	18	5	61	138	138	25
Mindanao	2025	3	18	6	65	138	138	25
Mindanao	2025	3	18	7	65	138	138	25
Mindanao	2025	3	18	8	73	138	138	25
Mindanao	2025	3	18	9	83	138	138	25
Mindanao	2025	3	18	10	92	138	138	25
Mindanao	2025	3	18	11	97	138	138	25
Mindanao	2025	3	18	12	96	138	138	25
Mindanao	2025	3	18	13	95	138	138	25
Mindanao	2025	3	18	14	102	138	138	25
Mindanao	2025	3	18	15	103	138	138	25
Mindanao	2025	3	18	16	99	138	138	25
Mindanao	2025	3	18	17	93	138	138	25
Mindanao	2025	3	18	18	96	138	138	25
Mindanao	2025	3	18	19	96	138	138	25
Mindanao	2025	3	18	20	92	138	138	25
Mindanao	2025	3	18	21	88	138	138	25
Mindanao	2025	3	18	22	82	138	138	25
Mindanao	2025	3	18	23	76	138	138	25
Mindanao	2025	3	18	24	72	138	138	25
Mindanao	2025	3	19	1	68	138	138	25
Mindanao	2025	3	19	2	65	138	138	25
Mindanao	2025	3	19	3	62	138	138	25
Mindanao	2025	3	19	4	61	138	138	25
Mindanao	2025	3	19	5	64	138	138	25
Mindanao	2025	3	19	6	69	138	138	25
Mindanao	2025	3	19	7	67	138	138	25
Mindanao	2025	3	19	8	74	138	138	25
Mindanao	2025	3	19	9	87	138	138	25
Mindanao	2025	3	19	10	93	138	138	25
Mindanao	2025	3	19	11	98	138	138	25
Mindanao	2025	3	19	12	98	138	138	25
Mindanao	2025	3	19	13	100	138	138	25
Mindanao	2025	3	19	14	104	138	138	25
Mindanao	2025	3	19	15	97	138	138	25
Mindanao	2025	3	19	16	100	138	138	25
Mindanao	2025	3	19	17	93	138	138	25
Mindanao	2025	3	19	18	94	138	138	25
Mindanao	2025	3	19	19	95	138	138	25
Mindanao	2025	3	19	20	91	138	138	25
Mindanao	2025	3	19	21	87	138	138	25
Mindanao	2025	3	19	22	81	138	138	25
Mindanao	2025	3	19	23	76	138	138	25
Mindanao	2025	3	19	24	71	138	138	25
Mindanao	2025	3	20	1	68	138	138	25
Mindanao	2025	3	20	2	66	138	138	25
Mindanao	2025	3	20	3	63	138	138	25
Mindanao	2025	3	20	4	63	138	138	25
Mindanao	2025	3	20	5	65	138	138	25
Mindanao	2025	3	20	6	69	138	138	25
Mindanao	2025	3	20	7	67	138	138	25
Mindanao	2025	3	20	8	74	138	138	25
Mindanao	2025	3	20	9	85	138	138	25
Mindanao	2025	3	20	10	91	138	138	25
Mindanao	2025	3	20	11	93	138	138	25
Mindanao	2025	3	20	12	91	138	138	25
Mindanao	2025	3	20	13	90	138	138	25
Mindanao	2025	3	20	14	96	138	138	25
Mindanao	2025	3	20	15	96	138	138	25
Mindanao	2025	3	20	16	92	138	138	25
Mindanao	2025	3	20	17	90	138	138	25
Mindanao	2025	3	20	18	93	138	138	25
Mindanao	2025	3	20	19	93	138	138	25
Mindanao	2025	3	20	20	88	138	138	25
Mindanao	2025	3	20	21	84	138	138	25
Mindanao	2025	3	20	22	78	138	138	25
Mindanao	2025	3	20	23	73	138	138	25
Mindanao	2025	3	20	24	68	138	138	25
Mindanao	2025	3	21	1	64	138	138	25
Mindanao	2025	3	21	2	62	138	138	25
Mindanao	2025	3	21	3	60	138	138	25
Mindanao	2025	3	21	4	58	138	138	25
Mindanao	2025	3	21	5	62	138	138	25
Mindanao	2025	3	21	6	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	21	7	65	138	138	25
Mindanao	2025	3	21	8	71	138	138	25
Mindanao	2025	3	21	9	82	138	138	25
Mindanao	2025	3	21	10	89	138	138	25
Mindanao	2025	3	21	11	95	138	138	25
Mindanao	2025	3	21	12	93	138	138	25
Mindanao	2025	3	21	13	96	138	138	25
Mindanao	2025	3	21	14	101	138	138	25
Mindanao	2025	3	21	15	99	138	138	25
Mindanao	2025	3	21	16	98	138	138	25
Mindanao	2025	3	21	17	90	138	138	25
Mindanao	2025	3	21	18	92	138	138	25
Mindanao	2025	3	21	19	96	138	138	25
Mindanao	2025	3	21	20	93	138	138	25
Mindanao	2025	3	21	21	88	138	138	25
Mindanao	2025	3	21	22	81	138	138	25
Mindanao	2025	3	21	23	77	138	138	25
Mindanao	2025	3	21	24	72	138	138	25
Mindanao	2025	3	22	1	68	138	138	25
Mindanao	2025	3	22	2	64	138	138	25
Mindanao	2025	3	22	3	61	138	138	25
Mindanao	2025	3	22	4	61	138	138	25
Mindanao	2025	3	22	5	61	138	138	25
Mindanao	2025	3	22	6	63	138	138	25
Mindanao	2025	3	22	7	63	138	138	25
Mindanao	2025	3	22	8	68	138	138	25
Mindanao	2025	3	22	9	75	138	138	25
Mindanao	2025	3	22	10	81	138	138	25
Mindanao	2025	3	22	11	85	138	138	25
Mindanao	2025	3	22	12	85	138	138	25
Mindanao	2025	3	22	13	86	138	138	25
Mindanao	2025	3	22	14	91	138	138	25
Mindanao	2025	3	22	15	88	138	138	25
Mindanao	2025	3	22	16	85	138	138	25
Mindanao	2025	3	22	17	82	138	138	25
Mindanao	2025	3	22	18	86	138	138	25
Mindanao	2025	3	22	19	91	138	138	25
Mindanao	2025	3	22	20	87	138	138	25
Mindanao	2025	3	22	21	84	138	138	25
Mindanao	2025	3	22	22	78	138	138	25
Mindanao	2025	3	22	23	73	138	138	25
Mindanao	2025	3	22	24	68	138	138	25
Mindanao	2025	3	23	1	64	138	138	25
Mindanao	2025	3	23	2	62	138	138	25
Mindanao	2025	3	23	3	59	138	138	25
Mindanao	2025	3	23	4	59	138	138	25
Mindanao	2025	3	23	5	61	138	138	25
Mindanao	2025	3	23	6	62	138	138	25
Mindanao	2025	3	23	7	61	138	138	25
Mindanao	2025	3	23	8	60	138	138	25
Mindanao	2025	3	23	9	63	138	138	25
Mindanao	2025	3	23	10	67	138	138	25
Mindanao	2025	3	23	11	71	138	138	25
Mindanao	2025	3	23	12	72	138	138	25
Mindanao	2025	3	23	13	69	138	138	25
Mindanao	2025	3	23	14	71	138	138	25
Mindanao	2025	3	23	15	71	138	138	25
Mindanao	2025	3	23	16	72	138	138	25
Mindanao	2025	3	23	17	73	138	138	25
Mindanao	2025	3	23	18	82	138	138	25
Mindanao	2025	3	23	19	83	138	138	25
Mindanao	2025	3	23	20	80	138	138	25
Mindanao	2025	3	23	21	75	138	138	25
Mindanao	2025	3	23	22	70	138	138	25
Mindanao	2025	3	23	23	66	138	138	25
Mindanao	2025	3	23	24	61	138	138	25
Mindanao	2025	3	24	1	59	138	138	25
Mindanao	2025	3	24	2	58	138	138	25
Mindanao	2025	3	24	3	57	138	138	25
Mindanao	2025	3	24	4	56	138	138	25
Mindanao	2025	3	24	5	59	138	138	25
Mindanao	2025	3	24	6	63	138	138	25
Mindanao	2025	3	24	7	62	138	138	25
Mindanao	2025	3	24	8	68	138	138	25
Mindanao	2025	3	24	9	82	138	138	25
Mindanao	2025	3	24	10	88	138	138	25
Mindanao	2025	3	24	11	94	138	138	25
Mindanao	2025	3	24	12	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	24	13	90	138	138	25
Mindanao	2025	3	24	14	95	138	138	25
Mindanao	2025	3	24	15	92	138	138	25
Mindanao	2025	3	24	16	89	138	138	25
Mindanao	2025	3	24	17	86	138	138	25
Mindanao	2025	3	24	18	91	138	138	25
Mindanao	2025	3	24	19	91	138	138	25
Mindanao	2025	3	24	20	85	138	138	25
Mindanao	2025	3	24	21	81	138	138	25
Mindanao	2025	3	24	22	75	138	138	25
Mindanao	2025	3	24	23	70	138	138	25
Mindanao	2025	3	24	24	66	138	138	25
Mindanao	2025	3	25	1	62	138	138	25
Mindanao	2025	3	25	2	59	138	138	25
Mindanao	2025	3	25	3	58	138	138	25
Mindanao	2025	3	25	4	58	138	138	25
Mindanao	2025	3	25	5	61	138	138	25
Mindanao	2025	3	25	6	67	138	138	25
Mindanao	2025	3	25	7	65	138	138	25
Mindanao	2025	3	25	8	71	138	138	25
Mindanao	2025	3	25	9	82	138	138	25
Mindanao	2025	3	25	10	92	138	138	25
Mindanao	2025	3	25	11	99	138	138	25
Mindanao	2025	3	25	12	97	138	138	25
Mindanao	2025	3	25	13	98	138	138	25
Mindanao	2025	3	25	14	104	138	138	25
Mindanao	2025	3	25	15	104	138	138	25
Mindanao	2025	3	25	16	102	138	138	25
Mindanao	2025	3	25	17	92	138	138	25
Mindanao	2025	3	25	18	96	138	138	25
Mindanao	2025	3	25	19	98	138	138	25
Mindanao	2025	3	25	20	94	138	138	25
Mindanao	2025	3	25	21	90	138	138	25
Mindanao	2025	3	25	22	83	138	138	25
Mindanao	2025	3	25	23	78	138	138	25
Mindanao	2025	3	25	24	72	138	138	25
Mindanao	2025	3	26	1	69	138	138	25
Mindanao	2025	3	26	2	66	138	138	25
Mindanao	2025	3	26	3	63	138	138	25
Mindanao	2025	3	26	4	61	138	138	25
Mindanao	2025	3	26	5	65	138	138	25
Mindanao	2025	3	26	6	70	138	138	25
Mindanao	2025	3	26	7	67	138	138	25
Mindanao	2025	3	26	8	75	138	138	25
Mindanao	2025	3	26	9	86	138	138	25
Mindanao	2025	3	26	10	95	138	138	25
Mindanao	2025	3	26	11	98	138	138	25
Mindanao	2025	3	26	12	94	138	138	25
Mindanao	2025	3	26	13	98	138	138	25
Mindanao	2025	3	26	14	102	138	138	25
Mindanao	2025	3	26	15	105	138	138	25
Mindanao	2025	3	26	16	100	138	138	25
Mindanao	2025	3	26	17	94	138	138	25
Mindanao	2025	3	26	18	97	138	138	25
Mindanao	2025	3	26	19	99	138	138	25
Mindanao	2025	3	26	20	94	138	138	25
Mindanao	2025	3	26	21	91	138	138	25
Mindanao	2025	3	26	22	84	138	138	25
Mindanao	2025	3	26	23	79	138	138	25
Mindanao	2025	3	26	24	71	138	138	25
Mindanao	2025	3	27	1	67	138	138	25
Mindanao	2025	3	27	2	64	138	138	25
Mindanao	2025	3	27	3	62	138	138	25
Mindanao	2025	3	27	4	62	138	138	25
Mindanao	2025	3	27	5	65	138	138	25
Mindanao	2025	3	27	6	71	138	138	25
Mindanao	2025	3	27	7	67	138	138	25
Mindanao	2025	3	27	8	76	138	138	25
Mindanao	2025	3	27	9	86	138	138	25
Mindanao	2025	3	27	10	94	138	138	25
Mindanao	2025	3	27	11	97	138	138	25
Mindanao	2025	3	27	12	96	138	138	25
Mindanao	2025	3	27	13	98	138	138	25
Mindanao	2025	3	27	14	100	138	138	25
Mindanao	2025	3	27	15	98	138	138	25
Mindanao	2025	3	27	16	98	138	138	25
Mindanao	2025	3	27	17	91	138	138	25
Mindanao	2025	3	27	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	27	19	96	138	138	25
Mindanao	2025	3	27	20	92	138	138	25
Mindanao	2025	3	27	21	88	138	138	25
Mindanao	2025	3	27	22	81	138	138	25
Mindanao	2025	3	27	23	76	138	138	25
Mindanao	2025	3	27	24	71	138	138	25
Mindanao	2025	3	28	1	68	138	138	25
Mindanao	2025	3	28	2	65	138	138	25
Mindanao	2025	3	28	3	62	138	138	25
Mindanao	2025	3	28	4	61	138	138	25
Mindanao	2025	3	28	5	65	138	138	25
Mindanao	2025	3	28	6	68	138	138	25
Mindanao	2025	3	28	7	68	138	138	25
Mindanao	2025	3	28	8	75	138	138	25
Mindanao	2025	3	28	9	86	138	138	25
Mindanao	2025	3	28	10	91	138	138	25
Mindanao	2025	3	28	11	98	138	138	25
Mindanao	2025	3	28	12	96	138	138	25
Mindanao	2025	3	28	13	99	138	138	25
Mindanao	2025	3	28	14	102	138	138	25
Mindanao	2025	3	28	15	104	138	138	25
Mindanao	2025	3	28	16	101	138	138	25
Mindanao	2025	3	28	17	94	138	138	25
Mindanao	2025	3	28	18	97	138	138	25
Mindanao	2025	3	28	19	98	138	138	25
Mindanao	2025	3	28	20	95	138	138	25
Mindanao	2025	3	28	21	91	138	138	25
Mindanao	2025	3	28	22	84	138	138	25
Mindanao	2025	3	28	23	78	138	138	25
Mindanao	2025	3	28	24	74	138	138	25
Mindanao	2025	3	29	1	71	138	138	25
Mindanao	2025	3	29	2	67	138	138	25
Mindanao	2025	3	29	3	65	138	138	25
Mindanao	2025	3	29	4	64	138	138	25
Mindanao	2025	3	29	5	66	138	138	25
Mindanao	2025	3	29	6	70	138	138	25
Mindanao	2025	3	29	7	68	138	138	25
Mindanao	2025	3	29	8	70	138	138	25
Mindanao	2025	3	29	9	72	138	138	25
Mindanao	2025	3	29	10	77	138	138	25
Mindanao	2025	3	29	11	78	138	138	25
Mindanao	2025	3	29	12	77	138	138	25
Mindanao	2025	3	29	13	78	138	138	25
Mindanao	2025	3	29	14	83	138	138	25
Mindanao	2025	3	29	15	81	138	138	25
Mindanao	2025	3	29	16	81	138	138	25
Mindanao	2025	3	29	17	81	138	138	25
Mindanao	2025	3	29	18	89	138	138	25
Mindanao	2025	3	29	19	89	138	138	25
Mindanao	2025	3	29	20	83	138	138	25
Mindanao	2025	3	29	21	79	138	138	25
Mindanao	2025	3	29	22	74	138	138	25
Mindanao	2025	3	29	23	68	138	138	25
Mindanao	2025	3	29	24	64	138	138	25
Mindanao	2025	3	30	1	61	138	138	25
Mindanao	2025	3	30	2	58	138	138	25
Mindanao	2025	3	30	3	56	138	138	25
Mindanao	2025	3	30	4	56	138	138	25
Mindanao	2025	3	30	5	58	138	138	25
Mindanao	2025	3	30	6	59	138	138	25
Mindanao	2025	3	30	7	59	138	138	25
Mindanao	2025	3	30	8	59	138	138	25
Mindanao	2025	3	30	9	60	138	138	25
Mindanao	2025	3	30	10	63	138	138	25
Mindanao	2025	3	30	11	67	138	138	25
Mindanao	2025	3	30	12	68	138	138	25
Mindanao	2025	3	30	13	67	138	138	25
Mindanao	2025	3	30	14	67	138	138	25
Mindanao	2025	3	30	15	67	138	138	25
Mindanao	2025	3	30	16	67	138	138	25
Mindanao	2025	3	30	17	70	138	138	25
Mindanao	2025	3	30	18	78	138	138	25
Mindanao	2025	3	30	19	81	138	138	25
Mindanao	2025	3	30	20	77	138	138	25
Mindanao	2025	3	30	21	74	138	138	25
Mindanao	2025	3	30	22	69	138	138	25
Mindanao	2025	3	30	23	65	138	138	25
Mindanao	2025	3	30	24	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	3	31	1	56	138	138	25
Mindanao	2025	3	31	2	54	138	138	25
Mindanao	2025	3	31	3	54	138	138	25
Mindanao	2025	3	31	4	54	138	138	25
Mindanao	2025	3	31	5	58	138	138	25
Mindanao	2025	3	31	6	63	138	138	25
Mindanao	2025	3	31	7	63	138	138	25
Mindanao	2025	3	31	8	70	138	138	25
Mindanao	2025	3	31	9	81	138	138	25
Mindanao	2025	3	31	10	86	138	138	25
Mindanao	2025	3	31	11	93	138	138	25
Mindanao	2025	3	31	12	91	138	138	25
Mindanao	2025	3	31	13	92	138	138	25
Mindanao	2025	3	31	14	96	138	138	25
Mindanao	2025	3	31	15	95	138	138	25
Mindanao	2025	3	31	16	93	138	138	25
Mindanao	2025	3	31	17	90	138	138	25
Mindanao	2025	3	31	18	94	138	138	25
Mindanao	2025	3	31	19	92	138	138	25
Mindanao	2025	3	31	20	88	138	138	25
Mindanao	2025	3	31	21	84	138	138	25
Mindanao	2025	3	31	22	79	138	138	25
Mindanao	2025	3	31	23	74	138	138	25
Mindanao	2025	3	31	24	70	138	138	25
Mindanao	2025	4	1	1	64	138	138	25
Mindanao	2025	4	1	2	62	138	138	25
Mindanao	2025	4	1	3	60	138	138	25
Mindanao	2025	4	1	4	60	138	138	25
Mindanao	2025	4	1	5	64	138	138	25
Mindanao	2025	4	1	6	70	138	138	25
Mindanao	2025	4	1	7	68	138	138	25
Mindanao	2025	4	1	8	77	138	138	25
Mindanao	2025	4	1	9	87	138	138	25
Mindanao	2025	4	1	10	96	138	138	25
Mindanao	2025	4	1	11	100	138	138	25
Mindanao	2025	4	1	12	97	138	138	25
Mindanao	2025	4	1	13	102	138	138	25
Mindanao	2025	4	1	14	106	138	138	25
Mindanao	2025	4	1	15	103	138	138	25
Mindanao	2025	4	1	16	99	138	138	25
Mindanao	2025	4	1	17	92	138	138	25
Mindanao	2025	4	1	18	95	138	138	25
Mindanao	2025	4	1	19	97	138	138	25
Mindanao	2025	4	1	20	91	138	138	25
Mindanao	2025	4	1	21	86	138	138	25
Mindanao	2025	4	1	22	81	138	138	25
Mindanao	2025	4	1	23	76	138	138	25
Mindanao	2025	4	1	24	71	138	138	25
Mindanao	2025	4	2	1	67	138	138	25
Mindanao	2025	4	2	2	65	138	138	25
Mindanao	2025	4	2	3	62	138	138	25
Mindanao	2025	4	2	4	61	138	138	25
Mindanao	2025	4	2	5	65	138	138	25
Mindanao	2025	4	2	6	71	138	138	25
Mindanao	2025	4	2	7	66	138	138	25
Mindanao	2025	4	2	8	74	138	138	25
Mindanao	2025	4	2	9	86	138	138	25
Mindanao	2025	4	2	10	93	138	138	25
Mindanao	2025	4	2	11	102	138	138	25
Mindanao	2025	4	2	12	99	138	138	25
Mindanao	2025	4	2	13	101	138	138	25
Mindanao	2025	4	2	14	107	138	138	25
Mindanao	2025	4	2	15	103	138	138	25
Mindanao	2025	4	2	16	102	138	138	25
Mindanao	2025	4	2	17	90	138	138	25
Mindanao	2025	4	2	18	94	138	138	25
Mindanao	2025	4	2	19	95	138	138	25
Mindanao	2025	4	2	20	93	138	138	25
Mindanao	2025	4	2	21	90	138	138	25
Mindanao	2025	4	2	22	82	138	138	25
Mindanao	2025	4	2	23	79	138	138	25
Mindanao	2025	4	2	24	73	138	138	25
Mindanao	2025	4	3	1	69	138	138	25
Mindanao	2025	4	3	2	66	138	138	25
Mindanao	2025	4	3	3	63	138	138	25
Mindanao	2025	4	3	4	63	138	138	25
Mindanao	2025	4	3	5	66	138	138	25
Mindanao	2025	4	3	6	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	3	7	69	138	138	25
Mindanao	2025	4	3	8	77	138	138	25
Mindanao	2025	4	3	9	89	138	138	25
Mindanao	2025	4	3	10	97	138	138	25
Mindanao	2025	4	3	11	101	138	138	25
Mindanao	2025	4	3	12	102	138	138	25
Mindanao	2025	4	3	13	102	138	138	25
Mindanao	2025	4	3	14	108	138	138	25
Mindanao	2025	4	3	15	107	138	138	25
Mindanao	2025	4	3	16	103	138	138	25
Mindanao	2025	4	3	17	95	138	138	25
Mindanao	2025	4	3	18	97	138	138	25
Mindanao	2025	4	3	19	99	138	138	25
Mindanao	2025	4	3	20	95	138	138	25
Mindanao	2025	4	3	21	93	138	138	25
Mindanao	2025	4	3	22	86	138	138	25
Mindanao	2025	4	3	23	80	138	138	25
Mindanao	2025	4	3	24	76	138	138	25
Mindanao	2025	4	4	1	71	138	138	25
Mindanao	2025	4	4	2	69	138	138	25
Mindanao	2025	4	4	3	66	138	138	25
Mindanao	2025	4	4	4	64	138	138	25
Mindanao	2025	4	4	5	67	138	138	25
Mindanao	2025	4	4	6	70	138	138	25
Mindanao	2025	4	4	7	68	138	138	25
Mindanao	2025	4	4	8	74	138	138	25
Mindanao	2025	4	4	9	87	138	138	25
Mindanao	2025	4	4	10	93	138	138	25
Mindanao	2025	4	4	11	99	138	138	25
Mindanao	2025	4	4	12	96	138	138	25
Mindanao	2025	4	4	13	98	138	138	25
Mindanao	2025	4	4	14	105	138	138	25
Mindanao	2025	4	4	15	103	138	138	25
Mindanao	2025	4	4	16	100	138	138	25
Mindanao	2025	4	4	17	93	138	138	25
Mindanao	2025	4	4	18	95	138	138	25
Mindanao	2025	4	4	19	94	138	138	25
Mindanao	2025	4	4	20	91	138	138	25
Mindanao	2025	4	4	21	88	138	138	25
Mindanao	2025	4	4	22	82	138	138	25
Mindanao	2025	4	4	23	78	138	138	25
Mindanao	2025	4	4	24	72	138	138	25
Mindanao	2025	4	5	1	69	138	138	25
Mindanao	2025	4	5	2	67	138	138	25
Mindanao	2025	4	5	3	65	138	138	25
Mindanao	2025	4	5	4	63	138	138	25
Mindanao	2025	4	5	5	66	138	138	25
Mindanao	2025	4	5	6	68	138	138	25
Mindanao	2025	4	5	7	66	138	138	25
Mindanao	2025	4	5	8	69	138	138	25
Mindanao	2025	4	5	9	75	138	138	25
Mindanao	2025	4	5	10	81	138	138	25
Mindanao	2025	4	5	11	85	138	138	25
Mindanao	2025	4	5	12	81	138	138	25
Mindanao	2025	4	5	13	83	138	138	25
Mindanao	2025	4	5	14	86	138	138	25
Mindanao	2025	4	5	15	84	138	138	25
Mindanao	2025	4	5	16	83	138	138	25
Mindanao	2025	4	5	17	83	138	138	25
Mindanao	2025	4	5	18	91	138	138	25
Mindanao	2025	4	5	19	87	138	138	25
Mindanao	2025	4	5	20	83	138	138	25
Mindanao	2025	4	5	21	80	138	138	25
Mindanao	2025	4	5	22	73	138	138	25
Mindanao	2025	4	5	23	69	138	138	25
Mindanao	2025	4	5	24	66	138	138	25
Mindanao	2025	4	6	1	62	138	138	25
Mindanao	2025	4	6	2	61	138	138	25
Mindanao	2025	4	6	3	60	138	138	25
Mindanao	2025	4	6	4	58	138	138	25
Mindanao	2025	4	6	5	59	138	138	25
Mindanao	2025	4	6	6	60	138	138	25
Mindanao	2025	4	6	7	59	138	138	25
Mindanao	2025	4	6	8	59	138	138	25
Mindanao	2025	4	6	9	61	138	138	25
Mindanao	2025	4	6	10	65	138	138	25
Mindanao	2025	4	6	11	69	138	138	25
Mindanao	2025	4	6	12	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	6	13	73	138	138	25
Mindanao	2025	4	6	14	76	138	138	25
Mindanao	2025	4	6	15	77	138	138	25
Mindanao	2025	4	6	16	76	138	138	25
Mindanao	2025	4	6	17	79	138	138	25
Mindanao	2025	4	6	18	86	138	138	25
Mindanao	2025	4	6	19	87	138	138	25
Mindanao	2025	4	6	20	84	138	138	25
Mindanao	2025	4	6	21	82	138	138	25
Mindanao	2025	4	6	22	77	138	138	25
Mindanao	2025	4	6	23	70	138	138	25
Mindanao	2025	4	6	24	67	138	138	25
Mindanao	2025	4	7	1	64	138	138	25
Mindanao	2025	4	7	2	61	138	138	25
Mindanao	2025	4	7	3	62	138	138	25
Mindanao	2025	4	7	4	60	138	138	25
Mindanao	2025	4	7	5	62	138	138	25
Mindanao	2025	4	7	6	66	138	138	25
Mindanao	2025	4	7	7	64	138	138	25
Mindanao	2025	4	7	8	74	138	138	25
Mindanao	2025	4	7	9	84	138	138	25
Mindanao	2025	4	7	10	94	138	138	25
Mindanao	2025	4	7	11	98	138	138	25
Mindanao	2025	4	7	12	98	138	138	25
Mindanao	2025	4	7	13	95	138	138	25
Mindanao	2025	4	7	14	105	138	138	25
Mindanao	2025	4	7	15	104	138	138	25
Mindanao	2025	4	7	16	102	138	138	25
Mindanao	2025	4	7	17	95	138	138	25
Mindanao	2025	4	7	18	97	138	138	25
Mindanao	2025	4	7	19	95	138	138	25
Mindanao	2025	4	7	20	92	138	138	25
Mindanao	2025	4	7	21	90	138	138	25
Mindanao	2025	4	7	22	84	138	138	25
Mindanao	2025	4	7	23	77	138	138	25
Mindanao	2025	4	7	24	71	138	138	25
Mindanao	2025	4	8	1	69	138	138	25
Mindanao	2025	4	8	2	67	138	138	25
Mindanao	2025	4	8	3	67	138	138	25
Mindanao	2025	4	8	4	63	138	138	25
Mindanao	2025	4	8	5	67	138	138	25
Mindanao	2025	4	8	6	71	138	138	25
Mindanao	2025	4	8	7	69	138	138	25
Mindanao	2025	4	8	8	75	138	138	25
Mindanao	2025	4	8	9	85	138	138	25
Mindanao	2025	4	8	10	89	138	138	25
Mindanao	2025	4	8	11	93	138	138	25
Mindanao	2025	4	8	12	87	138	138	25
Mindanao	2025	4	8	13	87	138	138	25
Mindanao	2025	4	8	14	91	138	138	25
Mindanao	2025	4	8	15	91	138	138	25
Mindanao	2025	4	8	16	92	138	138	25
Mindanao	2025	4	8	17	91	138	138	25
Mindanao	2025	4	8	18	94	138	138	25
Mindanao	2025	4	8	19	88	138	138	25
Mindanao	2025	4	8	20	84	138	138	25
Mindanao	2025	4	8	21	79	138	138	25
Mindanao	2025	4	8	22	71	138	138	25
Mindanao	2025	4	8	23	67	138	138	25
Mindanao	2025	4	8	24	62	138	138	25
Mindanao	2025	4	9	1	66	138	138	25
Mindanao	2025	4	9	2	63	138	138	25
Mindanao	2025	4	9	3	61	138	138	25
Mindanao	2025	4	9	4	60	138	138	25
Mindanao	2025	4	9	5	62	138	138	25
Mindanao	2025	4	9	6	64	138	138	25
Mindanao	2025	4	9	7	63	138	138	25
Mindanao	2025	4	9	8	63	138	138	25
Mindanao	2025	4	9	9	64	138	138	25
Mindanao	2025	4	9	10	69	138	138	25
Mindanao	2025	4	9	11	72	138	138	25
Mindanao	2025	4	9	12	73	138	138	25
Mindanao	2025	4	9	13	70	138	138	25
Mindanao	2025	4	9	14	73	138	138	25
Mindanao	2025	4	9	15	75	138	138	25
Mindanao	2025	4	9	16	76	138	138	25
Mindanao	2025	4	9	17	75	138	138	25
Mindanao	2025	4	9	18	88	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	9	19	84	138	138	25
Mindanao	2025	4	9	20	82	138	138	25
Mindanao	2025	4	9	21	77	138	138	25
Mindanao	2025	4	9	22	73	138	138	25
Mindanao	2025	4	9	23	68	138	138	25
Mindanao	2025	4	9	24	63	138	138	25
Mindanao	2025	4	10	1	62	138	138	25
Mindanao	2025	4	10	2	61	138	138	25
Mindanao	2025	4	10	3	61	138	138	25
Mindanao	2025	4	10	4	59	138	138	25
Mindanao	2025	4	10	5	63	138	138	25
Mindanao	2025	4	10	6	67	138	138	25
Mindanao	2025	4	10	7	64	138	138	25
Mindanao	2025	4	10	8	72	138	138	25
Mindanao	2025	4	10	9	80	138	138	25
Mindanao	2025	4	10	10	88	138	138	25
Mindanao	2025	4	10	11	92	138	138	25
Mindanao	2025	4	10	12	90	138	138	25
Mindanao	2025	4	10	13	88	138	138	25
Mindanao	2025	4	10	14	91	138	138	25
Mindanao	2025	4	10	15	90	138	138	25
Mindanao	2025	4	10	16	91	138	138	25
Mindanao	2025	4	10	17	88	138	138	25
Mindanao	2025	4	10	18	91	138	138	25
Mindanao	2025	4	10	19	90	138	138	25
Mindanao	2025	4	10	20	85	138	138	25
Mindanao	2025	4	10	21	83	138	138	25
Mindanao	2025	4	10	22	77	138	138	25
Mindanao	2025	4	10	23	72	138	138	25
Mindanao	2025	4	10	24	66	138	138	25
Mindanao	2025	4	11	1	64	138	138	25
Mindanao	2025	4	11	2	62	138	138	25
Mindanao	2025	4	11	3	61	138	138	25
Mindanao	2025	4	11	4	61	138	138	25
Mindanao	2025	4	11	5	63	138	138	25
Mindanao	2025	4	11	6	67	138	138	25
Mindanao	2025	4	11	7	66	138	138	25
Mindanao	2025	4	11	8	73	138	138	25
Mindanao	2025	4	11	9	83	138	138	25
Mindanao	2025	4	11	10	90	138	138	25
Mindanao	2025	4	11	11	94	138	138	25
Mindanao	2025	4	11	12	92	138	138	25
Mindanao	2025	4	11	13	90	138	138	25
Mindanao	2025	4	11	14	96	138	138	25
Mindanao	2025	4	11	15	95	138	138	25
Mindanao	2025	4	11	16	93	138	138	25
Mindanao	2025	4	11	17	91	138	138	25
Mindanao	2025	4	11	18	95	138	138	25
Mindanao	2025	4	11	19	92	138	138	25
Mindanao	2025	4	11	20	89	138	138	25
Mindanao	2025	4	11	21	85	138	138	25
Mindanao	2025	4	11	22	78	138	138	25
Mindanao	2025	4	11	23	73	138	138	25
Mindanao	2025	4	11	24	68	138	138	25
Mindanao	2025	4	12	1	55	138	138	25
Mindanao	2025	4	12	2	54	138	138	25
Mindanao	2025	4	12	3	53	138	138	25
Mindanao	2025	4	12	4	52	138	138	25
Mindanao	2025	4	12	5	53	138	138	25
Mindanao	2025	4	12	6	53	138	138	25
Mindanao	2025	4	12	7	54	138	138	25
Mindanao	2025	4	12	8	57	138	138	25
Mindanao	2025	4	12	9	63	138	138	25
Mindanao	2025	4	12	10	68	138	138	25
Mindanao	2025	4	12	11	74	138	138	25
Mindanao	2025	4	12	12	75	138	138	25
Mindanao	2025	4	12	13	77	138	138	25
Mindanao	2025	4	12	14	79	138	138	25
Mindanao	2025	4	12	15	78	138	138	25
Mindanao	2025	4	12	16	77	138	138	25
Mindanao	2025	4	12	17	77	138	138	25
Mindanao	2025	4	12	18	84	138	138	25
Mindanao	2025	4	12	19	85	138	138	25
Mindanao	2025	4	12	20	83	138	138	25
Mindanao	2025	4	12	21	81	138	138	25
Mindanao	2025	4	12	22	77	138	138	25
Mindanao	2025	4	12	23	72	138	138	25
Mindanao	2025	4	12	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	13	1	61	138	138	25
Mindanao	2025	4	13	2	60	138	138	25
Mindanao	2025	4	13	3	59	138	138	25
Mindanao	2025	4	13	4	57	138	138	25
Mindanao	2025	4	13	5	57	138	138	25
Mindanao	2025	4	13	6	58	138	138	25
Mindanao	2025	4	13	7	60	138	138	25
Mindanao	2025	4	13	8	61	138	138	25
Mindanao	2025	4	13	9	64	138	138	25
Mindanao	2025	4	13	10	66	138	138	25
Mindanao	2025	4	13	11	72	138	138	25
Mindanao	2025	4	13	12	71	138	138	25
Mindanao	2025	4	13	13	70	138	138	25
Mindanao	2025	4	13	14	70	138	138	25
Mindanao	2025	4	13	15	72	138	138	25
Mindanao	2025	4	13	16	71	138	138	25
Mindanao	2025	4	13	17	75	138	138	25
Mindanao	2025	4	13	18	85	138	138	25
Mindanao	2025	4	13	19	85	138	138	25
Mindanao	2025	4	13	20	83	138	138	25
Mindanao	2025	4	13	21	80	138	138	25
Mindanao	2025	4	13	22	73	138	138	25
Mindanao	2025	4	13	23	68	138	138	25
Mindanao	2025	4	13	24	63	138	138	25
Mindanao	2025	4	14	1	57	138	138	25
Mindanao	2025	4	14	2	58	138	138	25
Mindanao	2025	4	14	3	58	138	138	25
Mindanao	2025	4	14	4	56	138	138	25
Mindanao	2025	4	14	5	59	138	138	25
Mindanao	2025	4	14	6	64	138	138	25
Mindanao	2025	4	14	7	61	138	138	25
Mindanao	2025	4	14	8	72	138	138	25
Mindanao	2025	4	14	9	83	138	138	25
Mindanao	2025	4	14	10	89	138	138	25
Mindanao	2025	4	14	11	88	138	138	25
Mindanao	2025	4	14	12	88	138	138	25
Mindanao	2025	4	14	13	88	138	138	25
Mindanao	2025	4	14	14	92	138	138	25
Mindanao	2025	4	14	15	95	138	138	25
Mindanao	2025	4	14	16	93	138	138	25
Mindanao	2025	4	14	17	91	138	138	25
Mindanao	2025	4	14	18	96	138	138	25
Mindanao	2025	4	14	19	91	138	138	25
Mindanao	2025	4	14	20	88	138	138	25
Mindanao	2025	4	14	21	85	138	138	25
Mindanao	2025	4	14	22	78	138	138	25
Mindanao	2025	4	14	23	72	138	138	25
Mindanao	2025	4	14	24	65	138	138	25
Mindanao	2025	4	15	1	62	138	138	25
Mindanao	2025	4	15	2	61	138	138	25
Mindanao	2025	4	15	3	59	138	138	25
Mindanao	2025	4	15	4	59	138	138	25
Mindanao	2025	4	15	5	62	138	138	25
Mindanao	2025	4	15	6	66	138	138	25
Mindanao	2025	4	15	7	65	138	138	25
Mindanao	2025	4	15	8	72	138	138	25
Mindanao	2025	4	15	9	79	138	138	25
Mindanao	2025	4	15	10	88	138	138	25
Mindanao	2025	4	15	11	91	138	138	25
Mindanao	2025	4	15	12	87	138	138	25
Mindanao	2025	4	15	13	84	138	138	25
Mindanao	2025	4	15	14	88	138	138	25
Mindanao	2025	4	15	15	87	138	138	25
Mindanao	2025	4	15	16	88	138	138	25
Mindanao	2025	4	15	17	88	138	138	25
Mindanao	2025	4	15	18	93	138	138	25
Mindanao	2025	4	15	19	92	138	138	25
Mindanao	2025	4	15	20	89	138	138	25
Mindanao	2025	4	15	21	85	138	138	25
Mindanao	2025	4	15	22	79	138	138	25
Mindanao	2025	4	15	23	75	138	138	25
Mindanao	2025	4	15	24	69	138	138	25
Mindanao	2025	4	16	1	65	138	138	25
Mindanao	2025	4	16	2	63	138	138	25
Mindanao	2025	4	16	3	63	138	138	25
Mindanao	2025	4	16	4	60	138	138	25
Mindanao	2025	4	16	5	63	138	138	25
Mindanao	2025	4	16	6	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	16	7	66	138	138	25
Mindanao	2025	4	16	8	73	138	138	25
Mindanao	2025	4	16	9	80	138	138	25
Mindanao	2025	4	16	10	89	138	138	25
Mindanao	2025	4	16	11	92	138	138	25
Mindanao	2025	4	16	12	90	138	138	25
Mindanao	2025	4	16	13	90	138	138	25
Mindanao	2025	4	16	14	91	138	138	25
Mindanao	2025	4	16	15	92	138	138	25
Mindanao	2025	4	16	16	88	138	138	25
Mindanao	2025	4	16	17	83	138	138	25
Mindanao	2025	4	16	18	94	138	138	25
Mindanao	2025	4	16	19	92	138	138	25
Mindanao	2025	4	16	20	89	138	138	25
Mindanao	2025	4	16	21	85	138	138	25
Mindanao	2025	4	16	22	81	138	138	25
Mindanao	2025	4	16	23	75	138	138	25
Mindanao	2025	4	16	24	64	138	138	25
Mindanao	2025	4	17	1	62	138	138	25
Mindanao	2025	4	17	2	60	138	138	25
Mindanao	2025	4	17	3	58	138	138	25
Mindanao	2025	4	17	4	57	138	138	25
Mindanao	2025	4	17	5	58	138	138	25
Mindanao	2025	4	17	6	57	138	138	25
Mindanao	2025	4	17	7	58	138	138	25
Mindanao	2025	4	17	8	59	138	138	25
Mindanao	2025	4	17	9	62	138	138	25
Mindanao	2025	4	17	10	67	138	138	25
Mindanao	2025	4	17	11	71	138	138	25
Mindanao	2025	4	17	12	72	138	138	25
Mindanao	2025	4	17	13	74	138	138	25
Mindanao	2025	4	17	14	74	138	138	25
Mindanao	2025	4	17	15	75	138	138	25
Mindanao	2025	4	17	16	74	138	138	25
Mindanao	2025	4	17	17	72	138	138	25
Mindanao	2025	4	17	18	80	138	138	25
Mindanao	2025	4	17	19	81	138	138	25
Mindanao	2025	4	17	20	80	138	138	25
Mindanao	2025	4	17	21	77	138	138	25
Mindanao	2025	4	17	22	73	138	138	25
Mindanao	2025	4	17	23	68	138	138	25
Mindanao	2025	4	17	24	62	138	138	25
Mindanao	2025	4	18	1	57	138	138	25
Mindanao	2025	4	18	2	56	138	138	25
Mindanao	2025	4	18	3	54	138	138	25
Mindanao	2025	4	18	4	53	138	138	25
Mindanao	2025	4	18	5	52	138	138	25
Mindanao	2025	4	18	6	53	138	138	25
Mindanao	2025	4	18	7	52	138	138	25
Mindanao	2025	4	18	8	52	138	138	25
Mindanao	2025	4	18	9	52	138	138	25
Mindanao	2025	4	18	10	54	138	138	25
Mindanao	2025	4	18	11	56	138	138	25
Mindanao	2025	4	18	12	58	138	138	25
Mindanao	2025	4	18	13	60	138	138	25
Mindanao	2025	4	18	14	61	138	138	25
Mindanao	2025	4	18	15	61	138	138	25
Mindanao	2025	4	18	16	61	138	138	25
Mindanao	2025	4	18	17	60	138	138	25
Mindanao	2025	4	18	18	71	138	138	25
Mindanao	2025	4	18	19	75	138	138	25
Mindanao	2025	4	18	20	74	138	138	25
Mindanao	2025	4	18	21	74	138	138	25
Mindanao	2025	4	18	22	69	138	138	25
Mindanao	2025	4	18	23	67	138	138	25
Mindanao	2025	4	18	24	61	138	138	25
Mindanao	2025	4	19	1	55	138	138	25
Mindanao	2025	4	19	2	54	138	138	25
Mindanao	2025	4	19	3	53	138	138	25
Mindanao	2025	4	19	4	52	138	138	25
Mindanao	2025	4	19	5	53	138	138	25
Mindanao	2025	4	19	6	53	138	138	25
Mindanao	2025	4	19	7	54	138	138	25
Mindanao	2025	4	19	8	57	138	138	25
Mindanao	2025	4	19	9	63	138	138	25
Mindanao	2025	4	19	10	68	138	138	25
Mindanao	2025	4	19	11	74	138	138	25
Mindanao	2025	4	19	12	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	19	13	77	138	138	25
Mindanao	2025	4	19	14	79	138	138	25
Mindanao	2025	4	19	15	78	138	138	25
Mindanao	2025	4	19	16	77	138	138	25
Mindanao	2025	4	19	17	77	138	138	25
Mindanao	2025	4	19	18	84	138	138	25
Mindanao	2025	4	19	19	85	138	138	25
Mindanao	2025	4	19	20	83	138	138	25
Mindanao	2025	4	19	21	81	138	138	25
Mindanao	2025	4	19	22	77	138	138	25
Mindanao	2025	4	19	23	72	138	138	25
Mindanao	2025	4	19	24	64	138	138	25
Mindanao	2025	4	20	1	59	138	138	25
Mindanao	2025	4	20	2	58	138	138	25
Mindanao	2025	4	20	3	57	138	138	25
Mindanao	2025	4	20	4	56	138	138	25
Mindanao	2025	4	20	5	55	138	138	25
Mindanao	2025	4	20	6	58	138	138	25
Mindanao	2025	4	20	7	57	138	138	25
Mindanao	2025	4	20	8	59	138	138	25
Mindanao	2025	4	20	9	62	138	138	25
Mindanao	2025	4	20	10	68	138	138	25
Mindanao	2025	4	20	11	72	138	138	25
Mindanao	2025	4	20	12	72	138	138	25
Mindanao	2025	4	20	13	74	138	138	25
Mindanao	2025	4	20	14	77	138	138	25
Mindanao	2025	4	20	15	75	138	138	25
Mindanao	2025	4	20	16	76	138	138	25
Mindanao	2025	4	20	17	76	138	138	25
Mindanao	2025	4	20	18	81	138	138	25
Mindanao	2025	4	20	19	84	138	138	25
Mindanao	2025	4	20	20	82	138	138	25
Mindanao	2025	4	20	21	82	138	138	25
Mindanao	2025	4	20	22	77	138	138	25
Mindanao	2025	4	20	23	73	138	138	25
Mindanao	2025	4	20	24	66	138	138	25
Mindanao	2025	4	21	1	61	138	138	25
Mindanao	2025	4	21	2	59	138	138	25
Mindanao	2025	4	21	3	59	138	138	25
Mindanao	2025	4	21	4	58	138	138	25
Mindanao	2025	4	21	5	62	138	138	25
Mindanao	2025	4	21	6	64	138	138	25
Mindanao	2025	4	21	7	63	138	138	25
Mindanao	2025	4	21	8	73	138	138	25
Mindanao	2025	4	21	9	84	138	138	25
Mindanao	2025	4	21	10	94	138	138	25
Mindanao	2025	4	21	11	99	138	138	25
Mindanao	2025	4	21	12	97	138	138	25
Mindanao	2025	4	21	13	99	138	138	25
Mindanao	2025	4	21	14	100	138	138	25
Mindanao	2025	4	21	15	101	138	138	25
Mindanao	2025	4	21	16	102	138	138	25
Mindanao	2025	4	21	17	96	138	138	25
Mindanao	2025	4	21	18	96	138	138	25
Mindanao	2025	4	21	19	99	138	138	25
Mindanao	2025	4	21	20	96	138	138	25
Mindanao	2025	4	21	21	92	138	138	25
Mindanao	2025	4	21	22	84	138	138	25
Mindanao	2025	4	21	23	81	138	138	25
Mindanao	2025	4	21	24	75	138	138	25
Mindanao	2025	4	22	1	70	138	138	25
Mindanao	2025	4	22	2	68	138	138	25
Mindanao	2025	4	22	3	66	138	138	25
Mindanao	2025	4	22	4	64	138	138	25
Mindanao	2025	4	22	5	65	138	138	25
Mindanao	2025	4	22	6	69	138	138	25
Mindanao	2025	4	22	7	66	138	138	25
Mindanao	2025	4	22	8	77	138	138	25
Mindanao	2025	4	22	9	89	138	138	25
Mindanao	2025	4	22	10	96	138	138	25
Mindanao	2025	4	22	11	100	138	138	25
Mindanao	2025	4	22	12	97	138	138	25
Mindanao	2025	4	22	13	98	138	138	25
Mindanao	2025	4	22	14	103	138	138	25
Mindanao	2025	4	22	15	102	138	138	25
Mindanao	2025	4	22	16	100	138	138	25
Mindanao	2025	4	22	17	95	138	138	25
Mindanao	2025	4	22	18	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	22	19	96	138	138	25
Mindanao	2025	4	22	20	93	138	138	25
Mindanao	2025	4	22	21	91	138	138	25
Mindanao	2025	4	22	22	85	138	138	25
Mindanao	2025	4	22	23	79	138	138	25
Mindanao	2025	4	22	24	74	138	138	25
Mindanao	2025	4	23	1	69	138	138	25
Mindanao	2025	4	23	2	67	138	138	25
Mindanao	2025	4	23	3	66	138	138	25
Mindanao	2025	4	23	4	64	138	138	25
Mindanao	2025	4	23	5	67	138	138	25
Mindanao	2025	4	23	6	70	138	138	25
Mindanao	2025	4	23	7	70	138	138	25
Mindanao	2025	4	23	8	77	138	138	25
Mindanao	2025	4	23	9	89	138	138	25
Mindanao	2025	4	23	10	96	138	138	25
Mindanao	2025	4	23	11	102	138	138	25
Mindanao	2025	4	23	12	101	138	138	25
Mindanao	2025	4	23	13	103	138	138	25
Mindanao	2025	4	23	14	104	138	138	25
Mindanao	2025	4	23	15	105	138	138	25
Mindanao	2025	4	23	16	105	138	138	25
Mindanao	2025	4	23	17	94	138	138	25
Mindanao	2025	4	23	18	99	138	138	25
Mindanao	2025	4	23	19	100	138	138	25
Mindanao	2025	4	23	20	99	138	138	25
Mindanao	2025	4	23	21	94	138	138	25
Mindanao	2025	4	23	22	88	138	138	25
Mindanao	2025	4	23	23	83	138	138	25
Mindanao	2025	4	23	24	77	138	138	25
Mindanao	2025	4	24	1	73	138	138	25
Mindanao	2025	4	24	2	70	138	138	25
Mindanao	2025	4	24	3	67	138	138	25
Mindanao	2025	4	24	4	66	138	138	25
Mindanao	2025	4	24	5	69	138	138	25
Mindanao	2025	4	24	6	70	138	138	25
Mindanao	2025	4	24	7	68	138	138	25
Mindanao	2025	4	24	8	78	138	138	25
Mindanao	2025	4	24	9	90	138	138	25
Mindanao	2025	4	24	10	98	138	138	25
Mindanao	2025	4	24	11	104	138	138	25
Mindanao	2025	4	24	12	104	138	138	25
Mindanao	2025	4	24	13	105	138	138	25
Mindanao	2025	4	24	14	108	138	138	25
Mindanao	2025	4	24	15	105	138	138	25
Mindanao	2025	4	24	16	103	138	138	25
Mindanao	2025	4	24	17	97	138	138	25
Mindanao	2025	4	24	18	100	138	138	25
Mindanao	2025	4	24	19	99	138	138	25
Mindanao	2025	4	24	20	95	138	138	25
Mindanao	2025	4	24	21	93	138	138	25
Mindanao	2025	4	24	22	84	138	138	25
Mindanao	2025	4	24	23	81	138	138	25
Mindanao	2025	4	24	24	77	138	138	25
Mindanao	2025	4	25	1	73	138	138	25
Mindanao	2025	4	25	2	70	138	138	25
Mindanao	2025	4	25	3	68	138	138	25
Mindanao	2025	4	25	4	66	138	138	25
Mindanao	2025	4	25	5	69	138	138	25
Mindanao	2025	4	25	6	71	138	138	25
Mindanao	2025	4	25	7	67	138	138	25
Mindanao	2025	4	25	8	77	138	138	25
Mindanao	2025	4	25	9	90	138	138	25
Mindanao	2025	4	25	10	99	138	138	25
Mindanao	2025	4	25	11	104	138	138	25
Mindanao	2025	4	25	12	101	138	138	25
Mindanao	2025	4	25	13	103	138	138	25
Mindanao	2025	4	25	14	106	138	138	25
Mindanao	2025	4	25	15	106	138	138	25
Mindanao	2025	4	25	16	104	138	138	25
Mindanao	2025	4	25	17	99	138	138	25
Mindanao	2025	4	25	18	103	138	138	25
Mindanao	2025	4	25	19	100	138	138	25
Mindanao	2025	4	25	20	99	138	138	25
Mindanao	2025	4	25	21	95	138	138	25
Mindanao	2025	4	25	22	90	138	138	25
Mindanao	2025	4	25	23	84	138	138	25
Mindanao	2025	4	25	24	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	26	1	72	138	138	25
Mindanao	2025	4	26	2	69	138	138	25
Mindanao	2025	4	26	3	69	138	138	25
Mindanao	2025	4	26	4	66	138	138	25
Mindanao	2025	4	26	5	67	138	138	25
Mindanao	2025	4	26	6	65	138	138	25
Mindanao	2025	4	26	7	63	138	138	25
Mindanao	2025	4	26	8	68	138	138	25
Mindanao	2025	4	26	9	71	138	138	25
Mindanao	2025	4	26	10	74	138	138	25
Mindanao	2025	4	26	11	77	138	138	25
Mindanao	2025	4	26	12	76	138	138	25
Mindanao	2025	4	26	13	80	138	138	25
Mindanao	2025	4	26	14	84	138	138	25
Mindanao	2025	4	26	15	86	138	138	25
Mindanao	2025	4	26	16	85	138	138	25
Mindanao	2025	4	26	17	82	138	138	25
Mindanao	2025	4	26	18	96	138	138	25
Mindanao	2025	4	26	19	96	138	138	25
Mindanao	2025	4	26	20	95	138	138	25
Mindanao	2025	4	26	21	91	138	138	25
Mindanao	2025	4	26	22	84	138	138	25
Mindanao	2025	4	26	23	79	138	138	25
Mindanao	2025	4	26	24	75	138	138	25
Mindanao	2025	4	27	1	69	138	138	25
Mindanao	2025	4	27	2	67	138	138	25
Mindanao	2025	4	27	3	65	138	138	25
Mindanao	2025	4	27	4	61	138	138	25
Mindanao	2025	4	27	5	64	138	138	25
Mindanao	2025	4	27	6	63	138	138	25
Mindanao	2025	4	27	7	61	138	138	25
Mindanao	2025	4	27	8	63	138	138	25
Mindanao	2025	4	27	9	67	138	138	25
Mindanao	2025	4	27	10	72	138	138	25
Mindanao	2025	4	27	11	75	138	138	25
Mindanao	2025	4	27	12	77	138	138	25
Mindanao	2025	4	27	13	79	138	138	25
Mindanao	2025	4	27	14	81	138	138	25
Mindanao	2025	4	27	15	81	138	138	25
Mindanao	2025	4	27	16	76	138	138	25
Mindanao	2025	4	27	17	78	138	138	25
Mindanao	2025	4	27	18	89	138	138	25
Mindanao	2025	4	27	19	92	138	138	25
Mindanao	2025	4	27	20	90	138	138	25
Mindanao	2025	4	27	21	87	138	138	25
Mindanao	2025	4	27	22	83	138	138	25
Mindanao	2025	4	27	23	78	138	138	25
Mindanao	2025	4	27	24	74	138	138	25
Mindanao	2025	4	28	1	69	138	138	25
Mindanao	2025	4	28	2	65	138	138	25
Mindanao	2025	4	28	3	64	138	138	25
Mindanao	2025	4	28	4	62	138	138	25
Mindanao	2025	4	28	5	65	138	138	25
Mindanao	2025	4	28	6	67	138	138	25
Mindanao	2025	4	28	7	67	138	138	25
Mindanao	2025	4	28	8	78	138	138	25
Mindanao	2025	4	28	9	89	138	138	25
Mindanao	2025	4	28	10	99	138	138	25
Mindanao	2025	4	28	11	104	138	138	25
Mindanao	2025	4	28	12	104	138	138	25
Mindanao	2025	4	28	13	106	138	138	25
Mindanao	2025	4	28	14	109	138	138	25
Mindanao	2025	4	28	15	106	138	138	25
Mindanao	2025	4	28	16	106	138	138	25
Mindanao	2025	4	28	17	102	138	138	25
Mindanao	2025	4	28	18	104	138	138	25
Mindanao	2025	4	28	19	102	138	138	25
Mindanao	2025	4	28	20	100	138	138	25
Mindanao	2025	4	28	21	96	138	138	25
Mindanao	2025	4	28	22	90	138	138	25
Mindanao	2025	4	28	23	86	138	138	25
Mindanao	2025	4	28	24	79	138	138	25
Mindanao	2025	4	29	1	76	138	138	25
Mindanao	2025	4	29	2	72	138	138	25
Mindanao	2025	4	29	3	71	138	138	25
Mindanao	2025	4	29	4	68	138	138	25
Mindanao	2025	4	29	5	70	138	138	25
Mindanao	2025	4	29	6	74	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	4	29	7	70	138	138	25
Mindanao	2025	4	29	8	78	138	138	25
Mindanao	2025	4	29	9	91	138	138	25
Mindanao	2025	4	29	10	99	138	138	25
Mindanao	2025	4	29	11	104	138	138	25
Mindanao	2025	4	29	12	103	138	138	25
Mindanao	2025	4	29	13	104	138	138	25
Mindanao	2025	4	29	14	105	138	138	25
Mindanao	2025	4	29	15	102	138	138	25
Mindanao	2025	4	29	16	101	138	138	25
Mindanao	2025	4	29	17	96	138	138	25
Mindanao	2025	4	29	18	99	138	138	25
Mindanao	2025	4	29	19	97	138	138	25
Mindanao	2025	4	29	20	92	138	138	25
Mindanao	2025	4	29	21	91	138	138	25
Mindanao	2025	4	29	22	85	138	138	25
Mindanao	2025	4	29	23	80	138	138	25
Mindanao	2025	4	29	24	76	138	138	25
Mindanao	2025	4	30	1	71	138	138	25
Mindanao	2025	4	30	2	69	138	138	25
Mindanao	2025	4	30	3	66	138	138	25
Mindanao	2025	4	30	4	65	138	138	25
Mindanao	2025	4	30	5	68	138	138	25
Mindanao	2025	4	30	6	71	138	138	25
Mindanao	2025	4	30	7	70	138	138	25
Mindanao	2025	4	30	8	77	138	138	25
Mindanao	2025	4	30	9	88	138	138	25
Mindanao	2025	4	30	10	96	138	138	25
Mindanao	2025	4	30	11	101	138	138	25
Mindanao	2025	4	30	12	99	138	138	25
Mindanao	2025	4	30	13	100	138	138	25
Mindanao	2025	4	30	14	105	138	138	25
Mindanao	2025	4	30	15	103	138	138	25
Mindanao	2025	4	30	16	102	138	138	25
Mindanao	2025	4	30	17	95	138	138	25
Mindanao	2025	4	30	18	100	138	138	25
Mindanao	2025	4	30	19	97	138	138	25
Mindanao	2025	4	30	20	89	138	138	25
Mindanao	2025	4	30	21	88	138	138	25
Mindanao	2025	4	30	22	83	138	138	25
Mindanao	2025	4	30	23	78	138	138	25
Mindanao	2025	4	30	24	74	138	138	25
Mindanao	2025	5	1	1	67	138	138	25
Mindanao	2025	5	1	2	62	138	138	25
Mindanao	2025	5	1	3	60	138	138	25
Mindanao	2025	5	1	4	58	138	138	25
Mindanao	2025	5	1	5	59	138	138	25
Mindanao	2025	5	1	6	60	138	138	25
Mindanao	2025	5	1	7	59	138	138	25
Mindanao	2025	5	1	8	59	138	138	25
Mindanao	2025	5	1	9	63	138	138	25
Mindanao	2025	5	1	10	67	138	138	25
Mindanao	2025	5	1	11	71	138	138	25
Mindanao	2025	5	1	12	72	138	138	25
Mindanao	2025	5	1	13	72	138	138	25
Mindanao	2025	5	1	14	73	138	138	25
Mindanao	2025	5	1	15	73	138	138	25
Mindanao	2025	5	1	16	72	138	138	25
Mindanao	2025	5	1	17	75	138	138	25
Mindanao	2025	5	1	18	83	138	138	25
Mindanao	2025	5	1	19	84	138	138	25
Mindanao	2025	5	1	20	82	138	138	25
Mindanao	2025	5	1	21	80	138	138	25
Mindanao	2025	5	1	22	76	138	138	25
Mindanao	2025	5	1	23	71	138	138	25
Mindanao	2025	5	1	24	67	138	138	25
Mindanao	2025	5	2	1	73	138	138	25
Mindanao	2025	5	2	2	69	138	138	25
Mindanao	2025	5	2	3	68	138	138	25
Mindanao	2025	5	2	4	66	138	138	25
Mindanao	2025	5	2	5	66	138	138	25
Mindanao	2025	5	2	6	70	138	138	25
Mindanao	2025	5	2	7	68	138	138	25
Mindanao	2025	5	2	8	75	138	138	25
Mindanao	2025	5	2	9	88	138	138	25
Mindanao	2025	5	2	10	95	138	138	25
Mindanao	2025	5	2	11	96	138	138	25
Mindanao	2025	5	2	12	99	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	2	13	100	138	138	25
Mindanao	2025	5	2	14	107	138	138	25
Mindanao	2025	5	2	15	104	138	138	25
Mindanao	2025	5	2	16	100	138	138	25
Mindanao	2025	5	2	17	97	138	138	25
Mindanao	2025	5	2	18	99	138	138	25
Mindanao	2025	5	2	19	97	138	138	25
Mindanao	2025	5	2	20	93	138	138	25
Mindanao	2025	5	2	21	91	138	138	25
Mindanao	2025	5	2	22	84	138	138	25
Mindanao	2025	5	2	23	79	138	138	25
Mindanao	2025	5	2	24	74	138	138	25
Mindanao	2025	5	3	1	71	138	138	25
Mindanao	2025	5	3	2	68	138	138	25
Mindanao	2025	5	3	3	66	138	138	25
Mindanao	2025	5	3	4	64	138	138	25
Mindanao	2025	5	3	5	66	138	138	25
Mindanao	2025	5	3	6	69	138	138	25
Mindanao	2025	5	3	7	67	138	138	25
Mindanao	2025	5	3	8	72	138	138	25
Mindanao	2025	5	3	9	78	138	138	25
Mindanao	2025	5	3	10	84	138	138	25
Mindanao	2025	5	3	11	87	138	138	25
Mindanao	2025	5	3	12	82	138	138	25
Mindanao	2025	5	3	13	83	138	138	25
Mindanao	2025	5	3	14	86	138	138	25
Mindanao	2025	5	3	15	83	138	138	25
Mindanao	2025	5	3	16	84	138	138	25
Mindanao	2025	5	3	17	85	138	138	25
Mindanao	2025	5	3	18	91	138	138	25
Mindanao	2025	5	3	19	90	138	138	25
Mindanao	2025	5	3	20	86	138	138	25
Mindanao	2025	5	3	21	85	138	138	25
Mindanao	2025	5	3	22	80	138	138	25
Mindanao	2025	5	3	23	76	138	138	25
Mindanao	2025	5	3	24	71	138	138	25
Mindanao	2025	5	4	1	73	138	138	25
Mindanao	2025	5	4	2	69	138	138	25
Mindanao	2025	5	4	3	67	138	138	25
Mindanao	2025	5	4	4	65	138	138	25
Mindanao	2025	5	4	5	65	138	138	25
Mindanao	2025	5	4	6	67	138	138	25
Mindanao	2025	5	4	7	67	138	138	25
Mindanao	2025	5	4	8	66	138	138	25
Mindanao	2025	5	4	9	70	138	138	25
Mindanao	2025	5	4	10	76	138	138	25
Mindanao	2025	5	4	11	79	138	138	25
Mindanao	2025	5	4	12	79	138	138	25
Mindanao	2025	5	4	13	79	138	138	25
Mindanao	2025	5	4	14	78	138	138	25
Mindanao	2025	5	4	15	79	138	138	25
Mindanao	2025	5	4	16	77	138	138	25
Mindanao	2025	5	4	17	78	138	138	25
Mindanao	2025	5	4	18	87	138	138	25
Mindanao	2025	5	4	19	85	138	138	25
Mindanao	2025	5	4	20	83	138	138	25
Mindanao	2025	5	4	21	82	138	138	25
Mindanao	2025	5	4	22	76	138	138	25
Mindanao	2025	5	4	23	73	138	138	25
Mindanao	2025	5	4	24	69	138	138	25
Mindanao	2025	5	5	1	61	138	138	25
Mindanao	2025	5	5	2	59	138	138	25
Mindanao	2025	5	5	3	57	138	138	25
Mindanao	2025	5	5	4	57	138	138	25
Mindanao	2025	5	5	5	60	138	138	25
Mindanao	2025	5	5	6	62	138	138	25
Mindanao	2025	5	5	7	63	138	138	25
Mindanao	2025	5	5	8	70	138	138	25
Mindanao	2025	5	5	9	80	138	138	25
Mindanao	2025	5	5	10	86	138	138	25
Mindanao	2025	5	5	11	90	138	138	25
Mindanao	2025	5	5	12	89	138	138	25
Mindanao	2025	5	5	13	90	138	138	25
Mindanao	2025	5	5	14	92	138	138	25
Mindanao	2025	5	5	15	91	138	138	25
Mindanao	2025	5	5	16	88	138	138	25
Mindanao	2025	5	5	17	88	138	138	25
Mindanao	2025	5	5	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	5	19	91	138	138	25
Mindanao	2025	5	5	20	88	138	138	25
Mindanao	2025	5	5	21	83	138	138	25
Mindanao	2025	5	5	22	78	138	138	25
Mindanao	2025	5	5	23	75	138	138	25
Mindanao	2025	5	5	24	71	138	138	25
Mindanao	2025	5	6	1	66	138	138	25
Mindanao	2025	5	6	2	62	138	138	25
Mindanao	2025	5	6	3	60	138	138	25
Mindanao	2025	5	6	4	60	138	138	25
Mindanao	2025	5	6	5	62	138	138	25
Mindanao	2025	5	6	6	66	138	138	25
Mindanao	2025	5	6	7	64	138	138	25
Mindanao	2025	5	6	8	67	138	138	25
Mindanao	2025	5	6	9	71	138	138	25
Mindanao	2025	5	6	10	76	138	138	25
Mindanao	2025	5	6	11	81	138	138	25
Mindanao	2025	5	6	12	82	138	138	25
Mindanao	2025	5	6	13	81	138	138	25
Mindanao	2025	5	6	14	81	138	138	25
Mindanao	2025	5	6	15	80	138	138	25
Mindanao	2025	5	6	16	80	138	138	25
Mindanao	2025	5	6	17	81	138	138	25
Mindanao	2025	5	6	18	88	138	138	25
Mindanao	2025	5	6	19	90	138	138	25
Mindanao	2025	5	6	20	87	138	138	25
Mindanao	2025	5	6	21	84	138	138	25
Mindanao	2025	5	6	22	78	138	138	25
Mindanao	2025	5	6	23	73	138	138	25
Mindanao	2025	5	6	24	69	138	138	25
Mindanao	2025	5	7	1	67	138	138	25
Mindanao	2025	5	7	2	63	138	138	25
Mindanao	2025	5	7	3	59	138	138	25
Mindanao	2025	5	7	4	57	138	138	25
Mindanao	2025	5	7	5	62	138	138	25
Mindanao	2025	5	7	6	67	138	138	25
Mindanao	2025	5	7	7	65	138	138	25
Mindanao	2025	5	7	8	75	138	138	25
Mindanao	2025	5	7	9	84	138	138	25
Mindanao	2025	5	7	10	91	138	138	25
Mindanao	2025	5	7	11	98	138	138	25
Mindanao	2025	5	7	12	97	138	138	25
Mindanao	2025	5	7	13	94	138	138	25
Mindanao	2025	5	7	14	98	138	138	25
Mindanao	2025	5	7	15	97	138	138	25
Mindanao	2025	5	7	16	95	138	138	25
Mindanao	2025	5	7	17	91	138	138	25
Mindanao	2025	5	7	18	96	138	138	25
Mindanao	2025	5	7	19	96	138	138	25
Mindanao	2025	5	7	20	92	138	138	25
Mindanao	2025	5	7	21	87	138	138	25
Mindanao	2025	5	7	22	82	138	138	25
Mindanao	2025	5	7	23	77	138	138	25
Mindanao	2025	5	7	24	73	138	138	25
Mindanao	2025	5	8	1	68	138	138	25
Mindanao	2025	5	8	2	65	138	138	25
Mindanao	2025	5	8	3	62	138	138	25
Mindanao	2025	5	8	4	60	138	138	25
Mindanao	2025	5	8	5	64	138	138	25
Mindanao	2025	5	8	6	68	138	138	25
Mindanao	2025	5	8	7	67	138	138	25
Mindanao	2025	5	8	8	75	138	138	25
Mindanao	2025	5	8	9	87	138	138	25
Mindanao	2025	5	8	10	95	138	138	25
Mindanao	2025	5	8	11	100	138	138	25
Mindanao	2025	5	8	12	94	138	138	25
Mindanao	2025	5	8	13	95	138	138	25
Mindanao	2025	5	8	14	99	138	138	25
Mindanao	2025	5	8	15	96	138	138	25
Mindanao	2025	5	8	16	93	138	138	25
Mindanao	2025	5	8	17	89	138	138	25
Mindanao	2025	5	8	18	91	138	138	25
Mindanao	2025	5	8	19	92	138	138	25
Mindanao	2025	5	8	20	88	138	138	25
Mindanao	2025	5	8	21	86	138	138	25
Mindanao	2025	5	8	22	79	138	138	25
Mindanao	2025	5	8	23	74	138	138	25
Mindanao	2025	5	8	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	9	1	66	138	138	25
Mindanao	2025	5	9	2	63	138	138	25
Mindanao	2025	5	9	3	60	138	138	25
Mindanao	2025	5	9	4	60	138	138	25
Mindanao	2025	5	9	5	63	138	138	25
Mindanao	2025	5	9	6	67	138	138	25
Mindanao	2025	5	9	7	68	138	138	25
Mindanao	2025	5	9	8	76	138	138	25
Mindanao	2025	5	9	9	86	138	138	25
Mindanao	2025	5	9	10	93	138	138	25
Mindanao	2025	5	9	11	98	138	138	25
Mindanao	2025	5	9	12	98	138	138	25
Mindanao	2025	5	9	13	100	138	138	25
Mindanao	2025	5	9	14	105	138	138	25
Mindanao	2025	5	9	15	105	138	138	25
Mindanao	2025	5	9	16	104	138	138	25
Mindanao	2025	5	9	17	95	138	138	25
Mindanao	2025	5	9	18	99	138	138	25
Mindanao	2025	5	9	19	101	138	138	25
Mindanao	2025	5	9	20	98	138	138	25
Mindanao	2025	5	9	21	95	138	138	25
Mindanao	2025	5	9	22	89	138	138	25
Mindanao	2025	5	9	23	83	138	138	25
Mindanao	2025	5	9	24	78	138	138	25
Mindanao	2025	5	10	1	73	138	138	25
Mindanao	2025	5	10	2	70	138	138	25
Mindanao	2025	5	10	3	66	138	138	25
Mindanao	2025	5	10	4	65	138	138	25
Mindanao	2025	5	10	5	67	138	138	25
Mindanao	2025	5	10	6	69	138	138	25
Mindanao	2025	5	10	7	67	138	138	25
Mindanao	2025	5	10	8	73	138	138	25
Mindanao	2025	5	10	9	81	138	138	25
Mindanao	2025	5	10	10	88	138	138	25
Mindanao	2025	5	10	11	93	138	138	25
Mindanao	2025	5	10	12	94	138	138	25
Mindanao	2025	5	10	13	91	138	138	25
Mindanao	2025	5	10	14	97	138	138	25
Mindanao	2025	5	10	15	95	138	138	25
Mindanao	2025	5	10	16	92	138	138	25
Mindanao	2025	5	10	17	90	138	138	25
Mindanao	2025	5	10	18	95	138	138	25
Mindanao	2025	5	10	19	97	138	138	25
Mindanao	2025	5	10	20	95	138	138	25
Mindanao	2025	5	10	21	94	138	138	25
Mindanao	2025	5	10	22	88	138	138	25
Mindanao	2025	5	10	23	82	138	138	25
Mindanao	2025	5	10	24	76	138	138	25
Mindanao	2025	5	11	1	73	138	138	25
Mindanao	2025	5	11	2	69	138	138	25
Mindanao	2025	5	11	3	67	138	138	25
Mindanao	2025	5	11	4	65	138	138	25
Mindanao	2025	5	11	5	65	138	138	25
Mindanao	2025	5	11	6	67	138	138	25
Mindanao	2025	5	11	7	67	138	138	25
Mindanao	2025	5	11	8	66	138	138	25
Mindanao	2025	5	11	9	70	138	138	25
Mindanao	2025	5	11	10	76	138	138	25
Mindanao	2025	5	11	11	79	138	138	25
Mindanao	2025	5	11	12	79	138	138	25
Mindanao	2025	5	11	13	79	138	138	25
Mindanao	2025	5	11	14	78	138	138	25
Mindanao	2025	5	11	15	79	138	138	25
Mindanao	2025	5	11	16	77	138	138	25
Mindanao	2025	5	11	17	78	138	138	25
Mindanao	2025	5	11	18	87	138	138	25
Mindanao	2025	5	11	19	85	138	138	25
Mindanao	2025	5	11	20	83	138	138	25
Mindanao	2025	5	11	21	82	138	138	25
Mindanao	2025	5	11	22	76	138	138	25
Mindanao	2025	5	11	23	73	138	138	25
Mindanao	2025	5	11	24	69	138	138	25
Mindanao	2025	5	12	1	66	138	138	25
Mindanao	2025	5	12	2	63	138	138	25
Mindanao	2025	5	12	3	61	138	138	25
Mindanao	2025	5	12	4	59	138	138	25
Mindanao	2025	5	12	5	59	138	138	25
Mindanao	2025	5	12	6	59	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	12	7	55	138	138	25
Mindanao	2025	5	12	8	52	138	138	25
Mindanao	2025	5	12	9	54	138	138	25
Mindanao	2025	5	12	10	54	138	138	25
Mindanao	2025	5	12	11	57	138	138	25
Mindanao	2025	5	12	12	60	138	138	25
Mindanao	2025	5	12	13	61	138	138	25
Mindanao	2025	5	12	14	63	138	138	25
Mindanao	2025	5	12	15	63	138	138	25
Mindanao	2025	5	12	16	64	138	138	25
Mindanao	2025	5	12	17	66	138	138	25
Mindanao	2025	5	12	18	78	138	138	25
Mindanao	2025	5	12	19	80	138	138	25
Mindanao	2025	5	12	20	79	138	138	25
Mindanao	2025	5	12	21	78	138	138	25
Mindanao	2025	5	12	22	75	138	138	25
Mindanao	2025	5	12	23	70	138	138	25
Mindanao	2025	5	12	24	65	138	138	25
Mindanao	2025	5	13	1	62	138	138	25
Mindanao	2025	5	13	2	60	138	138	25
Mindanao	2025	5	13	3	58	138	138	25
Mindanao	2025	5	13	4	57	138	138	25
Mindanao	2025	5	13	5	58	138	138	25
Mindanao	2025	5	13	6	62	138	138	25
Mindanao	2025	5	13	7	64	138	138	25
Mindanao	2025	5	13	8	72	138	138	25
Mindanao	2025	5	13	9	81	138	138	25
Mindanao	2025	5	13	10	89	138	138	25
Mindanao	2025	5	13	11	95	138	138	25
Mindanao	2025	5	13	12	94	138	138	25
Mindanao	2025	5	13	13	96	138	138	25
Mindanao	2025	5	13	14	101	138	138	25
Mindanao	2025	5	13	15	100	138	138	25
Mindanao	2025	5	13	16	97	138	138	25
Mindanao	2025	5	13	17	91	138	138	25
Mindanao	2025	5	13	18	95	138	138	25
Mindanao	2025	5	13	19	93	138	138	25
Mindanao	2025	5	13	20	90	138	138	25
Mindanao	2025	5	13	21	86	138	138	25
Mindanao	2025	5	13	22	81	138	138	25
Mindanao	2025	5	13	23	76	138	138	25
Mindanao	2025	5	13	24	71	138	138	25
Mindanao	2025	5	14	1	69	138	138	25
Mindanao	2025	5	14	2	65	138	138	25
Mindanao	2025	5	14	3	63	138	138	25
Mindanao	2025	5	14	4	61	138	138	25
Mindanao	2025	5	14	5	63	138	138	25
Mindanao	2025	5	14	6	66	138	138	25
Mindanao	2025	5	14	7	67	138	138	25
Mindanao	2025	5	14	8	73	138	138	25
Mindanao	2025	5	14	9	86	138	138	25
Mindanao	2025	5	14	10	93	138	138	25
Mindanao	2025	5	14	11	100	138	138	25
Mindanao	2025	5	14	12	100	138	138	25
Mindanao	2025	5	14	13	100	138	138	25
Mindanao	2025	5	14	14	105	138	138	25
Mindanao	2025	5	14	15	103	138	138	25
Mindanao	2025	5	14	16	100	138	138	25
Mindanao	2025	5	14	17	94	138	138	25
Mindanao	2025	5	14	18	98	138	138	25
Mindanao	2025	5	14	19	99	138	138	25
Mindanao	2025	5	14	20	94	138	138	25
Mindanao	2025	5	14	21	92	138	138	25
Mindanao	2025	5	14	22	89	138	138	25
Mindanao	2025	5	14	23	83	138	138	25
Mindanao	2025	5	14	24	78	138	138	25
Mindanao	2025	5	15	1	75	138	138	25
Mindanao	2025	5	15	2	72	138	138	25
Mindanao	2025	5	15	3	70	138	138	25
Mindanao	2025	5	15	4	67	138	138	25
Mindanao	2025	5	15	5	69	138	138	25
Mindanao	2025	5	15	6	72	138	138	25
Mindanao	2025	5	15	7	71	138	138	25
Mindanao	2025	5	15	8	79	138	138	25
Mindanao	2025	5	15	9	91	138	138	25
Mindanao	2025	5	15	10	98	138	138	25
Mindanao	2025	5	15	11	104	138	138	25
Mindanao	2025	5	15	12	103	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	15	13	104	138	138	25
Mindanao	2025	5	15	14	109	138	138	25
Mindanao	2025	5	15	15	108	138	138	25
Mindanao	2025	5	15	16	104	138	138	25
Mindanao	2025	5	15	17	98	138	138	25
Mindanao	2025	5	15	18	104	138	138	25
Mindanao	2025	5	15	19	103	138	138	25
Mindanao	2025	5	15	20	99	138	138	25
Mindanao	2025	5	15	21	96	138	138	25
Mindanao	2025	5	15	22	88	138	138	25
Mindanao	2025	5	15	23	84	138	138	25
Mindanao	2025	5	15	24	79	138	138	25
Mindanao	2025	5	16	1	75	138	138	25
Mindanao	2025	5	16	2	72	138	138	25
Mindanao	2025	5	16	3	68	138	138	25
Mindanao	2025	5	16	4	66	138	138	25
Mindanao	2025	5	16	5	69	138	138	25
Mindanao	2025	5	16	6	70	138	138	25
Mindanao	2025	5	16	7	70	138	138	25
Mindanao	2025	5	16	8	78	138	138	25
Mindanao	2025	5	16	9	87	138	138	25
Mindanao	2025	5	16	10	92	138	138	25
Mindanao	2025	5	16	11	98	138	138	25
Mindanao	2025	5	16	12	98	138	138	25
Mindanao	2025	5	16	13	99	138	138	25
Mindanao	2025	5	16	14	103	138	138	25
Mindanao	2025	5	16	15	102	138	138	25
Mindanao	2025	5	16	16	97	138	138	25
Mindanao	2025	5	16	17	92	138	138	25
Mindanao	2025	5	16	18	98	138	138	25
Mindanao	2025	5	16	19	97	138	138	25
Mindanao	2025	5	16	20	94	138	138	25
Mindanao	2025	5	16	21	90	138	138	25
Mindanao	2025	5	16	22	82	138	138	25
Mindanao	2025	5	16	23	80	138	138	25
Mindanao	2025	5	16	24	76	138	138	25
Mindanao	2025	5	17	1	73	138	138	25
Mindanao	2025	5	17	2	70	138	138	25
Mindanao	2025	5	17	3	67	138	138	25
Mindanao	2025	5	17	4	67	138	138	25
Mindanao	2025	5	17	5	68	138	138	25
Mindanao	2025	5	17	6	70	138	138	25
Mindanao	2025	5	17	7	68	138	138	25
Mindanao	2025	5	17	8	71	138	138	25
Mindanao	2025	5	17	9	77	138	138	25
Mindanao	2025	5	17	10	84	138	138	25
Mindanao	2025	5	17	11	88	138	138	25
Mindanao	2025	5	17	12	86	138	138	25
Mindanao	2025	5	17	13	87	138	138	25
Mindanao	2025	5	17	14	93	138	138	25
Mindanao	2025	5	17	15	89	138	138	25
Mindanao	2025	5	17	16	87	138	138	25
Mindanao	2025	5	17	17	85	138	138	25
Mindanao	2025	5	17	18	94	138	138	25
Mindanao	2025	5	17	19	93	138	138	25
Mindanao	2025	5	17	20	89	138	138	25
Mindanao	2025	5	17	21	85	138	138	25
Mindanao	2025	5	17	22	83	138	138	25
Mindanao	2025	5	17	23	77	138	138	25
Mindanao	2025	5	17	24	76	138	138	25
Mindanao	2025	5	18	1	72	138	138	25
Mindanao	2025	5	18	2	69	138	138	25
Mindanao	2025	5	18	3	63	138	138	25
Mindanao	2025	5	18	4	64	138	138	25
Mindanao	2025	5	18	5	64	138	138	25
Mindanao	2025	5	18	6	65	138	138	25
Mindanao	2025	5	18	7	65	138	138	25
Mindanao	2025	5	18	8	63	138	138	25
Mindanao	2025	5	18	9	67	138	138	25
Mindanao	2025	5	18	10	71	138	138	25
Mindanao	2025	5	18	11	75	138	138	25
Mindanao	2025	5	18	12	75	138	138	25
Mindanao	2025	5	18	13	76	138	138	25
Mindanao	2025	5	18	14	75	138	138	25
Mindanao	2025	5	18	15	76	138	138	25
Mindanao	2025	5	18	16	76	138	138	25
Mindanao	2025	5	18	17	77	138	138	25
Mindanao	2025	5	18	18	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	18	19	87	138	138	25
Mindanao	2025	5	18	20	84	138	138	25
Mindanao	2025	5	18	21	83	138	138	25
Mindanao	2025	5	18	22	79	138	138	25
Mindanao	2025	5	18	23	74	138	138	25
Mindanao	2025	5	18	24	70	138	138	25
Mindanao	2025	5	19	1	68	138	138	25
Mindanao	2025	5	19	2	66	138	138	25
Mindanao	2025	5	19	3	64	138	138	25
Mindanao	2025	5	19	4	62	138	138	25
Mindanao	2025	5	19	5	66	138	138	25
Mindanao	2025	5	19	6	69	138	138	25
Mindanao	2025	5	19	7	67	138	138	25
Mindanao	2025	5	19	8	76	138	138	25
Mindanao	2025	5	19	9	86	138	138	25
Mindanao	2025	5	19	10	95	138	138	25
Mindanao	2025	5	19	11	100	138	138	25
Mindanao	2025	5	19	12	98	138	138	25
Mindanao	2025	5	19	13	99	138	138	25
Mindanao	2025	5	19	14	105	138	138	25
Mindanao	2025	5	19	15	103	138	138	25
Mindanao	2025	5	19	16	101	138	138	25
Mindanao	2025	5	19	17	94	138	138	25
Mindanao	2025	5	19	18	97	138	138	25
Mindanao	2025	5	19	19	94	138	138	25
Mindanao	2025	5	19	20	94	138	138	25
Mindanao	2025	5	19	21	92	138	138	25
Mindanao	2025	5	19	22	86	138	138	25
Mindanao	2025	5	19	23	82	138	138	25
Mindanao	2025	5	19	24	77	138	138	25
Mindanao	2025	5	20	1	73	138	138	25
Mindanao	2025	5	20	2	67	138	138	25
Mindanao	2025	5	20	3	67	138	138	25
Mindanao	2025	5	20	4	65	138	138	25
Mindanao	2025	5	20	5	67	138	138	25
Mindanao	2025	5	20	6	72	138	138	25
Mindanao	2025	5	20	7	70	138	138	25
Mindanao	2025	5	20	8	77	138	138	25
Mindanao	2025	5	20	9	90	138	138	25
Mindanao	2025	5	20	10	98	138	138	25
Mindanao	2025	5	20	11	102	138	138	25
Mindanao	2025	5	20	12	102	138	138	25
Mindanao	2025	5	20	13	102	138	138	25
Mindanao	2025	5	20	14	109	138	138	25
Mindanao	2025	5	20	15	107	138	138	25
Mindanao	2025	5	20	16	104	138	138	25
Mindanao	2025	5	20	17	97	138	138	25
Mindanao	2025	5	20	18	102	138	138	25
Mindanao	2025	5	20	19	103	138	138	25
Mindanao	2025	5	20	20	100	138	138	25
Mindanao	2025	5	20	21	94	138	138	25
Mindanao	2025	5	20	22	89	138	138	25
Mindanao	2025	5	20	23	85	138	138	25
Mindanao	2025	5	20	24	80	138	138	25
Mindanao	2025	5	21	1	76	138	138	25
Mindanao	2025	5	21	2	72	138	138	25
Mindanao	2025	5	21	3	69	138	138	25
Mindanao	2025	5	21	4	68	138	138	25
Mindanao	2025	5	21	5	71	138	138	25
Mindanao	2025	5	21	6	74	138	138	25
Mindanao	2025	5	21	7	70	138	138	25
Mindanao	2025	5	21	8	79	138	138	25
Mindanao	2025	5	21	9	92	138	138	25
Mindanao	2025	5	21	10	101	138	138	25
Mindanao	2025	5	21	11	106	138	138	25
Mindanao	2025	5	21	12	103	138	138	25
Mindanao	2025	5	21	13	105	138	138	25
Mindanao	2025	5	21	14	110	138	138	25
Mindanao	2025	5	21	15	109	138	138	25
Mindanao	2025	5	21	16	107	138	138	25
Mindanao	2025	5	21	17	101	138	138	25
Mindanao	2025	5	21	18	103	138	138	25
Mindanao	2025	5	21	19	106	138	138	25
Mindanao	2025	5	21	20	102	138	138	25
Mindanao	2025	5	21	21	101	138	138	25
Mindanao	2025	5	21	22	92	138	138	25
Mindanao	2025	5	21	23	88	138	138	25
Mindanao	2025	5	21	24	80	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	22	1	76	138	138	25
Mindanao	2025	5	22	2	75	138	138	25
Mindanao	2025	5	22	3	72	138	138	25
Mindanao	2025	5	22	4	71	138	138	25
Mindanao	2025	5	22	5	72	138	138	25
Mindanao	2025	5	22	6	75	138	138	25
Mindanao	2025	5	22	7	72	138	138	25
Mindanao	2025	5	22	8	80	138	138	25
Mindanao	2025	5	22	9	93	138	138	25
Mindanao	2025	5	22	10	102	138	138	25
Mindanao	2025	5	22	11	100	138	138	25
Mindanao	2025	5	22	12	102	138	138	25
Mindanao	2025	5	22	13	103	138	138	25
Mindanao	2025	5	22	14	108	138	138	25
Mindanao	2025	5	22	15	108	138	138	25
Mindanao	2025	5	22	16	106	138	138	25
Mindanao	2025	5	22	17	99	138	138	25
Mindanao	2025	5	22	18	104	138	138	25
Mindanao	2025	5	22	19	104	138	138	25
Mindanao	2025	5	22	20	104	138	138	25
Mindanao	2025	5	22	21	98	138	138	25
Mindanao	2025	5	22	22	95	138	138	25
Mindanao	2025	5	22	23	89	138	138	25
Mindanao	2025	5	22	24	82	138	138	25
Mindanao	2025	5	23	1	80	138	138	25
Mindanao	2025	5	23	2	76	138	138	25
Mindanao	2025	5	23	3	75	138	138	25
Mindanao	2025	5	23	4	73	138	138	25
Mindanao	2025	5	23	5	74	138	138	25
Mindanao	2025	5	23	6	77	138	138	25
Mindanao	2025	5	23	7	75	138	138	25
Mindanao	2025	5	23	8	84	138	138	25
Mindanao	2025	5	23	9	97	138	138	25
Mindanao	2025	5	23	10	104	138	138	25
Mindanao	2025	5	23	11	108	138	138	25
Mindanao	2025	5	23	12	105	138	138	25
Mindanao	2025	5	23	13	107	138	138	25
Mindanao	2025	5	23	14	112	138	138	25
Mindanao	2025	5	23	15	109	138	138	25
Mindanao	2025	5	23	16	106	138	138	25
Mindanao	2025	5	23	17	100	138	138	25
Mindanao	2025	5	23	18	104	138	138	25
Mindanao	2025	5	23	19	105	138	138	25
Mindanao	2025	5	23	20	101	138	138	25
Mindanao	2025	5	23	21	96	138	138	25
Mindanao	2025	5	23	22	92	138	138	25
Mindanao	2025	5	23	23	88	138	138	25
Mindanao	2025	5	23	24	83	138	138	25
Mindanao	2025	5	24	1	79	138	138	25
Mindanao	2025	5	24	2	75	138	138	25
Mindanao	2025	5	24	3	72	138	138	25
Mindanao	2025	5	24	4	72	138	138	25
Mindanao	2025	5	24	5	72	138	138	25
Mindanao	2025	5	24	6	73	138	138	25
Mindanao	2025	5	24	7	71	138	138	25
Mindanao	2025	5	24	8	75	138	138	25
Mindanao	2025	5	24	9	85	138	138	25
Mindanao	2025	5	24	10	90	138	138	25
Mindanao	2025	5	24	11	94	138	138	25
Mindanao	2025	5	24	12	94	138	138	25
Mindanao	2025	5	24	13	93	138	138	25
Mindanao	2025	5	24	14	96	138	138	25
Mindanao	2025	5	24	15	96	138	138	25
Mindanao	2025	5	24	16	92	138	138	25
Mindanao	2025	5	24	17	92	138	138	25
Mindanao	2025	5	24	18	98	138	138	25
Mindanao	2025	5	24	19	100	138	138	25
Mindanao	2025	5	24	20	95	138	138	25
Mindanao	2025	5	24	21	93	138	138	25
Mindanao	2025	5	24	22	88	138	138	25
Mindanao	2025	5	24	23	82	138	138	25
Mindanao	2025	5	24	24	77	138	138	25
Mindanao	2025	5	25	1	73	138	138	25
Mindanao	2025	5	25	2	71	138	138	25
Mindanao	2025	5	25	3	68	138	138	25
Mindanao	2025	5	25	4	67	138	138	25
Mindanao	2025	5	25	5	67	138	138	25
Mindanao	2025	5	25	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	25	7	62	138	138	25
Mindanao	2025	5	25	8	62	138	138	25
Mindanao	2025	5	25	9	67	138	138	25
Mindanao	2025	5	25	10	70	138	138	25
Mindanao	2025	5	25	11	76	138	138	25
Mindanao	2025	5	25	12	76	138	138	25
Mindanao	2025	5	25	13	78	138	138	25
Mindanao	2025	5	25	14	80	138	138	25
Mindanao	2025	5	25	15	79	138	138	25
Mindanao	2025	5	25	16	74	138	138	25
Mindanao	2025	5	25	17	77	138	138	25
Mindanao	2025	5	25	18	90	138	138	25
Mindanao	2025	5	25	19	92	138	138	25
Mindanao	2025	5	25	20	90	138	138	25
Mindanao	2025	5	25	21	86	138	138	25
Mindanao	2025	5	25	22	81	138	138	25
Mindanao	2025	5	25	23	78	138	138	25
Mindanao	2025	5	25	24	73	138	138	25
Mindanao	2025	5	26	1	71	138	138	25
Mindanao	2025	5	26	2	67	138	138	25
Mindanao	2025	5	26	3	65	138	138	25
Mindanao	2025	5	26	4	65	138	138	25
Mindanao	2025	5	26	5	67	138	138	25
Mindanao	2025	5	26	6	70	138	138	25
Mindanao	2025	5	26	7	69	138	138	25
Mindanao	2025	5	26	8	77	138	138	25
Mindanao	2025	5	26	9	91	138	138	25
Mindanao	2025	5	26	10	99	138	138	25
Mindanao	2025	5	26	11	105	138	138	25
Mindanao	2025	5	26	12	103	138	138	25
Mindanao	2025	5	26	13	106	138	138	25
Mindanao	2025	5	26	14	109	138	138	25
Mindanao	2025	5	26	15	110	138	138	25
Mindanao	2025	5	26	16	107	138	138	25
Mindanao	2025	5	26	17	102	138	138	25
Mindanao	2025	5	26	18	103	138	138	25
Mindanao	2025	5	26	19	106	138	138	25
Mindanao	2025	5	26	20	99	138	138	25
Mindanao	2025	5	26	21	98	138	138	25
Mindanao	2025	5	26	22	91	138	138	25
Mindanao	2025	5	26	23	85	138	138	25
Mindanao	2025	5	26	24	81	138	138	25
Mindanao	2025	5	27	1	76	138	138	25
Mindanao	2025	5	27	2	73	138	138	25
Mindanao	2025	5	27	3	70	138	138	25
Mindanao	2025	5	27	4	69	138	138	25
Mindanao	2025	5	27	5	70	138	138	25
Mindanao	2025	5	27	6	74	138	138	25
Mindanao	2025	5	27	7	73	138	138	25
Mindanao	2025	5	27	8	79	138	138	25
Mindanao	2025	5	27	9	92	138	138	25
Mindanao	2025	5	27	10	100	138	138	25
Mindanao	2025	5	27	11	103	138	138	25
Mindanao	2025	5	27	12	100	138	138	25
Mindanao	2025	5	27	13	103	138	138	25
Mindanao	2025	5	27	14	106	138	138	25
Mindanao	2025	5	27	15	105	138	138	25
Mindanao	2025	5	27	16	103	138	138	25
Mindanao	2025	5	27	17	99	138	138	25
Mindanao	2025	5	27	18	98	138	138	25
Mindanao	2025	5	27	19	104	138	138	25
Mindanao	2025	5	27	20	99	138	138	25
Mindanao	2025	5	27	21	97	138	138	25
Mindanao	2025	5	27	22	90	138	138	25
Mindanao	2025	5	27	23	86	138	138	25
Mindanao	2025	5	27	24	79	138	138	25
Mindanao	2025	5	28	1	76	138	138	25
Mindanao	2025	5	28	2	73	138	138	25
Mindanao	2025	5	28	3	71	138	138	25
Mindanao	2025	5	28	4	67	138	138	25
Mindanao	2025	5	28	5	72	138	138	25
Mindanao	2025	5	28	6	75	138	138	25
Mindanao	2025	5	28	7	72	138	138	25
Mindanao	2025	5	28	8	77	138	138	25
Mindanao	2025	5	28	9	86	138	138	25
Mindanao	2025	5	28	10	94	138	138	25
Mindanao	2025	5	28	11	98	138	138	25
Mindanao	2025	5	28	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	28	13	95	138	138	25
Mindanao	2025	5	28	14	101	138	138	25
Mindanao	2025	5	28	15	101	138	138	25
Mindanao	2025	5	28	16	99	138	138	25
Mindanao	2025	5	28	17	96	138	138	25
Mindanao	2025	5	28	18	101	138	138	25
Mindanao	2025	5	28	19	100	138	138	25
Mindanao	2025	5	28	20	97	138	138	25
Mindanao	2025	5	28	21	94	138	138	25
Mindanao	2025	5	28	22	88	138	138	25
Mindanao	2025	5	28	23	83	138	138	25
Mindanao	2025	5	28	24	77	138	138	25
Mindanao	2025	5	29	1	72	138	138	25
Mindanao	2025	5	29	2	71	138	138	25
Mindanao	2025	5	29	3	68	138	138	25
Mindanao	2025	5	29	4	66	138	138	25
Mindanao	2025	5	29	5	69	138	138	25
Mindanao	2025	5	29	6	72	138	138	25
Mindanao	2025	5	29	7	69	138	138	25
Mindanao	2025	5	29	8	77	138	138	25
Mindanao	2025	5	29	9	89	138	138	25
Mindanao	2025	5	29	10	96	138	138	25
Mindanao	2025	5	29	11	101	138	138	25
Mindanao	2025	5	29	12	100	138	138	25
Mindanao	2025	5	29	13	99	138	138	25
Mindanao	2025	5	29	14	97	138	138	25
Mindanao	2025	5	29	15	97	138	138	25
Mindanao	2025	5	29	16	95	138	138	25
Mindanao	2025	5	29	17	92	138	138	25
Mindanao	2025	5	29	18	94	138	138	25
Mindanao	2025	5	29	19	95	138	138	25
Mindanao	2025	5	29	20	93	138	138	25
Mindanao	2025	5	29	21	87	138	138	25
Mindanao	2025	5	29	22	83	138	138	25
Mindanao	2025	5	29	23	78	138	138	25
Mindanao	2025	5	29	24	74	138	138	25
Mindanao	2025	5	30	1	70	138	138	25
Mindanao	2025	5	30	2	69	138	138	25
Mindanao	2025	5	30	3	66	138	138	25
Mindanao	2025	5	30	4	64	138	138	25
Mindanao	2025	5	30	5	66	138	138	25
Mindanao	2025	5	30	6	71	138	138	25
Mindanao	2025	5	30	7	68	138	138	25
Mindanao	2025	5	30	8	75	138	138	25
Mindanao	2025	5	30	9	87	138	138	25
Mindanao	2025	5	30	10	92	138	138	25
Mindanao	2025	5	30	11	99	138	138	25
Mindanao	2025	5	30	12	97	138	138	25
Mindanao	2025	5	30	13	98	138	138	25
Mindanao	2025	5	30	14	103	138	138	25
Mindanao	2025	5	30	15	101	138	138	25
Mindanao	2025	5	30	16	99	138	138	25
Mindanao	2025	5	30	17	93	138	138	25
Mindanao	2025	5	30	18	99	138	138	25
Mindanao	2025	5	30	19	98	138	138	25
Mindanao	2025	5	30	20	96	138	138	25
Mindanao	2025	5	30	21	90	138	138	25
Mindanao	2025	5	30	22	86	138	138	25
Mindanao	2025	5	30	23	80	138	138	25
Mindanao	2025	5	30	24	75	138	138	25
Mindanao	2025	5	31	1	72	138	138	25
Mindanao	2025	5	31	2	69	138	138	25
Mindanao	2025	5	31	3	67	138	138	25
Mindanao	2025	5	31	4	65	138	138	25
Mindanao	2025	5	31	5	64	138	138	25
Mindanao	2025	5	31	6	69	138	138	25
Mindanao	2025	5	31	7	67	138	138	25
Mindanao	2025	5	31	8	70	138	138	25
Mindanao	2025	5	31	9	78	138	138	25
Mindanao	2025	5	31	10	83	138	138	25
Mindanao	2025	5	31	11	88	138	138	25
Mindanao	2025	5	31	12	86	138	138	25
Mindanao	2025	5	31	13	87	138	138	25
Mindanao	2025	5	31	14	92	138	138	25
Mindanao	2025	5	31	15	89	138	138	25
Mindanao	2025	5	31	16	87	138	138	25
Mindanao	2025	5	31	17	88	138	138	25
Mindanao	2025	5	31	18	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	5	31	19	95	138	138	25
Mindanao	2025	5	31	20	92	138	138	25
Mindanao	2025	5	31	21	89	138	138	25
Mindanao	2025	5	31	22	84	138	138	25
Mindanao	2025	5	31	23	77	138	138	25
Mindanao	2025	5	31	24	75	138	138	25
Mindanao	2025	6	1	1	70	138	138	25
Mindanao	2025	6	1	2	68	138	138	25
Mindanao	2025	6	1	3	66	138	138	25
Mindanao	2025	6	1	4	63	138	138	25
Mindanao	2025	6	1	5	63	138	138	25
Mindanao	2025	6	1	6	65	138	138	25
Mindanao	2025	6	1	7	64	138	138	25
Mindanao	2025	6	1	8	65	138	138	25
Mindanao	2025	6	1	9	67	138	138	25
Mindanao	2025	6	1	10	71	138	138	25
Mindanao	2025	6	1	11	76	138	138	25
Mindanao	2025	6	1	12	77	138	138	25
Mindanao	2025	6	1	13	79	138	138	25
Mindanao	2025	6	1	14	81	138	138	25
Mindanao	2025	6	1	15	80	138	138	25
Mindanao	2025	6	1	16	78	138	138	25
Mindanao	2025	6	1	17	80	138	138	25
Mindanao	2025	6	1	18	88	138	138	25
Mindanao	2025	6	1	19	89	138	138	25
Mindanao	2025	6	1	20	86	138	138	25
Mindanao	2025	6	1	21	82	138	138	25
Mindanao	2025	6	1	22	78	138	138	25
Mindanao	2025	6	1	23	73	138	138	25
Mindanao	2025	6	1	24	70	138	138	25
Mindanao	2025	6	2	1	67	138	138	25
Mindanao	2025	6	2	2	63	138	138	25
Mindanao	2025	6	2	3	61	138	138	25
Mindanao	2025	6	2	4	60	138	138	25
Mindanao	2025	6	2	5	64	138	138	25
Mindanao	2025	6	2	6	68	138	138	25
Mindanao	2025	6	2	7	67	138	138	25
Mindanao	2025	6	2	8	75	138	138	25
Mindanao	2025	6	2	9	83	138	138	25
Mindanao	2025	6	2	10	89	138	138	25
Mindanao	2025	6	2	11	93	138	138	25
Mindanao	2025	6	2	12	91	138	138	25
Mindanao	2025	6	2	13	90	138	138	25
Mindanao	2025	6	2	14	97	138	138	25
Mindanao	2025	6	2	15	95	138	138	25
Mindanao	2025	6	2	16	95	138	138	25
Mindanao	2025	6	2	17	91	138	138	25
Mindanao	2025	6	2	18	95	138	138	25
Mindanao	2025	6	2	19	94	138	138	25
Mindanao	2025	6	2	20	91	138	138	25
Mindanao	2025	6	2	21	88	138	138	25
Mindanao	2025	6	2	22	81	138	138	25
Mindanao	2025	6	2	23	77	138	138	25
Mindanao	2025	6	2	24	72	138	138	25
Mindanao	2025	6	3	1	68	138	138	25
Mindanao	2025	6	3	2	66	138	138	25
Mindanao	2025	6	3	3	63	138	138	25
Mindanao	2025	6	3	4	63	138	138	25
Mindanao	2025	6	3	5	65	138	138	25
Mindanao	2025	6	3	6	69	138	138	25
Mindanao	2025	6	3	7	68	138	138	25
Mindanao	2025	6	3	8	75	138	138	25
Mindanao	2025	6	3	9	86	138	138	25
Mindanao	2025	6	3	10	95	138	138	25
Mindanao	2025	6	3	11	99	138	138	25
Mindanao	2025	6	3	12	101	138	138	25
Mindanao	2025	6	3	13	102	138	138	25
Mindanao	2025	6	3	14	106	138	138	25
Mindanao	2025	6	3	15	105	138	138	25
Mindanao	2025	6	3	16	102	138	138	25
Mindanao	2025	6	3	17	96	138	138	25
Mindanao	2025	6	3	18	99	138	138	25
Mindanao	2025	6	3	19	103	138	138	25
Mindanao	2025	6	3	20	101	138	138	25
Mindanao	2025	6	3	21	96	138	138	25
Mindanao	2025	6	3	22	91	138	138	25
Mindanao	2025	6	3	23	83	138	138	25
Mindanao	2025	6	3	24	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	4	1	76	138	138	25
Mindanao	2025	6	4	2	73	138	138	25
Mindanao	2025	6	4	3	70	138	138	25
Mindanao	2025	6	4	4	69	138	138	25
Mindanao	2025	6	4	5	70	138	138	25
Mindanao	2025	6	4	6	73	138	138	25
Mindanao	2025	6	4	7	72	138	138	25
Mindanao	2025	6	4	8	80	138	138	25
Mindanao	2025	6	4	9	93	138	138	25
Mindanao	2025	6	4	10	102	138	138	25
Mindanao	2025	6	4	11	106	138	138	25
Mindanao	2025	6	4	12	104	138	138	25
Mindanao	2025	6	4	13	105	138	138	25
Mindanao	2025	6	4	14	111	138	138	25
Mindanao	2025	6	4	15	111	138	138	25
Mindanao	2025	6	4	16	108	138	138	25
Mindanao	2025	6	4	17	100	138	138	25
Mindanao	2025	6	4	18	101	138	138	25
Mindanao	2025	6	4	19	101	138	138	25
Mindanao	2025	6	4	20	98	138	138	25
Mindanao	2025	6	4	21	95	138	138	25
Mindanao	2025	6	4	22	89	138	138	25
Mindanao	2025	6	4	23	84	138	138	25
Mindanao	2025	6	4	24	78	138	138	25
Mindanao	2025	6	5	1	75	138	138	25
Mindanao	2025	6	5	2	71	138	138	25
Mindanao	2025	6	5	3	68	138	138	25
Mindanao	2025	6	5	4	67	138	138	25
Mindanao	2025	6	5	5	70	138	138	25
Mindanao	2025	6	5	6	73	138	138	25
Mindanao	2025	6	5	7	70	138	138	25
Mindanao	2025	6	5	8	79	138	138	25
Mindanao	2025	6	5	9	90	138	138	25
Mindanao	2025	6	5	10	99	138	138	25
Mindanao	2025	6	5	11	104	138	138	25
Mindanao	2025	6	5	12	104	138	138	25
Mindanao	2025	6	5	13	104	138	138	25
Mindanao	2025	6	5	14	109	138	138	25
Mindanao	2025	6	5	15	106	138	138	25
Mindanao	2025	6	5	16	101	138	138	25
Mindanao	2025	6	5	17	95	138	138	25
Mindanao	2025	6	5	18	98	138	138	25
Mindanao	2025	6	5	19	99	138	138	25
Mindanao	2025	6	5	20	96	138	138	25
Mindanao	2025	6	5	21	92	138	138	25
Mindanao	2025	6	5	22	86	138	138	25
Mindanao	2025	6	5	23	80	138	138	25
Mindanao	2025	6	5	24	74	138	138	25
Mindanao	2025	6	6	1	72	138	138	25
Mindanao	2025	6	6	2	68	138	138	25
Mindanao	2025	6	6	3	65	138	138	25
Mindanao	2025	6	6	4	63	138	138	25
Mindanao	2025	6	6	5	66	138	138	25
Mindanao	2025	6	6	6	71	138	138	25
Mindanao	2025	6	6	7	68	138	138	25
Mindanao	2025	6	6	8	76	138	138	25
Mindanao	2025	6	6	9	87	138	138	25
Mindanao	2025	6	6	10	97	138	138	25
Mindanao	2025	6	6	11	103	138	138	25
Mindanao	2025	6	6	12	101	138	138	25
Mindanao	2025	6	6	13	102	138	138	25
Mindanao	2025	6	6	14	105	138	138	25
Mindanao	2025	6	6	15	105	138	138	25
Mindanao	2025	6	6	16	102	138	138	25
Mindanao	2025	6	6	17	93	138	138	25
Mindanao	2025	6	6	18	96	138	138	25
Mindanao	2025	6	6	19	97	138	138	25
Mindanao	2025	6	6	20	95	138	138	25
Mindanao	2025	6	6	21	92	138	138	25
Mindanao	2025	6	6	22	86	138	138	25
Mindanao	2025	6	6	23	80	138	138	25
Mindanao	2025	6	6	24	73	138	138	25
Mindanao	2025	6	7	1	72	138	138	25
Mindanao	2025	6	7	2	69	138	138	25
Mindanao	2025	6	7	3	67	138	138	25
Mindanao	2025	6	7	4	66	138	138	25
Mindanao	2025	6	7	5	66	138	138	25
Mindanao	2025	6	7	6	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	7	7	68	138	138	25
Mindanao	2025	6	7	8	71	138	138	25
Mindanao	2025	6	7	9	80	138	138	25
Mindanao	2025	6	7	10	86	138	138	25
Mindanao	2025	6	7	11	90	138	138	25
Mindanao	2025	6	7	12	91	138	138	25
Mindanao	2025	6	7	13	94	138	138	25
Mindanao	2025	6	7	14	96	138	138	25
Mindanao	2025	6	7	15	94	138	138	25
Mindanao	2025	6	7	16	89	138	138	25
Mindanao	2025	6	7	17	89	138	138	25
Mindanao	2025	6	7	18	94	138	138	25
Mindanao	2025	6	7	19	97	138	138	25
Mindanao	2025	6	7	20	92	138	138	25
Mindanao	2025	6	7	21	87	138	138	25
Mindanao	2025	6	7	22	83	138	138	25
Mindanao	2025	6	7	23	80	138	138	25
Mindanao	2025	6	7	24	74	138	138	25
Mindanao	2025	6	8	1	69	138	138	25
Mindanao	2025	6	8	2	67	138	138	25
Mindanao	2025	6	8	3	64	138	138	25
Mindanao	2025	6	8	4	64	138	138	25
Mindanao	2025	6	8	5	63	138	138	25
Mindanao	2025	6	8	6	63	138	138	25
Mindanao	2025	6	8	7	62	138	138	25
Mindanao	2025	6	8	8	61	138	138	25
Mindanao	2025	6	8	9	62	138	138	25
Mindanao	2025	6	8	10	66	138	138	25
Mindanao	2025	6	8	11	71	138	138	25
Mindanao	2025	6	8	12	71	138	138	25
Mindanao	2025	6	8	13	71	138	138	25
Mindanao	2025	6	8	14	71	138	138	25
Mindanao	2025	6	8	15	69	138	138	25
Mindanao	2025	6	8	16	68	138	138	25
Mindanao	2025	6	8	17	72	138	138	25
Mindanao	2025	6	8	18	83	138	138	25
Mindanao	2025	6	8	19	82	138	138	25
Mindanao	2025	6	8	20	82	138	138	25
Mindanao	2025	6	8	21	78	138	138	25
Mindanao	2025	6	8	22	73	138	138	25
Mindanao	2025	6	8	23	66	138	138	25
Mindanao	2025	6	8	24	64	138	138	25
Mindanao	2025	6	9	1	60	138	138	25
Mindanao	2025	6	9	2	59	138	138	25
Mindanao	2025	6	9	3	56	138	138	25
Mindanao	2025	6	9	4	57	138	138	25
Mindanao	2025	6	9	5	59	138	138	25
Mindanao	2025	6	9	6	64	138	138	25
Mindanao	2025	6	9	7	63	138	138	25
Mindanao	2025	6	9	8	72	138	138	25
Mindanao	2025	6	9	9	85	138	138	25
Mindanao	2025	6	9	10	93	138	138	25
Mindanao	2025	6	9	11	99	138	138	25
Mindanao	2025	6	9	12	98	138	138	25
Mindanao	2025	6	9	13	101	138	138	25
Mindanao	2025	6	9	14	106	138	138	25
Mindanao	2025	6	9	15	105	138	138	25
Mindanao	2025	6	9	16	103	138	138	25
Mindanao	2025	6	9	17	96	138	138	25
Mindanao	2025	6	9	18	97	138	138	25
Mindanao	2025	6	9	19	100	138	138	25
Mindanao	2025	6	9	20	98	138	138	25
Mindanao	2025	6	9	21	95	138	138	25
Mindanao	2025	6	9	22	89	138	138	25
Mindanao	2025	6	9	23	84	138	138	25
Mindanao	2025	6	9	24	78	138	138	25
Mindanao	2025	6	10	1	73	138	138	25
Mindanao	2025	6	10	2	71	138	138	25
Mindanao	2025	6	10	3	68	138	138	25
Mindanao	2025	6	10	4	67	138	138	25
Mindanao	2025	6	10	5	69	138	138	25
Mindanao	2025	6	10	6	72	138	138	25
Mindanao	2025	6	10	7	70	138	138	25
Mindanao	2025	6	10	8	79	138	138	25
Mindanao	2025	6	10	9	91	138	138	25
Mindanao	2025	6	10	10	99	138	138	25
Mindanao	2025	6	10	11	106	138	138	25
Mindanao	2025	6	10	12	105	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	10	13	106	138	138	25
Mindanao	2025	6	10	14	109	138	138	25
Mindanao	2025	6	10	15	109	138	138	25
Mindanao	2025	6	10	16	107	138	138	25
Mindanao	2025	6	10	17	96	138	138	25
Mindanao	2025	6	10	18	97	138	138	25
Mindanao	2025	6	10	19	101	138	138	25
Mindanao	2025	6	10	20	98	138	138	25
Mindanao	2025	6	10	21	93	138	138	25
Mindanao	2025	6	10	22	86	138	138	25
Mindanao	2025	6	10	23	80	138	138	25
Mindanao	2025	6	10	24	75	138	138	25
Mindanao	2025	6	11	1	74	138	138	25
Mindanao	2025	6	11	2	70	138	138	25
Mindanao	2025	6	11	3	67	138	138	25
Mindanao	2025	6	11	4	66	138	138	25
Mindanao	2025	6	11	5	70	138	138	25
Mindanao	2025	6	11	6	74	138	138	25
Mindanao	2025	6	11	7	69	138	138	25
Mindanao	2025	6	11	8	76	138	138	25
Mindanao	2025	6	11	9	88	138	138	25
Mindanao	2025	6	11	10	100	138	138	25
Mindanao	2025	6	11	11	103	138	138	25
Mindanao	2025	6	11	12	103	138	138	25
Mindanao	2025	6	11	13	103	138	138	25
Mindanao	2025	6	11	14	106	138	138	25
Mindanao	2025	6	11	15	102	138	138	25
Mindanao	2025	6	11	16	102	138	138	25
Mindanao	2025	6	11	17	97	138	138	25
Mindanao	2025	6	11	18	100	138	138	25
Mindanao	2025	6	11	19	97	138	138	25
Mindanao	2025	6	11	20	92	138	138	25
Mindanao	2025	6	11	21	87	138	138	25
Mindanao	2025	6	11	22	82	138	138	25
Mindanao	2025	6	11	23	76	138	138	25
Mindanao	2025	6	11	24	71	138	138	25
Mindanao	2025	6	12	1	71	138	138	25
Mindanao	2025	6	12	2	67	138	138	25
Mindanao	2025	6	12	3	65	138	138	25
Mindanao	2025	6	12	4	62	138	138	25
Mindanao	2025	6	12	5	64	138	138	25
Mindanao	2025	6	12	6	63	138	138	25
Mindanao	2025	6	12	7	62	138	138	25
Mindanao	2025	6	12	8	61	138	138	25
Mindanao	2025	6	12	9	65	138	138	25
Mindanao	2025	6	12	10	72	138	138	25
Mindanao	2025	6	12	11	77	138	138	25
Mindanao	2025	6	12	12	77	138	138	25
Mindanao	2025	6	12	13	79	138	138	25
Mindanao	2025	6	12	14	80	138	138	25
Mindanao	2025	6	12	15	81	138	138	25
Mindanao	2025	6	12	16	78	138	138	25
Mindanao	2025	6	12	17	77	138	138	25
Mindanao	2025	6	12	18	85	138	138	25
Mindanao	2025	6	12	19	89	138	138	25
Mindanao	2025	6	12	20	88	138	138	25
Mindanao	2025	6	12	21	87	138	138	25
Mindanao	2025	6	12	22	83	138	138	25
Mindanao	2025	6	12	23	76	138	138	25
Mindanao	2025	6	12	24	71	138	138	25
Mindanao	2025	6	13	1	74	138	138	25
Mindanao	2025	6	13	2	71	138	138	25
Mindanao	2025	6	13	3	67	138	138	25
Mindanao	2025	6	13	4	66	138	138	25
Mindanao	2025	6	13	5	68	138	138	25
Mindanao	2025	6	13	6	71	138	138	25
Mindanao	2025	6	13	7	71	138	138	25
Mindanao	2025	6	13	8	78	138	138	25
Mindanao	2025	6	13	9	90	138	138	25
Mindanao	2025	6	13	10	97	138	138	25
Mindanao	2025	6	13	11	102	138	138	25
Mindanao	2025	6	13	12	99	138	138	25
Mindanao	2025	6	13	13	101	138	138	25
Mindanao	2025	6	13	14	106	138	138	25
Mindanao	2025	6	13	15	104	138	138	25
Mindanao	2025	6	13	16	101	138	138	25
Mindanao	2025	6	13	17	92	138	138	25
Mindanao	2025	6	13	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	13	19	98	138	138	25
Mindanao	2025	6	13	20	96	138	138	25
Mindanao	2025	6	13	21	93	138	138	25
Mindanao	2025	6	13	22	84	138	138	25
Mindanao	2025	6	13	23	80	138	138	25
Mindanao	2025	6	13	24	73	138	138	25
Mindanao	2025	6	14	1	71	138	138	25
Mindanao	2025	6	14	2	66	138	138	25
Mindanao	2025	6	14	3	65	138	138	25
Mindanao	2025	6	14	4	62	138	138	25
Mindanao	2025	6	14	5	62	138	138	25
Mindanao	2025	6	14	6	64	138	138	25
Mindanao	2025	6	14	7	64	138	138	25
Mindanao	2025	6	14	8	69	138	138	25
Mindanao	2025	6	14	9	76	138	138	25
Mindanao	2025	6	14	10	82	138	138	25
Mindanao	2025	6	14	11	88	138	138	25
Mindanao	2025	6	14	12	89	138	138	25
Mindanao	2025	6	14	13	88	138	138	25
Mindanao	2025	6	14	14	94	138	138	25
Mindanao	2025	6	14	15	93	138	138	25
Mindanao	2025	6	14	16	91	138	138	25
Mindanao	2025	6	14	17	85	138	138	25
Mindanao	2025	6	14	18	91	138	138	25
Mindanao	2025	6	14	19	96	138	138	25
Mindanao	2025	6	14	20	94	138	138	25
Mindanao	2025	6	14	21	91	138	138	25
Mindanao	2025	6	14	22	85	138	138	25
Mindanao	2025	6	14	23	81	138	138	25
Mindanao	2025	6	14	24	76	138	138	25
Mindanao	2025	6	15	1	71	138	138	25
Mindanao	2025	6	15	2	68	138	138	25
Mindanao	2025	6	15	3	65	138	138	25
Mindanao	2025	6	15	4	62	138	138	25
Mindanao	2025	6	15	5	63	138	138	25
Mindanao	2025	6	15	6	64	138	138	25
Mindanao	2025	6	15	7	63	138	138	25
Mindanao	2025	6	15	8	64	138	138	25
Mindanao	2025	6	15	9	67	138	138	25
Mindanao	2025	6	15	10	73	138	138	25
Mindanao	2025	6	15	11	76	138	138	25
Mindanao	2025	6	15	12	78	138	138	25
Mindanao	2025	6	15	13	79	138	138	25
Mindanao	2025	6	15	14	80	138	138	25
Mindanao	2025	6	15	15	79	138	138	25
Mindanao	2025	6	15	16	74	138	138	25
Mindanao	2025	6	15	17	76	138	138	25
Mindanao	2025	6	15	18	83	138	138	25
Mindanao	2025	6	15	19	86	138	138	25
Mindanao	2025	6	15	20	85	138	138	25
Mindanao	2025	6	15	21	83	138	138	25
Mindanao	2025	6	15	22	79	138	138	25
Mindanao	2025	6	15	23	73	138	138	25
Mindanao	2025	6	15	24	71	138	138	25
Mindanao	2025	6	16	1	67	138	138	25
Mindanao	2025	6	16	2	64	138	138	25
Mindanao	2025	6	16	3	62	138	138	25
Mindanao	2025	6	16	4	60	138	138	25
Mindanao	2025	6	16	5	62	138	138	25
Mindanao	2025	6	16	6	65	138	138	25
Mindanao	2025	6	16	7	66	138	138	25
Mindanao	2025	6	16	8	76	138	138	25
Mindanao	2025	6	16	9	88	138	138	25
Mindanao	2025	6	16	10	97	138	138	25
Mindanao	2025	6	16	11	101	138	138	25
Mindanao	2025	6	16	12	100	138	138	25
Mindanao	2025	6	16	13	101	138	138	25
Mindanao	2025	6	16	14	106	138	138	25
Mindanao	2025	6	16	15	103	138	138	25
Mindanao	2025	6	16	16	100	138	138	25
Mindanao	2025	6	16	17	95	138	138	25
Mindanao	2025	6	16	18	95	138	138	25
Mindanao	2025	6	16	19	96	138	138	25
Mindanao	2025	6	16	20	92	138	138	25
Mindanao	2025	6	16	21	86	138	138	25
Mindanao	2025	6	16	22	82	138	138	25
Mindanao	2025	6	16	23	77	138	138	25
Mindanao	2025	6	16	24	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	17	1	68	138	138	25
Mindanao	2025	6	17	2	66	138	138	25
Mindanao	2025	6	17	3	63	138	138	25
Mindanao	2025	6	17	4	62	138	138	25
Mindanao	2025	6	17	5	65	138	138	25
Mindanao	2025	6	17	6	70	138	138	25
Mindanao	2025	6	17	7	66	138	138	25
Mindanao	2025	6	17	8	73	138	138	25
Mindanao	2025	6	17	9	88	138	138	25
Mindanao	2025	6	17	10	96	138	138	25
Mindanao	2025	6	17	11	101	138	138	25
Mindanao	2025	6	17	12	99	138	138	25
Mindanao	2025	6	17	13	99	138	138	25
Mindanao	2025	6	17	14	101	138	138	25
Mindanao	2025	6	17	15	102	138	138	25
Mindanao	2025	6	17	16	99	138	138	25
Mindanao	2025	6	17	17	93	138	138	25
Mindanao	2025	6	17	18	95	138	138	25
Mindanao	2025	6	17	19	97	138	138	25
Mindanao	2025	6	17	20	94	138	138	25
Mindanao	2025	6	17	21	90	138	138	25
Mindanao	2025	6	17	22	83	138	138	25
Mindanao	2025	6	17	23	77	138	138	25
Mindanao	2025	6	17	24	72	138	138	25
Mindanao	2025	6	18	1	68	138	138	25
Mindanao	2025	6	18	2	66	138	138	25
Mindanao	2025	6	18	3	62	138	138	25
Mindanao	2025	6	18	4	62	138	138	25
Mindanao	2025	6	18	5	66	138	138	25
Mindanao	2025	6	18	6	68	138	138	25
Mindanao	2025	6	18	7	66	138	138	25
Mindanao	2025	6	18	8	75	138	138	25
Mindanao	2025	6	18	9	86	138	138	25
Mindanao	2025	6	18	10	94	138	138	25
Mindanao	2025	6	18	11	100	138	138	25
Mindanao	2025	6	18	12	100	138	138	25
Mindanao	2025	6	18	13	102	138	138	25
Mindanao	2025	6	18	14	107	138	138	25
Mindanao	2025	6	18	15	106	138	138	25
Mindanao	2025	6	18	16	101	138	138	25
Mindanao	2025	6	18	17	96	138	138	25
Mindanao	2025	6	18	18	96	138	138	25
Mindanao	2025	6	18	19	101	138	138	25
Mindanao	2025	6	18	20	98	138	138	25
Mindanao	2025	6	18	21	95	138	138	25
Mindanao	2025	6	18	22	88	138	138	25
Mindanao	2025	6	18	23	82	138	138	25
Mindanao	2025	6	18	24	78	138	138	25
Mindanao	2025	6	19	1	73	138	138	25
Mindanao	2025	6	19	2	70	138	138	25
Mindanao	2025	6	19	3	67	138	138	25
Mindanao	2025	6	19	4	64	138	138	25
Mindanao	2025	6	19	5	67	138	138	25
Mindanao	2025	6	19	6	69	138	138	25
Mindanao	2025	6	19	7	67	138	138	25
Mindanao	2025	6	19	8	76	138	138	25
Mindanao	2025	6	19	9	89	138	138	25
Mindanao	2025	6	19	10	98	138	138	25
Mindanao	2025	6	19	11	101	138	138	25
Mindanao	2025	6	19	12	97	138	138	25
Mindanao	2025	6	19	13	96	138	138	25
Mindanao	2025	6	19	14	100	138	138	25
Mindanao	2025	6	19	15	97	138	138	25
Mindanao	2025	6	19	16	96	138	138	25
Mindanao	2025	6	19	17	90	138	138	25
Mindanao	2025	6	19	18	92	138	138	25
Mindanao	2025	6	19	19	95	138	138	25
Mindanao	2025	6	19	20	91	138	138	25
Mindanao	2025	6	19	21	89	138	138	25
Mindanao	2025	6	19	22	81	138	138	25
Mindanao	2025	6	19	23	76	138	138	25
Mindanao	2025	6	19	24	70	138	138	25
Mindanao	2025	6	20	1	67	138	138	25
Mindanao	2025	6	20	2	66	138	138	25
Mindanao	2025	6	20	3	64	138	138	25
Mindanao	2025	6	20	4	63	138	138	25
Mindanao	2025	6	20	5	64	138	138	25
Mindanao	2025	6	20	6	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	20	7	66	138	138	25
Mindanao	2025	6	20	8	72	138	138	25
Mindanao	2025	6	20	9	84	138	138	25
Mindanao	2025	6	20	10	92	138	138	25
Mindanao	2025	6	20	11	98	138	138	25
Mindanao	2025	6	20	12	99	138	138	25
Mindanao	2025	6	20	13	99	138	138	25
Mindanao	2025	6	20	14	105	138	138	25
Mindanao	2025	6	20	15	103	138	138	25
Mindanao	2025	6	20	16	95	138	138	25
Mindanao	2025	6	20	17	94	138	138	25
Mindanao	2025	6	20	18	96	138	138	25
Mindanao	2025	6	20	19	99	138	138	25
Mindanao	2025	6	20	20	95	138	138	25
Mindanao	2025	6	20	21	90	138	138	25
Mindanao	2025	6	20	22	86	138	138	25
Mindanao	2025	6	20	23	81	138	138	25
Mindanao	2025	6	20	24	75	138	138	25
Mindanao	2025	6	21	1	73	138	138	25
Mindanao	2025	6	21	2	69	138	138	25
Mindanao	2025	6	21	3	62	138	138	25
Mindanao	2025	6	21	4	63	138	138	25
Mindanao	2025	6	21	5	65	138	138	25
Mindanao	2025	6	21	6	66	138	138	25
Mindanao	2025	6	21	7	65	138	138	25
Mindanao	2025	6	21	8	68	138	138	25
Mindanao	2025	6	21	9	74	138	138	25
Mindanao	2025	6	21	10	82	138	138	25
Mindanao	2025	6	21	11	88	138	138	25
Mindanao	2025	6	21	12	88	138	138	25
Mindanao	2025	6	21	13	89	138	138	25
Mindanao	2025	6	21	14	95	138	138	25
Mindanao	2025	6	21	15	93	138	138	25
Mindanao	2025	6	21	16	89	138	138	25
Mindanao	2025	6	21	17	88	138	138	25
Mindanao	2025	6	21	18	93	138	138	25
Mindanao	2025	6	21	19	95	138	138	25
Mindanao	2025	6	21	20	93	138	138	25
Mindanao	2025	6	21	21	89	138	138	25
Mindanao	2025	6	21	22	85	138	138	25
Mindanao	2025	6	21	23	80	138	138	25
Mindanao	2025	6	21	24	75	138	138	25
Mindanao	2025	6	22	1	71	138	138	25
Mindanao	2025	6	22	2	68	138	138	25
Mindanao	2025	6	22	3	65	138	138	25
Mindanao	2025	6	22	4	62	138	138	25
Mindanao	2025	6	22	5	63	138	138	25
Mindanao	2025	6	22	6	64	138	138	25
Mindanao	2025	6	22	7	63	138	138	25
Mindanao	2025	6	22	8	64	138	138	25
Mindanao	2025	6	22	9	67	138	138	25
Mindanao	2025	6	22	10	73	138	138	25
Mindanao	2025	6	22	11	76	138	138	25
Mindanao	2025	6	22	12	78	138	138	25
Mindanao	2025	6	22	13	79	138	138	25
Mindanao	2025	6	22	14	80	138	138	25
Mindanao	2025	6	22	15	79	138	138	25
Mindanao	2025	6	22	16	74	138	138	25
Mindanao	2025	6	22	17	76	138	138	25
Mindanao	2025	6	22	18	83	138	138	25
Mindanao	2025	6	22	19	86	138	138	25
Mindanao	2025	6	22	20	85	138	138	25
Mindanao	2025	6	22	21	83	138	138	25
Mindanao	2025	6	22	22	79	138	138	25
Mindanao	2025	6	22	23	73	138	138	25
Mindanao	2025	6	22	24	71	138	138	25
Mindanao	2025	6	23	1	66	138	138	25
Mindanao	2025	6	23	2	63	138	138	25
Mindanao	2025	6	23	3	62	138	138	25
Mindanao	2025	6	23	4	60	138	138	25
Mindanao	2025	6	23	5	64	138	138	25
Mindanao	2025	6	23	6	67	138	138	25
Mindanao	2025	6	23	7	65	138	138	25
Mindanao	2025	6	23	8	72	138	138	25
Mindanao	2025	6	23	9	87	138	138	25
Mindanao	2025	6	23	10	93	138	138	25
Mindanao	2025	6	23	11	99	138	138	25
Mindanao	2025	6	23	12	99	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	23	13	101	138	138	25
Mindanao	2025	6	23	14	105	138	138	25
Mindanao	2025	6	23	15	102	138	138	25
Mindanao	2025	6	23	16	100	138	138	25
Mindanao	2025	6	23	17	94	138	138	25
Mindanao	2025	6	23	18	93	138	138	25
Mindanao	2025	6	23	19	98	138	138	25
Mindanao	2025	6	23	20	93	138	138	25
Mindanao	2025	6	23	21	90	138	138	25
Mindanao	2025	6	23	22	84	138	138	25
Mindanao	2025	6	23	23	78	138	138	25
Mindanao	2025	6	23	24	74	138	138	25
Mindanao	2025	6	24	1	70	138	138	25
Mindanao	2025	6	24	2	68	138	138	25
Mindanao	2025	6	24	3	64	138	138	25
Mindanao	2025	6	24	4	64	138	138	25
Mindanao	2025	6	24	5	65	138	138	25
Mindanao	2025	6	24	6	68	138	138	25
Mindanao	2025	6	24	7	68	138	138	25
Mindanao	2025	6	24	8	74	138	138	25
Mindanao	2025	6	24	9	88	138	138	25
Mindanao	2025	6	24	10	95	138	138	25
Mindanao	2025	6	24	11	101	138	138	25
Mindanao	2025	6	24	12	99	138	138	25
Mindanao	2025	6	24	13	98	138	138	25
Mindanao	2025	6	24	14	100	138	138	25
Mindanao	2025	6	24	15	96	138	138	25
Mindanao	2025	6	24	16	92	138	138	25
Mindanao	2025	6	24	17	88	138	138	25
Mindanao	2025	6	24	18	92	138	138	25
Mindanao	2025	6	24	19	93	138	138	25
Mindanao	2025	6	24	20	89	138	138	25
Mindanao	2025	6	24	21	84	138	138	25
Mindanao	2025	6	24	22	79	138	138	25
Mindanao	2025	6	24	23	74	138	138	25
Mindanao	2025	6	24	24	69	138	138	25
Mindanao	2025	6	25	1	67	138	138	25
Mindanao	2025	6	25	2	65	138	138	25
Mindanao	2025	6	25	3	62	138	138	25
Mindanao	2025	6	25	4	62	138	138	25
Mindanao	2025	6	25	5	63	138	138	25
Mindanao	2025	6	25	6	68	138	138	25
Mindanao	2025	6	25	7	67	138	138	25
Mindanao	2025	6	25	8	73	138	138	25
Mindanao	2025	6	25	9	84	138	138	25
Mindanao	2025	6	25	10	90	138	138	25
Mindanao	2025	6	25	11	96	138	138	25
Mindanao	2025	6	25	12	94	138	138	25
Mindanao	2025	6	25	13	95	138	138	25
Mindanao	2025	6	25	14	94	138	138	25
Mindanao	2025	6	25	15	94	138	138	25
Mindanao	2025	6	25	16	93	138	138	25
Mindanao	2025	6	25	17	91	138	138	25
Mindanao	2025	6	25	18	95	138	138	25
Mindanao	2025	6	25	19	97	138	138	25
Mindanao	2025	6	25	20	93	138	138	25
Mindanao	2025	6	25	21	90	138	138	25
Mindanao	2025	6	25	22	81	138	138	25
Mindanao	2025	6	25	23	77	138	138	25
Mindanao	2025	6	25	24	72	138	138	25
Mindanao	2025	6	26	1	69	138	138	25
Mindanao	2025	6	26	2	65	138	138	25
Mindanao	2025	6	26	3	63	138	138	25
Mindanao	2025	6	26	4	63	138	138	25
Mindanao	2025	6	26	5	64	138	138	25
Mindanao	2025	6	26	6	69	138	138	25
Mindanao	2025	6	26	7	68	138	138	25
Mindanao	2025	6	26	8	76	138	138	25
Mindanao	2025	6	26	9	88	138	138	25
Mindanao	2025	6	26	10	96	138	138	25
Mindanao	2025	6	26	11	100	138	138	25
Mindanao	2025	6	26	12	100	138	138	25
Mindanao	2025	6	26	13	101	138	138	25
Mindanao	2025	6	26	14	106	138	138	25
Mindanao	2025	6	26	15	107	138	138	25
Mindanao	2025	6	26	16	104	138	138	25
Mindanao	2025	6	26	17	99	138	138	25
Mindanao	2025	6	26	18	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	26	19	102	138	138	25
Mindanao	2025	6	26	20	98	138	138	25
Mindanao	2025	6	26	21	96	138	138	25
Mindanao	2025	6	26	22	89	138	138	25
Mindanao	2025	6	26	23	84	138	138	25
Mindanao	2025	6	26	24	78	138	138	25
Mindanao	2025	6	27	1	73	138	138	25
Mindanao	2025	6	27	2	70	138	138	25
Mindanao	2025	6	27	3	68	138	138	25
Mindanao	2025	6	27	4	66	138	138	25
Mindanao	2025	6	27	5	69	138	138	25
Mindanao	2025	6	27	6	70	138	138	25
Mindanao	2025	6	27	7	71	138	138	25
Mindanao	2025	6	27	8	78	138	138	25
Mindanao	2025	6	27	9	91	138	138	25
Mindanao	2025	6	27	10	97	138	138	25
Mindanao	2025	6	27	11	101	138	138	25
Mindanao	2025	6	27	12	100	138	138	25
Mindanao	2025	6	27	13	101	138	138	25
Mindanao	2025	6	27	14	106	138	138	25
Mindanao	2025	6	27	15	105	138	138	25
Mindanao	2025	6	27	16	103	138	138	25
Mindanao	2025	6	27	17	97	138	138	25
Mindanao	2025	6	27	18	97	138	138	25
Mindanao	2025	6	27	19	102	138	138	25
Mindanao	2025	6	27	20	100	138	138	25
Mindanao	2025	6	27	21	97	138	138	25
Mindanao	2025	6	27	22	91	138	138	25
Mindanao	2025	6	27	23	86	138	138	25
Mindanao	2025	6	27	24	82	138	138	25
Mindanao	2025	6	28	1	77	138	138	25
Mindanao	2025	6	28	2	74	138	138	25
Mindanao	2025	6	28	3	71	138	138	25
Mindanao	2025	6	28	4	67	138	138	25
Mindanao	2025	6	28	5	64	138	138	25
Mindanao	2025	6	28	6	70	138	138	25
Mindanao	2025	6	28	7	67	138	138	25
Mindanao	2025	6	28	8	71	138	138	25
Mindanao	2025	6	28	9	78	138	138	25
Mindanao	2025	6	28	10	85	138	138	25
Mindanao	2025	6	28	11	90	138	138	25
Mindanao	2025	6	28	12	89	138	138	25
Mindanao	2025	6	28	13	89	138	138	25
Mindanao	2025	6	28	14	93	138	138	25
Mindanao	2025	6	28	15	92	138	138	25
Mindanao	2025	6	28	16	89	138	138	25
Mindanao	2025	6	28	17	88	138	138	25
Mindanao	2025	6	28	18	93	138	138	25
Mindanao	2025	6	28	19	97	138	138	25
Mindanao	2025	6	28	20	94	138	138	25
Mindanao	2025	6	28	21	90	138	138	25
Mindanao	2025	6	28	22	85	138	138	25
Mindanao	2025	6	28	23	81	138	138	25
Mindanao	2025	6	28	24	76	138	138	25
Mindanao	2025	6	29	1	71	138	138	25
Mindanao	2025	6	29	2	68	138	138	25
Mindanao	2025	6	29	3	67	138	138	25
Mindanao	2025	6	29	4	64	138	138	25
Mindanao	2025	6	29	5	66	138	138	25
Mindanao	2025	6	29	6	67	138	138	25
Mindanao	2025	6	29	7	65	138	138	25
Mindanao	2025	6	29	8	62	138	138	25
Mindanao	2025	6	29	9	64	138	138	25
Mindanao	2025	6	29	10	68	138	138	25
Mindanao	2025	6	29	11	70	138	138	25
Mindanao	2025	6	29	12	70	138	138	25
Mindanao	2025	6	29	13	73	138	138	25
Mindanao	2025	6	29	14	72	138	138	25
Mindanao	2025	6	29	15	69	138	138	25
Mindanao	2025	6	29	16	70	138	138	25
Mindanao	2025	6	29	17	71	138	138	25
Mindanao	2025	6	29	18	88	138	138	25
Mindanao	2025	6	29	19	89	138	138	25
Mindanao	2025	6	29	20	88	138	138	25
Mindanao	2025	6	29	21	82	138	138	25
Mindanao	2025	6	29	22	80	138	138	25
Mindanao	2025	6	29	23	74	138	138	25
Mindanao	2025	6	29	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	6	30	1	67	138	138	25
Mindanao	2025	6	30	2	64	138	138	25
Mindanao	2025	6	30	3	62	138	138	25
Mindanao	2025	6	30	4	61	138	138	25
Mindanao	2025	6	30	5	63	138	138	25
Mindanao	2025	6	30	6	68	138	138	25
Mindanao	2025	6	30	7	67	138	138	25
Mindanao	2025	6	30	8	74	138	138	25
Mindanao	2025	6	30	9	87	138	138	25
Mindanao	2025	6	30	10	94	138	138	25
Mindanao	2025	6	30	11	100	138	138	25
Mindanao	2025	6	30	12	99	138	138	25
Mindanao	2025	6	30	13	101	138	138	25
Mindanao	2025	6	30	14	107	138	138	25
Mindanao	2025	6	30	15	104	138	138	25
Mindanao	2025	6	30	16	100	138	138	25
Mindanao	2025	6	30	17	96	138	138	25
Mindanao	2025	6	30	18	97	138	138	25
Mindanao	2025	6	30	19	96	138	138	25
Mindanao	2025	6	30	20	90	138	138	25
Mindanao	2025	6	30	21	85	138	138	25
Mindanao	2025	6	30	22	80	138	138	25
Mindanao	2025	6	30	23	76	138	138	25
Mindanao	2025	6	30	24	72	138	138	25
Mindanao	2025	7	1	1	69	138	138	25
Mindanao	2025	7	1	2	65	138	138	25
Mindanao	2025	7	1	3	64	138	138	25
Mindanao	2025	7	1	4	65	138	138	25
Mindanao	2025	7	1	5	66	138	138	25
Mindanao	2025	7	1	6	69	138	138	25
Mindanao	2025	7	1	7	68	138	138	25
Mindanao	2025	7	1	8	76	138	138	25
Mindanao	2025	7	1	9	87	138	138	25
Mindanao	2025	7	1	10	96	138	138	25
Mindanao	2025	7	1	11	101	138	138	25
Mindanao	2025	7	1	12	99	138	138	25
Mindanao	2025	7	1	13	101	138	138	25
Mindanao	2025	7	1	14	105	138	138	25
Mindanao	2025	7	1	15	101	138	138	25
Mindanao	2025	7	1	16	98	138	138	25
Mindanao	2025	7	1	17	94	138	138	25
Mindanao	2025	7	1	18	96	138	138	25
Mindanao	2025	7	1	19	98	138	138	25
Mindanao	2025	7	1	20	93	138	138	25
Mindanao	2025	7	1	21	90	138	138	25
Mindanao	2025	7	1	22	85	138	138	25
Mindanao	2025	7	1	23	78	138	138	25
Mindanao	2025	7	1	24	73	138	138	25
Mindanao	2025	7	2	1	70	138	138	25
Mindanao	2025	7	2	2	68	138	138	25
Mindanao	2025	7	2	3	66	138	138	25
Mindanao	2025	7	2	4	64	138	138	25
Mindanao	2025	7	2	5	65	138	138	25
Mindanao	2025	7	2	6	71	138	138	25
Mindanao	2025	7	2	7	69	138	138	25
Mindanao	2025	7	2	8	76	138	138	25
Mindanao	2025	7	2	9	86	138	138	25
Mindanao	2025	7	2	10	97	138	138	25
Mindanao	2025	7	2	11	101	138	138	25
Mindanao	2025	7	2	12	100	138	138	25
Mindanao	2025	7	2	13	101	138	138	25
Mindanao	2025	7	2	14	105	138	138	25
Mindanao	2025	7	2	15	102	138	138	25
Mindanao	2025	7	2	16	101	138	138	25
Mindanao	2025	7	2	17	93	138	138	25
Mindanao	2025	7	2	18	97	138	138	25
Mindanao	2025	7	2	19	98	138	138	25
Mindanao	2025	7	2	20	95	138	138	25
Mindanao	2025	7	2	21	92	138	138	25
Mindanao	2025	7	2	22	85	138	138	25
Mindanao	2025	7	2	23	80	138	138	25
Mindanao	2025	7	2	24	74	138	138	25
Mindanao	2025	7	3	1	71	138	138	25
Mindanao	2025	7	3	2	69	138	138	25
Mindanao	2025	7	3	3	67	138	138	25
Mindanao	2025	7	3	4	66	138	138	25
Mindanao	2025	7	3	5	67	138	138	25
Mindanao	2025	7	3	6	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	3	7	70	138	138	25
Mindanao	2025	7	3	8	78	138	138	25
Mindanao	2025	7	3	9	90	138	138	25
Mindanao	2025	7	3	10	99	138	138	25
Mindanao	2025	7	3	11	102	138	138	25
Mindanao	2025	7	3	12	100	138	138	25
Mindanao	2025	7	3	13	102	138	138	25
Mindanao	2025	7	3	14	105	138	138	25
Mindanao	2025	7	3	15	106	138	138	25
Mindanao	2025	7	3	16	102	138	138	25
Mindanao	2025	7	3	17	95	138	138	25
Mindanao	2025	7	3	18	97	138	138	25
Mindanao	2025	7	3	19	99	138	138	25
Mindanao	2025	7	3	20	94	138	138	25
Mindanao	2025	7	3	21	92	138	138	25
Mindanao	2025	7	3	22	86	138	138	25
Mindanao	2025	7	3	23	81	138	138	25
Mindanao	2025	7	3	24	75	138	138	25
Mindanao	2025	7	4	1	73	138	138	25
Mindanao	2025	7	4	2	69	138	138	25
Mindanao	2025	7	4	3	67	138	138	25
Mindanao	2025	7	4	4	66	138	138	25
Mindanao	2025	7	4	5	67	138	138	25
Mindanao	2025	7	4	6	70	138	138	25
Mindanao	2025	7	4	7	68	138	138	25
Mindanao	2025	7	4	8	75	138	138	25
Mindanao	2025	7	4	9	89	138	138	25
Mindanao	2025	7	4	10	97	138	138	25
Mindanao	2025	7	4	11	102	138	138	25
Mindanao	2025	7	4	12	102	138	138	25
Mindanao	2025	7	4	13	103	138	138	25
Mindanao	2025	7	4	14	107	138	138	25
Mindanao	2025	7	4	15	105	138	138	25
Mindanao	2025	7	4	16	102	138	138	25
Mindanao	2025	7	4	17	94	138	138	25
Mindanao	2025	7	4	18	97	138	138	25
Mindanao	2025	7	4	19	99	138	138	25
Mindanao	2025	7	4	20	95	138	138	25
Mindanao	2025	7	4	21	91	138	138	25
Mindanao	2025	7	4	22	84	138	138	25
Mindanao	2025	7	4	23	79	138	138	25
Mindanao	2025	7	4	24	75	138	138	25
Mindanao	2025	7	5	1	71	138	138	25
Mindanao	2025	7	5	2	70	138	138	25
Mindanao	2025	7	5	3	66	138	138	25
Mindanao	2025	7	5	4	65	138	138	25
Mindanao	2025	7	5	5	66	138	138	25
Mindanao	2025	7	5	6	68	138	138	25
Mindanao	2025	7	5	7	66	138	138	25
Mindanao	2025	7	5	8	70	138	138	25
Mindanao	2025	7	5	9	76	138	138	25
Mindanao	2025	7	5	10	81	138	138	25
Mindanao	2025	7	5	11	84	138	138	25
Mindanao	2025	7	5	12	82	138	138	25
Mindanao	2025	7	5	13	82	138	138	25
Mindanao	2025	7	5	14	85	138	138	25
Mindanao	2025	7	5	15	85	138	138	25
Mindanao	2025	7	5	16	84	138	138	25
Mindanao	2025	7	5	17	84	138	138	25
Mindanao	2025	7	5	18	89	138	138	25
Mindanao	2025	7	5	19	92	138	138	25
Mindanao	2025	7	5	20	89	138	138	25
Mindanao	2025	7	5	21	87	138	138	25
Mindanao	2025	7	5	22	80	138	138	25
Mindanao	2025	7	5	23	75	138	138	25
Mindanao	2025	7	5	24	69	138	138	25
Mindanao	2025	7	6	1	67	138	138	25
Mindanao	2025	7	6	2	65	138	138	25
Mindanao	2025	7	6	3	63	138	138	25
Mindanao	2025	7	6	4	60	138	138	25
Mindanao	2025	7	6	5	60	138	138	25
Mindanao	2025	7	6	6	61	138	138	25
Mindanao	2025	7	6	7	61	138	138	25
Mindanao	2025	7	6	8	60	138	138	25
Mindanao	2025	7	6	9	65	138	138	25
Mindanao	2025	7	6	10	70	138	138	25
Mindanao	2025	7	6	11	73	138	138	25
Mindanao	2025	7	6	12	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	6	13	75	138	138	25
Mindanao	2025	7	6	14	74	138	138	25
Mindanao	2025	7	6	15	74	138	138	25
Mindanao	2025	7	6	16	75	138	138	25
Mindanao	2025	7	6	17	74	138	138	25
Mindanao	2025	7	6	18	79	138	138	25
Mindanao	2025	7	6	19	84	138	138	25
Mindanao	2025	7	6	20	82	138	138	25
Mindanao	2025	7	6	21	80	138	138	25
Mindanao	2025	7	6	22	75	138	138	25
Mindanao	2025	7	6	23	70	138	138	25
Mindanao	2025	7	6	24	65	138	138	25
Mindanao	2025	7	7	1	61	138	138	25
Mindanao	2025	7	7	2	58	138	138	25
Mindanao	2025	7	7	3	56	138	138	25
Mindanao	2025	7	7	4	56	138	138	25
Mindanao	2025	7	7	5	57	138	138	25
Mindanao	2025	7	7	6	59	138	138	25
Mindanao	2025	7	7	7	61	138	138	25
Mindanao	2025	7	7	8	70	138	138	25
Mindanao	2025	7	7	9	81	138	138	25
Mindanao	2025	7	7	10	89	138	138	25
Mindanao	2025	7	7	11	95	138	138	25
Mindanao	2025	7	7	12	94	138	138	25
Mindanao	2025	7	7	13	95	138	138	25
Mindanao	2025	7	7	14	99	138	138	25
Mindanao	2025	7	7	15	98	138	138	25
Mindanao	2025	7	7	16	96	138	138	25
Mindanao	2025	7	7	17	89	138	138	25
Mindanao	2025	7	7	18	90	138	138	25
Mindanao	2025	7	7	19	91	138	138	25
Mindanao	2025	7	7	20	87	138	138	25
Mindanao	2025	7	7	21	84	138	138	25
Mindanao	2025	7	7	22	78	138	138	25
Mindanao	2025	7	7	23	74	138	138	25
Mindanao	2025	7	7	24	69	138	138	25
Mindanao	2025	7	8	1	65	138	138	25
Mindanao	2025	7	8	2	63	138	138	25
Mindanao	2025	7	8	3	62	138	138	25
Mindanao	2025	7	8	4	61	138	138	25
Mindanao	2025	7	8	5	63	138	138	25
Mindanao	2025	7	8	6	64	138	138	25
Mindanao	2025	7	8	7	66	138	138	25
Mindanao	2025	7	8	8	74	138	138	25
Mindanao	2025	7	8	9	85	138	138	25
Mindanao	2025	7	8	10	93	138	138	25
Mindanao	2025	7	8	11	99	138	138	25
Mindanao	2025	7	8	12	98	138	138	25
Mindanao	2025	7	8	13	99	138	138	25
Mindanao	2025	7	8	14	102	138	138	25
Mindanao	2025	7	8	15	100	138	138	25
Mindanao	2025	7	8	16	98	138	138	25
Mindanao	2025	7	8	17	88	138	138	25
Mindanao	2025	7	8	18	90	138	138	25
Mindanao	2025	7	8	19	89	138	138	25
Mindanao	2025	7	8	20	86	138	138	25
Mindanao	2025	7	8	21	80	138	138	25
Mindanao	2025	7	8	22	76	138	138	25
Mindanao	2025	7	8	23	71	138	138	25
Mindanao	2025	7	8	24	67	138	138	25
Mindanao	2025	7	9	1	63	138	138	25
Mindanao	2025	7	9	2	61	138	138	25
Mindanao	2025	7	9	3	59	138	138	25
Mindanao	2025	7	9	4	60	138	138	25
Mindanao	2025	7	9	5	60	138	138	25
Mindanao	2025	7	9	6	64	138	138	25
Mindanao	2025	7	9	7	63	138	138	25
Mindanao	2025	7	9	8	72	138	138	25
Mindanao	2025	7	9	9	83	138	138	25
Mindanao	2025	7	9	10	91	138	138	25
Mindanao	2025	7	9	11	96	138	138	25
Mindanao	2025	7	9	12	95	138	138	25
Mindanao	2025	7	9	13	96	138	138	25
Mindanao	2025	7	9	14	99	138	138	25
Mindanao	2025	7	9	15	100	138	138	25
Mindanao	2025	7	9	16	98	138	138	25
Mindanao	2025	7	9	17	90	138	138	25
Mindanao	2025	7	9	18	90	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	9	19	95	138	138	25
Mindanao	2025	7	9	20	93	138	138	25
Mindanao	2025	7	9	21	89	138	138	25
Mindanao	2025	7	9	22	83	138	138	25
Mindanao	2025	7	9	23	77	138	138	25
Mindanao	2025	7	9	24	70	138	138	25
Mindanao	2025	7	10	1	68	138	138	25
Mindanao	2025	7	10	2	66	138	138	25
Mindanao	2025	7	10	3	64	138	138	25
Mindanao	2025	7	10	4	62	138	138	25
Mindanao	2025	7	10	5	63	138	138	25
Mindanao	2025	7	10	6	66	138	138	25
Mindanao	2025	7	10	7	65	138	138	25
Mindanao	2025	7	10	8	75	138	138	25
Mindanao	2025	7	10	9	86	138	138	25
Mindanao	2025	7	10	10	93	138	138	25
Mindanao	2025	7	10	11	99	138	138	25
Mindanao	2025	7	10	12	99	138	138	25
Mindanao	2025	7	10	13	98	138	138	25
Mindanao	2025	7	10	14	102	138	138	25
Mindanao	2025	7	10	15	98	138	138	25
Mindanao	2025	7	10	16	97	138	138	25
Mindanao	2025	7	10	17	89	138	138	25
Mindanao	2025	7	10	18	90	138	138	25
Mindanao	2025	7	10	19	90	138	138	25
Mindanao	2025	7	10	20	88	138	138	25
Mindanao	2025	7	10	21	84	138	138	25
Mindanao	2025	7	10	22	78	138	138	25
Mindanao	2025	7	10	23	74	138	138	25
Mindanao	2025	7	10	24	69	138	138	25
Mindanao	2025	7	11	1	65	138	138	25
Mindanao	2025	7	11	2	61	138	138	25
Mindanao	2025	7	11	3	62	138	138	25
Mindanao	2025	7	11	4	62	138	138	25
Mindanao	2025	7	11	5	60	138	138	25
Mindanao	2025	7	11	6	66	138	138	25
Mindanao	2025	7	11	7	66	138	138	25
Mindanao	2025	7	11	8	73	138	138	25
Mindanao	2025	7	11	9	83	138	138	25
Mindanao	2025	7	11	10	90	138	138	25
Mindanao	2025	7	11	11	96	138	138	25
Mindanao	2025	7	11	12	94	138	138	25
Mindanao	2025	7	11	13	94	138	138	25
Mindanao	2025	7	11	14	95	138	138	25
Mindanao	2025	7	11	15	96	138	138	25
Mindanao	2025	7	11	16	95	138	138	25
Mindanao	2025	7	11	17	89	138	138	25
Mindanao	2025	7	11	18	89	138	138	25
Mindanao	2025	7	11	19	91	138	138	25
Mindanao	2025	7	11	20	86	138	138	25
Mindanao	2025	7	11	21	83	138	138	25
Mindanao	2025	7	11	22	77	138	138	25
Mindanao	2025	7	11	23	71	138	138	25
Mindanao	2025	7	11	24	68	138	138	25
Mindanao	2025	7	12	1	64	138	138	25
Mindanao	2025	7	12	2	61	138	138	25
Mindanao	2025	7	12	3	59	138	138	25
Mindanao	2025	7	12	4	59	138	138	25
Mindanao	2025	7	12	5	61	138	138	25
Mindanao	2025	7	12	6	62	138	138	25
Mindanao	2025	7	12	7	61	138	138	25
Mindanao	2025	7	12	8	62	138	138	25
Mindanao	2025	7	12	9	69	138	138	25
Mindanao	2025	7	12	10	72	138	138	25
Mindanao	2025	7	12	11	77	138	138	25
Mindanao	2025	7	12	12	76	138	138	25
Mindanao	2025	7	12	13	76	138	138	25
Mindanao	2025	7	12	14	78	138	138	25
Mindanao	2025	7	12	15	77	138	138	25
Mindanao	2025	7	12	16	77	138	138	25
Mindanao	2025	7	12	17	76	138	138	25
Mindanao	2025	7	12	18	83	138	138	25
Mindanao	2025	7	12	19	84	138	138	25
Mindanao	2025	7	12	20	81	138	138	25
Mindanao	2025	7	12	21	80	138	138	25
Mindanao	2025	7	12	22	74	138	138	25
Mindanao	2025	7	12	23	70	138	138	25
Mindanao	2025	7	12	24	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	13	1	61	138	138	25
Mindanao	2025	7	13	2	58	138	138	25
Mindanao	2025	7	13	3	57	138	138	25
Mindanao	2025	7	13	4	57	138	138	25
Mindanao	2025	7	13	5	57	138	138	25
Mindanao	2025	7	13	6	59	138	138	25
Mindanao	2025	7	13	7	58	138	138	25
Mindanao	2025	7	13	8	57	138	138	25
Mindanao	2025	7	13	9	59	138	138	25
Mindanao	2025	7	13	10	66	138	138	25
Mindanao	2025	7	13	11	69	138	138	25
Mindanao	2025	7	13	12	69	138	138	25
Mindanao	2025	7	13	13	69	138	138	25
Mindanao	2025	7	13	14	71	138	138	25
Mindanao	2025	7	13	15	72	138	138	25
Mindanao	2025	7	13	16	70	138	138	25
Mindanao	2025	7	13	17	71	138	138	25
Mindanao	2025	7	13	18	80	138	138	25
Mindanao	2025	7	13	19	86	138	138	25
Mindanao	2025	7	13	20	84	138	138	25
Mindanao	2025	7	13	21	83	138	138	25
Mindanao	2025	7	13	22	80	138	138	25
Mindanao	2025	7	13	23	73	138	138	25
Mindanao	2025	7	13	24	69	138	138	25
Mindanao	2025	7	14	1	66	138	138	25
Mindanao	2025	7	14	2	61	138	138	25
Mindanao	2025	7	14	3	58	138	138	25
Mindanao	2025	7	14	4	59	138	138	25
Mindanao	2025	7	14	5	61	138	138	25
Mindanao	2025	7	14	6	65	138	138	25
Mindanao	2025	7	14	7	64	138	138	25
Mindanao	2025	7	14	8	72	138	138	25
Mindanao	2025	7	14	9	84	138	138	25
Mindanao	2025	7	14	10	92	138	138	25
Mindanao	2025	7	14	11	97	138	138	25
Mindanao	2025	7	14	12	92	138	138	25
Mindanao	2025	7	14	13	95	138	138	25
Mindanao	2025	7	14	14	100	138	138	25
Mindanao	2025	7	14	15	99	138	138	25
Mindanao	2025	7	14	16	98	138	138	25
Mindanao	2025	7	14	17	90	138	138	25
Mindanao	2025	7	14	18	94	138	138	25
Mindanao	2025	7	14	19	93	138	138	25
Mindanao	2025	7	14	20	89	138	138	25
Mindanao	2025	7	14	21	86	138	138	25
Mindanao	2025	7	14	22	80	138	138	25
Mindanao	2025	7	14	23	76	138	138	25
Mindanao	2025	7	14	24	69	138	138	25
Mindanao	2025	7	15	1	66	138	138	25
Mindanao	2025	7	15	2	63	138	138	25
Mindanao	2025	7	15	3	60	138	138	25
Mindanao	2025	7	15	4	60	138	138	25
Mindanao	2025	7	15	5	61	138	138	25
Mindanao	2025	7	15	6	66	138	138	25
Mindanao	2025	7	15	7	67	138	138	25
Mindanao	2025	7	15	8	73	138	138	25
Mindanao	2025	7	15	9	86	138	138	25
Mindanao	2025	7	15	10	93	138	138	25
Mindanao	2025	7	15	11	99	138	138	25
Mindanao	2025	7	15	12	98	138	138	25
Mindanao	2025	7	15	13	98	138	138	25
Mindanao	2025	7	15	14	103	138	138	25
Mindanao	2025	7	15	15	98	138	138	25
Mindanao	2025	7	15	16	97	138	138	25
Mindanao	2025	7	15	17	91	138	138	25
Mindanao	2025	7	15	18	92	138	138	25
Mindanao	2025	7	15	19	91	138	138	25
Mindanao	2025	7	15	20	90	138	138	25
Mindanao	2025	7	15	21	83	138	138	25
Mindanao	2025	7	15	22	79	138	138	25
Mindanao	2025	7	15	23	77	138	138	25
Mindanao	2025	7	15	24	71	138	138	25
Mindanao	2025	7	16	1	68	138	138	25
Mindanao	2025	7	16	2	64	138	138	25
Mindanao	2025	7	16	3	62	138	138	25
Mindanao	2025	7	16	4	60	138	138	25
Mindanao	2025	7	16	5	63	138	138	25
Mindanao	2025	7	16	6	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	16	7	65	138	138	25
Mindanao	2025	7	16	8	71	138	138	25
Mindanao	2025	7	16	9	85	138	138	25
Mindanao	2025	7	16	10	94	138	138	25
Mindanao	2025	7	16	11	97	138	138	25
Mindanao	2025	7	16	12	97	138	138	25
Mindanao	2025	7	16	13	100	138	138	25
Mindanao	2025	7	16	14	101	138	138	25
Mindanao	2025	7	16	15	98	138	138	25
Mindanao	2025	7	16	16	94	138	138	25
Mindanao	2025	7	16	17	91	138	138	25
Mindanao	2025	7	16	18	91	138	138	25
Mindanao	2025	7	16	19	94	138	138	25
Mindanao	2025	7	16	20	91	138	138	25
Mindanao	2025	7	16	21	88	138	138	25
Mindanao	2025	7	16	22	81	138	138	25
Mindanao	2025	7	16	23	75	138	138	25
Mindanao	2025	7	16	24	69	138	138	25
Mindanao	2025	7	17	1	65	138	138	25
Mindanao	2025	7	17	2	63	138	138	25
Mindanao	2025	7	17	3	61	138	138	25
Mindanao	2025	7	17	4	62	138	138	25
Mindanao	2025	7	17	5	62	138	138	25
Mindanao	2025	7	17	6	65	138	138	25
Mindanao	2025	7	17	7	65	138	138	25
Mindanao	2025	7	17	8	73	138	138	25
Mindanao	2025	7	17	9	86	138	138	25
Mindanao	2025	7	17	10	93	138	138	25
Mindanao	2025	7	17	11	99	138	138	25
Mindanao	2025	7	17	12	97	138	138	25
Mindanao	2025	7	17	13	99	138	138	25
Mindanao	2025	7	17	14	105	138	138	25
Mindanao	2025	7	17	15	102	138	138	25
Mindanao	2025	7	17	16	99	138	138	25
Mindanao	2025	7	17	17	94	138	138	25
Mindanao	2025	7	17	18	93	138	138	25
Mindanao	2025	7	17	19	95	138	138	25
Mindanao	2025	7	17	20	92	138	138	25
Mindanao	2025	7	17	21	89	138	138	25
Mindanao	2025	7	17	22	82	138	138	25
Mindanao	2025	7	17	23	77	138	138	25
Mindanao	2025	7	17	24	73	138	138	25
Mindanao	2025	7	18	1	70	138	138	25
Mindanao	2025	7	18	2	66	138	138	25
Mindanao	2025	7	18	3	63	138	138	25
Mindanao	2025	7	18	4	62	138	138	25
Mindanao	2025	7	18	5	64	138	138	25
Mindanao	2025	7	18	6	69	138	138	25
Mindanao	2025	7	18	7	65	138	138	25
Mindanao	2025	7	18	8	73	138	138	25
Mindanao	2025	7	18	9	86	138	138	25
Mindanao	2025	7	18	10	91	138	138	25
Mindanao	2025	7	18	11	96	138	138	25
Mindanao	2025	7	18	12	94	138	138	25
Mindanao	2025	7	18	13	95	138	138	25
Mindanao	2025	7	18	14	97	138	138	25
Mindanao	2025	7	18	15	97	138	138	25
Mindanao	2025	7	18	16	92	138	138	25
Mindanao	2025	7	18	17	88	138	138	25
Mindanao	2025	7	18	18	91	138	138	25
Mindanao	2025	7	18	19	92	138	138	25
Mindanao	2025	7	18	20	90	138	138	25
Mindanao	2025	7	18	21	87	138	138	25
Mindanao	2025	7	18	22	80	138	138	25
Mindanao	2025	7	18	23	75	138	138	25
Mindanao	2025	7	18	24	70	138	138	25
Mindanao	2025	7	19	1	68	138	138	25
Mindanao	2025	7	19	2	66	138	138	25
Mindanao	2025	7	19	3	62	138	138	25
Mindanao	2025	7	19	4	62	138	138	25
Mindanao	2025	7	19	5	60	138	138	25
Mindanao	2025	7	19	6	63	138	138	25
Mindanao	2025	7	19	7	63	138	138	25
Mindanao	2025	7	19	8	64	138	138	25
Mindanao	2025	7	19	9	76	138	138	25
Mindanao	2025	7	19	10	81	138	138	25
Mindanao	2025	7	19	11	85	138	138	25
Mindanao	2025	7	19	12	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	19	13	86	138	138	25
Mindanao	2025	7	19	14	88	138	138	25
Mindanao	2025	7	19	15	85	138	138	25
Mindanao	2025	7	19	16	85	138	138	25
Mindanao	2025	7	19	17	83	138	138	25
Mindanao	2025	7	19	18	86	138	138	25
Mindanao	2025	7	19	19	85	138	138	25
Mindanao	2025	7	19	20	82	138	138	25
Mindanao	2025	7	19	21	78	138	138	25
Mindanao	2025	7	19	22	74	138	138	25
Mindanao	2025	7	19	23	69	138	138	25
Mindanao	2025	7	19	24	65	138	138	25
Mindanao	2025	7	20	1	61	138	138	25
Mindanao	2025	7	20	2	59	138	138	25
Mindanao	2025	7	20	3	57	138	138	25
Mindanao	2025	7	20	4	56	138	138	25
Mindanao	2025	7	20	5	56	138	138	25
Mindanao	2025	7	20	6	59	138	138	25
Mindanao	2025	7	20	7	59	138	138	25
Mindanao	2025	7	20	8	60	138	138	25
Mindanao	2025	7	20	9	64	138	138	25
Mindanao	2025	7	20	10	67	138	138	25
Mindanao	2025	7	20	11	73	138	138	25
Mindanao	2025	7	20	12	75	138	138	25
Mindanao	2025	7	20	13	76	138	138	25
Mindanao	2025	7	20	14	78	138	138	25
Mindanao	2025	7	20	15	76	138	138	25
Mindanao	2025	7	20	16	76	138	138	25
Mindanao	2025	7	20	17	77	138	138	25
Mindanao	2025	7	20	18	82	138	138	25
Mindanao	2025	7	20	19	83	138	138	25
Mindanao	2025	7	20	20	80	138	138	25
Mindanao	2025	7	20	21	77	138	138	25
Mindanao	2025	7	20	22	72	138	138	25
Mindanao	2025	7	20	23	67	138	138	25
Mindanao	2025	7	20	24	63	138	138	25
Mindanao	2025	7	21	1	60	138	138	25
Mindanao	2025	7	21	2	58	138	138	25
Mindanao	2025	7	21	3	57	138	138	25
Mindanao	2025	7	21	4	56	138	138	25
Mindanao	2025	7	21	5	58	138	138	25
Mindanao	2025	7	21	6	62	138	138	25
Mindanao	2025	7	21	7	62	138	138	25
Mindanao	2025	7	21	8	68	138	138	25
Mindanao	2025	7	21	9	77	138	138	25
Mindanao	2025	7	21	10	86	138	138	25
Mindanao	2025	7	21	11	91	138	138	25
Mindanao	2025	7	21	12	90	138	138	25
Mindanao	2025	7	21	13	89	138	138	25
Mindanao	2025	7	21	14	90	138	138	25
Mindanao	2025	7	21	15	90	138	138	25
Mindanao	2025	7	21	16	89	138	138	25
Mindanao	2025	7	21	17	83	138	138	25
Mindanao	2025	7	21	18	89	138	138	25
Mindanao	2025	7	21	19	90	138	138	25
Mindanao	2025	7	21	20	85	138	138	25
Mindanao	2025	7	21	21	81	138	138	25
Mindanao	2025	7	21	22	74	138	138	25
Mindanao	2025	7	21	23	70	138	138	25
Mindanao	2025	7	21	24	66	138	138	25
Mindanao	2025	7	22	1	63	138	138	25
Mindanao	2025	7	22	2	62	138	138	25
Mindanao	2025	7	22	3	59	138	138	25
Mindanao	2025	7	22	4	58	138	138	25
Mindanao	2025	7	22	5	59	138	138	25
Mindanao	2025	7	22	6	65	138	138	25
Mindanao	2025	7	22	7	64	138	138	25
Mindanao	2025	7	22	8	68	138	138	25
Mindanao	2025	7	22	9	80	138	138	25
Mindanao	2025	7	22	10	84	138	138	25
Mindanao	2025	7	22	11	92	138	138	25
Mindanao	2025	7	22	12	91	138	138	25
Mindanao	2025	7	22	13	92	138	138	25
Mindanao	2025	7	22	14	99	138	138	25
Mindanao	2025	7	22	15	98	138	138	25
Mindanao	2025	7	22	16	96	138	138	25
Mindanao	2025	7	22	17	90	138	138	25
Mindanao	2025	7	22	18	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	22	19	93	138	138	25
Mindanao	2025	7	22	20	91	138	138	25
Mindanao	2025	7	22	21	86	138	138	25
Mindanao	2025	7	22	22	80	138	138	25
Mindanao	2025	7	22	23	72	138	138	25
Mindanao	2025	7	22	24	67	138	138	25
Mindanao	2025	7	23	1	64	138	138	25
Mindanao	2025	7	23	2	62	138	138	25
Mindanao	2025	7	23	3	62	138	138	25
Mindanao	2025	7	23	4	59	138	138	25
Mindanao	2025	7	23	5	60	138	138	25
Mindanao	2025	7	23	6	64	138	138	25
Mindanao	2025	7	23	7	66	138	138	25
Mindanao	2025	7	23	8	73	138	138	25
Mindanao	2025	7	23	9	85	138	138	25
Mindanao	2025	7	23	10	92	138	138	25
Mindanao	2025	7	23	11	100	138	138	25
Mindanao	2025	7	23	12	98	138	138	25
Mindanao	2025	7	23	13	98	138	138	25
Mindanao	2025	7	23	14	103	138	138	25
Mindanao	2025	7	23	15	100	138	138	25
Mindanao	2025	7	23	16	102	138	138	25
Mindanao	2025	7	23	17	95	138	138	25
Mindanao	2025	7	23	18	95	138	138	25
Mindanao	2025	7	23	19	99	138	138	25
Mindanao	2025	7	23	20	97	138	138	25
Mindanao	2025	7	23	21	94	138	138	25
Mindanao	2025	7	23	22	86	138	138	25
Mindanao	2025	7	23	23	81	138	138	25
Mindanao	2025	7	23	24	78	138	138	25
Mindanao	2025	7	24	1	72	138	138	25
Mindanao	2025	7	24	2	71	138	138	25
Mindanao	2025	7	24	3	66	138	138	25
Mindanao	2025	7	24	4	65	138	138	25
Mindanao	2025	7	24	5	65	138	138	25
Mindanao	2025	7	24	6	69	138	138	25
Mindanao	2025	7	24	7	67	138	138	25
Mindanao	2025	7	24	8	76	138	138	25
Mindanao	2025	7	24	9	88	138	138	25
Mindanao	2025	7	24	10	97	138	138	25
Mindanao	2025	7	24	11	102	138	138	25
Mindanao	2025	7	24	12	102	138	138	25
Mindanao	2025	7	24	13	103	138	138	25
Mindanao	2025	7	24	14	109	138	138	25
Mindanao	2025	7	24	15	108	138	138	25
Mindanao	2025	7	24	16	105	138	138	25
Mindanao	2025	7	24	17	99	138	138	25
Mindanao	2025	7	24	18	98	138	138	25
Mindanao	2025	7	24	19	99	138	138	25
Mindanao	2025	7	24	20	93	138	138	25
Mindanao	2025	7	24	21	91	138	138	25
Mindanao	2025	7	24	22	85	138	138	25
Mindanao	2025	7	24	23	81	138	138	25
Mindanao	2025	7	24	24	75	138	138	25
Mindanao	2025	7	25	1	73	138	138	25
Mindanao	2025	7	25	2	69	138	138	25
Mindanao	2025	7	25	3	67	138	138	25
Mindanao	2025	7	25	4	65	138	138	25
Mindanao	2025	7	25	5	67	138	138	25
Mindanao	2025	7	25	6	70	138	138	25
Mindanao	2025	7	25	7	69	138	138	25
Mindanao	2025	7	25	8	74	138	138	25
Mindanao	2025	7	25	9	86	138	138	25
Mindanao	2025	7	25	10	92	138	138	25
Mindanao	2025	7	25	11	98	138	138	25
Mindanao	2025	7	25	12	98	138	138	25
Mindanao	2025	7	25	13	98	138	138	25
Mindanao	2025	7	25	14	105	138	138	25
Mindanao	2025	7	25	15	102	138	138	25
Mindanao	2025	7	25	16	100	138	138	25
Mindanao	2025	7	25	17	94	138	138	25
Mindanao	2025	7	25	18	93	138	138	25
Mindanao	2025	7	25	19	95	138	138	25
Mindanao	2025	7	25	20	94	138	138	25
Mindanao	2025	7	25	21	90	138	138	25
Mindanao	2025	7	25	22	84	138	138	25
Mindanao	2025	7	25	23	80	138	138	25
Mindanao	2025	7	25	24	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	26	1	72	138	138	25
Mindanao	2025	7	26	2	68	138	138	25
Mindanao	2025	7	26	3	66	138	138	25
Mindanao	2025	7	26	4	65	138	138	25
Mindanao	2025	7	26	5	66	138	138	25
Mindanao	2025	7	26	6	68	138	138	25
Mindanao	2025	7	26	7	64	138	138	25
Mindanao	2025	7	26	8	69	138	138	25
Mindanao	2025	7	26	9	76	138	138	25
Mindanao	2025	7	26	10	80	138	138	25
Mindanao	2025	7	26	11	84	138	138	25
Mindanao	2025	7	26	12	85	138	138	25
Mindanao	2025	7	26	13	88	138	138	25
Mindanao	2025	7	26	14	94	138	138	25
Mindanao	2025	7	26	15	91	138	138	25
Mindanao	2025	7	26	16	88	138	138	25
Mindanao	2025	7	26	17	87	138	138	25
Mindanao	2025	7	26	18	91	138	138	25
Mindanao	2025	7	26	19	92	138	138	25
Mindanao	2025	7	26	20	88	138	138	25
Mindanao	2025	7	26	21	87	138	138	25
Mindanao	2025	7	26	22	81	138	138	25
Mindanao	2025	7	26	23	77	138	138	25
Mindanao	2025	7	26	24	72	138	138	25
Mindanao	2025	7	27	1	69	138	138	25
Mindanao	2025	7	27	2	66	138	138	25
Mindanao	2025	7	27	3	65	138	138	25
Mindanao	2025	7	27	4	63	138	138	25
Mindanao	2025	7	27	5	65	138	138	25
Mindanao	2025	7	27	6	64	138	138	25
Mindanao	2025	7	27	7	63	138	138	25
Mindanao	2025	7	27	8	59	138	138	25
Mindanao	2025	7	27	9	62	138	138	25
Mindanao	2025	7	27	10	66	138	138	25
Mindanao	2025	7	27	11	71	138	138	25
Mindanao	2025	7	27	12	72	138	138	25
Mindanao	2025	7	27	13	73	138	138	25
Mindanao	2025	7	27	14	77	138	138	25
Mindanao	2025	7	27	15	76	138	138	25
Mindanao	2025	7	27	16	74	138	138	25
Mindanao	2025	7	27	17	74	138	138	25
Mindanao	2025	7	27	18	80	138	138	25
Mindanao	2025	7	27	19	84	138	138	25
Mindanao	2025	7	27	20	83	138	138	25
Mindanao	2025	7	27	21	83	138	138	25
Mindanao	2025	7	27	22	78	138	138	25
Mindanao	2025	7	27	23	74	138	138	25
Mindanao	2025	7	27	24	75	138	138	25
Mindanao	2025	7	28	1	70	138	138	25
Mindanao	2025	7	28	2	67	138	138	25
Mindanao	2025	7	28	3	64	138	138	25
Mindanao	2025	7	28	4	63	138	138	25
Mindanao	2025	7	28	5	65	138	138	25
Mindanao	2025	7	28	6	68	138	138	25
Mindanao	2025	7	28	7	67	138	138	25
Mindanao	2025	7	28	8	76	138	138	25
Mindanao	2025	7	28	9	88	138	138	25
Mindanao	2025	7	28	10	97	138	138	25
Mindanao	2025	7	28	11	100	138	138	25
Mindanao	2025	7	28	12	101	138	138	25
Mindanao	2025	7	28	13	102	138	138	25
Mindanao	2025	7	28	14	107	138	138	25
Mindanao	2025	7	28	15	106	138	138	25
Mindanao	2025	7	28	16	104	138	138	25
Mindanao	2025	7	28	17	97	138	138	25
Mindanao	2025	7	28	18	97	138	138	25
Mindanao	2025	7	28	19	102	138	138	25
Mindanao	2025	7	28	20	96	138	138	25
Mindanao	2025	7	28	21	95	138	138	25
Mindanao	2025	7	28	22	89	138	138	25
Mindanao	2025	7	28	23	83	138	138	25
Mindanao	2025	7	28	24	74	138	138	25
Mindanao	2025	7	29	1	73	138	138	25
Mindanao	2025	7	29	2	69	138	138	25
Mindanao	2025	7	29	3	66	138	138	25
Mindanao	2025	7	29	4	64	138	138	25
Mindanao	2025	7	29	5	67	138	138	25
Mindanao	2025	7	29	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	7	29	7	70	138	138	25
Mindanao	2025	7	29	8	76	138	138	25
Mindanao	2025	7	29	9	89	138	138	25
Mindanao	2025	7	29	10	98	138	138	25
Mindanao	2025	7	29	11	104	138	138	25
Mindanao	2025	7	29	12	102	138	138	25
Mindanao	2025	7	29	13	104	138	138	25
Mindanao	2025	7	29	14	109	138	138	25
Mindanao	2025	7	29	15	108	138	138	25
Mindanao	2025	7	29	16	103	138	138	25
Mindanao	2025	7	29	17	98	138	138	25
Mindanao	2025	7	29	18	98	138	138	25
Mindanao	2025	7	29	19	101	138	138	25
Mindanao	2025	7	29	20	96	138	138	25
Mindanao	2025	7	29	21	93	138	138	25
Mindanao	2025	7	29	22	86	138	138	25
Mindanao	2025	7	29	23	80	138	138	25
Mindanao	2025	7	29	24	75	138	138	25
Mindanao	2025	7	30	1	71	138	138	25
Mindanao	2025	7	30	2	70	138	138	25
Mindanao	2025	7	30	3	67	138	138	25
Mindanao	2025	7	30	4	65	138	138	25
Mindanao	2025	7	30	5	64	138	138	25
Mindanao	2025	7	30	6	69	138	138	25
Mindanao	2025	7	30	7	64	138	138	25
Mindanao	2025	7	30	8	74	138	138	25
Mindanao	2025	7	30	9	85	138	138	25
Mindanao	2025	7	30	10	92	138	138	25
Mindanao	2025	7	30	11	98	138	138	25
Mindanao	2025	7	30	12	97	138	138	25
Mindanao	2025	7	30	13	101	138	138	25
Mindanao	2025	7	30	14	106	138	138	25
Mindanao	2025	7	30	15	106	138	138	25
Mindanao	2025	7	30	16	102	138	138	25
Mindanao	2025	7	30	17	97	138	138	25
Mindanao	2025	7	30	18	95	138	138	25
Mindanao	2025	7	30	19	100	138	138	25
Mindanao	2025	7	30	20	95	138	138	25
Mindanao	2025	7	30	21	93	138	138	25
Mindanao	2025	7	30	22	86	138	138	25
Mindanao	2025	7	30	23	81	138	138	25
Mindanao	2025	7	30	24	76	138	138	25
Mindanao	2025	7	31	1	73	138	138	25
Mindanao	2025	7	31	2	70	138	138	25
Mindanao	2025	7	31	3	68	138	138	25
Mindanao	2025	7	31	4	66	138	138	25
Mindanao	2025	7	31	5	67	138	138	25
Mindanao	2025	7	31	6	68	138	138	25
Mindanao	2025	7	31	7	67	138	138	25
Mindanao	2025	7	31	8	74	138	138	25
Mindanao	2025	7	31	9	87	138	138	25
Mindanao	2025	7	31	10	95	138	138	25
Mindanao	2025	7	31	11	100	138	138	25
Mindanao	2025	7	31	12	99	138	138	25
Mindanao	2025	7	31	13	98	138	138	25
Mindanao	2025	7	31	14	105	138	138	25
Mindanao	2025	7	31	15	102	138	138	25
Mindanao	2025	7	31	16	102	138	138	25
Mindanao	2025	7	31	17	96	138	138	25
Mindanao	2025	7	31	18	95	138	138	25
Mindanao	2025	7	31	19	98	138	138	25
Mindanao	2025	7	31	20	95	138	138	25
Mindanao	2025	7	31	21	89	138	138	25
Mindanao	2025	7	31	22	85	138	138	25
Mindanao	2025	7	31	23	80	138	138	25
Mindanao	2025	7	31	24	75	138	138	25
Mindanao	2025	8	1	1	70	138	138	25
Mindanao	2025	8	1	2	68	138	138	25
Mindanao	2025	8	1	3	66	138	138	25
Mindanao	2025	8	1	4	64	138	138	25
Mindanao	2025	8	1	5	65	138	138	25
Mindanao	2025	8	1	6	69	138	138	25
Mindanao	2025	8	1	7	69	138	138	25
Mindanao	2025	8	1	8	76	138	138	25
Mindanao	2025	8	1	9	87	138	138	25
Mindanao	2025	8	1	10	94	138	138	25
Mindanao	2025	8	1	11	99	138	138	25
Mindanao	2025	8	1	12	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	1	13	100	138	138	25
Mindanao	2025	8	1	14	105	138	138	25
Mindanao	2025	8	1	15	104	138	138	25
Mindanao	2025	8	1	16	102	138	138	25
Mindanao	2025	8	1	17	94	138	138	25
Mindanao	2025	8	1	18	96	138	138	25
Mindanao	2025	8	1	19	99	138	138	25
Mindanao	2025	8	1	20	96	138	138	25
Mindanao	2025	8	1	21	94	138	138	25
Mindanao	2025	8	1	22	87	138	138	25
Mindanao	2025	8	1	23	81	138	138	25
Mindanao	2025	8	1	24	78	138	138	25
Mindanao	2025	8	2	1	74	138	138	25
Mindanao	2025	8	2	2	70	138	138	25
Mindanao	2025	8	2	3	67	138	138	25
Mindanao	2025	8	2	4	66	138	138	25
Mindanao	2025	8	2	5	67	138	138	25
Mindanao	2025	8	2	6	70	138	138	25
Mindanao	2025	8	2	7	68	138	138	25
Mindanao	2025	8	2	8	72	138	138	25
Mindanao	2025	8	2	9	80	138	138	25
Mindanao	2025	8	2	10	85	138	138	25
Mindanao	2025	8	2	11	89	138	138	25
Mindanao	2025	8	2	12	87	138	138	25
Mindanao	2025	8	2	13	91	138	138	25
Mindanao	2025	8	2	14	96	138	138	25
Mindanao	2025	8	2	15	93	138	138	25
Mindanao	2025	8	2	16	89	138	138	25
Mindanao	2025	8	2	17	83	138	138	25
Mindanao	2025	8	2	18	90	138	138	25
Mindanao	2025	8	2	19	93	138	138	25
Mindanao	2025	8	2	20	91	138	138	25
Mindanao	2025	8	2	21	87	138	138	25
Mindanao	2025	8	2	22	80	138	138	25
Mindanao	2025	8	2	23	77	138	138	25
Mindanao	2025	8	2	24	72	138	138	25
Mindanao	2025	8	3	1	68	138	138	25
Mindanao	2025	8	3	2	66	138	138	25
Mindanao	2025	8	3	3	63	138	138	25
Mindanao	2025	8	3	4	61	138	138	25
Mindanao	2025	8	3	5	62	138	138	25
Mindanao	2025	8	3	6	62	138	138	25
Mindanao	2025	8	3	7	60	138	138	25
Mindanao	2025	8	3	8	58	138	138	25
Mindanao	2025	8	3	9	61	138	138	25
Mindanao	2025	8	3	10	67	138	138	25
Mindanao	2025	8	3	11	69	138	138	25
Mindanao	2025	8	3	12	72	138	138	25
Mindanao	2025	8	3	13	72	138	138	25
Mindanao	2025	8	3	14	72	138	138	25
Mindanao	2025	8	3	15	72	138	138	25
Mindanao	2025	8	3	16	71	138	138	25
Mindanao	2025	8	3	17	73	138	138	25
Mindanao	2025	8	3	18	81	138	138	25
Mindanao	2025	8	3	19	84	138	138	25
Mindanao	2025	8	3	20	83	138	138	25
Mindanao	2025	8	3	21	79	138	138	25
Mindanao	2025	8	3	22	75	138	138	25
Mindanao	2025	8	3	23	69	138	138	25
Mindanao	2025	8	3	24	67	138	138	25
Mindanao	2025	8	4	1	64	138	138	25
Mindanao	2025	8	4	2	61	138	138	25
Mindanao	2025	8	4	3	59	138	138	25
Mindanao	2025	8	4	4	59	138	138	25
Mindanao	2025	8	4	5	58	138	138	25
Mindanao	2025	8	4	6	61	138	138	25
Mindanao	2025	8	4	7	61	138	138	25
Mindanao	2025	8	4	8	69	138	138	25
Mindanao	2025	8	4	9	80	138	138	25
Mindanao	2025	8	4	10	89	138	138	25
Mindanao	2025	8	4	11	94	138	138	25
Mindanao	2025	8	4	12	94	138	138	25
Mindanao	2025	8	4	13	96	138	138	25
Mindanao	2025	8	4	14	102	138	138	25
Mindanao	2025	8	4	15	101	138	138	25
Mindanao	2025	8	4	16	99	138	138	25
Mindanao	2025	8	4	17	91	138	138	25
Mindanao	2025	8	4	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	4	19	95	138	138	25
Mindanao	2025	8	4	20	93	138	138	25
Mindanao	2025	8	4	21	88	138	138	25
Mindanao	2025	8	4	22	80	138	138	25
Mindanao	2025	8	4	23	76	138	138	25
Mindanao	2025	8	4	24	71	138	138	25
Mindanao	2025	8	5	1	67	138	138	25
Mindanao	2025	8	5	2	65	138	138	25
Mindanao	2025	8	5	3	63	138	138	25
Mindanao	2025	8	5	4	61	138	138	25
Mindanao	2025	8	5	5	62	138	138	25
Mindanao	2025	8	5	6	65	138	138	25
Mindanao	2025	8	5	7	64	138	138	25
Mindanao	2025	8	5	8	72	138	138	25
Mindanao	2025	8	5	9	86	138	138	25
Mindanao	2025	8	5	10	93	138	138	25
Mindanao	2025	8	5	11	97	138	138	25
Mindanao	2025	8	5	12	97	138	138	25
Mindanao	2025	8	5	13	96	138	138	25
Mindanao	2025	8	5	14	101	138	138	25
Mindanao	2025	8	5	15	100	138	138	25
Mindanao	2025	8	5	16	97	138	138	25
Mindanao	2025	8	5	17	90	138	138	25
Mindanao	2025	8	5	18	92	138	138	25
Mindanao	2025	8	5	19	95	138	138	25
Mindanao	2025	8	5	20	90	138	138	25
Mindanao	2025	8	5	21	88	138	138	25
Mindanao	2025	8	5	22	81	138	138	25
Mindanao	2025	8	5	23	75	138	138	25
Mindanao	2025	8	5	24	71	138	138	25
Mindanao	2025	8	6	1	68	138	138	25
Mindanao	2025	8	6	2	65	138	138	25
Mindanao	2025	8	6	3	63	138	138	25
Mindanao	2025	8	6	4	64	138	138	25
Mindanao	2025	8	6	5	63	138	138	25
Mindanao	2025	8	6	6	67	138	138	25
Mindanao	2025	8	6	7	68	138	138	25
Mindanao	2025	8	6	8	74	138	138	25
Mindanao	2025	8	6	9	88	138	138	25
Mindanao	2025	8	6	10	96	138	138	25
Mindanao	2025	8	6	11	102	138	138	25
Mindanao	2025	8	6	12	102	138	138	25
Mindanao	2025	8	6	13	103	138	138	25
Mindanao	2025	8	6	14	108	138	138	25
Mindanao	2025	8	6	15	107	138	138	25
Mindanao	2025	8	6	16	105	138	138	25
Mindanao	2025	8	6	17	98	138	138	25
Mindanao	2025	8	6	18	97	138	138	25
Mindanao	2025	8	6	19	100	138	138	25
Mindanao	2025	8	6	20	98	138	138	25
Mindanao	2025	8	6	21	96	138	138	25
Mindanao	2025	8	6	22	87	138	138	25
Mindanao	2025	8	6	23	82	138	138	25
Mindanao	2025	8	6	24	77	138	138	25
Mindanao	2025	8	7	1	74	138	138	25
Mindanao	2025	8	7	2	71	138	138	25
Mindanao	2025	8	7	3	68	138	138	25
Mindanao	2025	8	7	4	67	138	138	25
Mindanao	2025	8	7	5	67	138	138	25
Mindanao	2025	8	7	6	70	138	138	25
Mindanao	2025	8	7	7	69	138	138	25
Mindanao	2025	8	7	8	76	138	138	25
Mindanao	2025	8	7	9	88	138	138	25
Mindanao	2025	8	7	10	95	138	138	25
Mindanao	2025	8	7	11	102	138	138	25
Mindanao	2025	8	7	12	102	138	138	25
Mindanao	2025	8	7	13	100	138	138	25
Mindanao	2025	8	7	14	106	138	138	25
Mindanao	2025	8	7	15	104	138	138	25
Mindanao	2025	8	7	16	101	138	138	25
Mindanao	2025	8	7	17	93	138	138	25
Mindanao	2025	8	7	18	96	138	138	25
Mindanao	2025	8	7	19	98	138	138	25
Mindanao	2025	8	7	20	94	138	138	25
Mindanao	2025	8	7	21	93	138	138	25
Mindanao	2025	8	7	22	84	138	138	25
Mindanao	2025	8	7	23	79	138	138	25
Mindanao	2025	8	7	24	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	8	1	68	138	138	25
Mindanao	2025	8	8	2	66	138	138	25
Mindanao	2025	8	8	3	63	138	138	25
Mindanao	2025	8	8	4	62	138	138	25
Mindanao	2025	8	8	5	64	138	138	25
Mindanao	2025	8	8	6	69	138	138	25
Mindanao	2025	8	8	7	65	138	138	25
Mindanao	2025	8	8	8	73	138	138	25
Mindanao	2025	8	8	9	83	138	138	25
Mindanao	2025	8	8	10	88	138	138	25
Mindanao	2025	8	8	11	93	138	138	25
Mindanao	2025	8	8	12	90	138	138	25
Mindanao	2025	8	8	13	90	138	138	25
Mindanao	2025	8	8	14	95	138	138	25
Mindanao	2025	8	8	15	94	138	138	25
Mindanao	2025	8	8	16	93	138	138	25
Mindanao	2025	8	8	17	89	138	138	25
Mindanao	2025	8	8	18	90	138	138	25
Mindanao	2025	8	8	19	91	138	138	25
Mindanao	2025	8	8	20	88	138	138	25
Mindanao	2025	8	8	21	86	138	138	25
Mindanao	2025	8	8	22	81	138	138	25
Mindanao	2025	8	8	23	75	138	138	25
Mindanao	2025	8	8	24	71	138	138	25
Mindanao	2025	8	9	1	68	138	138	25
Mindanao	2025	8	9	2	65	138	138	25
Mindanao	2025	8	9	3	64	138	138	25
Mindanao	2025	8	9	4	61	138	138	25
Mindanao	2025	8	9	5	63	138	138	25
Mindanao	2025	8	9	6	66	138	138	25
Mindanao	2025	8	9	7	64	138	138	25
Mindanao	2025	8	9	8	67	138	138	25
Mindanao	2025	8	9	9	77	138	138	25
Mindanao	2025	8	9	10	81	138	138	25
Mindanao	2025	8	9	11	87	138	138	25
Mindanao	2025	8	9	12	87	138	138	25
Mindanao	2025	8	9	13	90	138	138	25
Mindanao	2025	8	9	14	94	138	138	25
Mindanao	2025	8	9	15	93	138	138	25
Mindanao	2025	8	9	16	89	138	138	25
Mindanao	2025	8	9	17	86	138	138	25
Mindanao	2025	8	9	18	90	138	138	25
Mindanao	2025	8	9	19	93	138	138	25
Mindanao	2025	8	9	20	91	138	138	25
Mindanao	2025	8	9	21	87	138	138	25
Mindanao	2025	8	9	22	81	138	138	25
Mindanao	2025	8	9	23	76	138	138	25
Mindanao	2025	8	9	24	71	138	138	25
Mindanao	2025	8	10	1	66	138	138	25
Mindanao	2025	8	10	2	64	138	138	25
Mindanao	2025	8	10	3	62	138	138	25
Mindanao	2025	8	10	4	60	138	138	25
Mindanao	2025	8	10	5	60	138	138	25
Mindanao	2025	8	10	6	63	138	138	25
Mindanao	2025	8	10	7	57	138	138	25
Mindanao	2025	8	10	8	59	138	138	25
Mindanao	2025	8	10	9	64	138	138	25
Mindanao	2025	8	10	10	70	138	138	25
Mindanao	2025	8	10	11	72	138	138	25
Mindanao	2025	8	10	12	73	138	138	25
Mindanao	2025	8	10	13	73	138	138	25
Mindanao	2025	8	10	14	74	138	138	25
Mindanao	2025	8	10	15	74	138	138	25
Mindanao	2025	8	10	16	72	138	138	25
Mindanao	2025	8	10	17	74	138	138	25
Mindanao	2025	8	10	18	81	138	138	25
Mindanao	2025	8	10	19	81	138	138	25
Mindanao	2025	8	10	20	79	138	138	25
Mindanao	2025	8	10	21	74	138	138	25
Mindanao	2025	8	10	22	70	138	138	25
Mindanao	2025	8	10	23	64	138	138	25
Mindanao	2025	8	10	24	59	138	138	25
Mindanao	2025	8	11	1	60	138	138	25
Mindanao	2025	8	11	2	57	138	138	25
Mindanao	2025	8	11	3	56	138	138	25
Mindanao	2025	8	11	4	56	138	138	25
Mindanao	2025	8	11	5	58	138	138	25
Mindanao	2025	8	11	6	63	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	11	7	61	138	138	25
Mindanao	2025	8	11	8	70	138	138	25
Mindanao	2025	8	11	9	80	138	138	25
Mindanao	2025	8	11	10	87	138	138	25
Mindanao	2025	8	11	11	92	138	138	25
Mindanao	2025	8	11	12	92	138	138	25
Mindanao	2025	8	11	13	94	138	138	25
Mindanao	2025	8	11	14	99	138	138	25
Mindanao	2025	8	11	15	95	138	138	25
Mindanao	2025	8	11	16	90	138	138	25
Mindanao	2025	8	11	17	90	138	138	25
Mindanao	2025	8	11	18	91	138	138	25
Mindanao	2025	8	11	19	88	138	138	25
Mindanao	2025	8	11	20	83	138	138	25
Mindanao	2025	8	11	21	81	138	138	25
Mindanao	2025	8	11	22	74	138	138	25
Mindanao	2025	8	11	23	70	138	138	25
Mindanao	2025	8	11	24	65	138	138	25
Mindanao	2025	8	12	1	64	138	138	25
Mindanao	2025	8	12	2	61	138	138	25
Mindanao	2025	8	12	3	60	138	138	25
Mindanao	2025	8	12	4	61	138	138	25
Mindanao	2025	8	12	5	61	138	138	25
Mindanao	2025	8	12	6	67	138	138	25
Mindanao	2025	8	12	7	65	138	138	25
Mindanao	2025	8	12	8	72	138	138	25
Mindanao	2025	8	12	9	82	138	138	25
Mindanao	2025	8	12	10	90	138	138	25
Mindanao	2025	8	12	11	94	138	138	25
Mindanao	2025	8	12	12	92	138	138	25
Mindanao	2025	8	12	13	93	138	138	25
Mindanao	2025	8	12	14	100	138	138	25
Mindanao	2025	8	12	15	99	138	138	25
Mindanao	2025	8	12	16	95	138	138	25
Mindanao	2025	8	12	17	92	138	138	25
Mindanao	2025	8	12	18	93	138	138	25
Mindanao	2025	8	12	19	91	138	138	25
Mindanao	2025	8	12	20	88	138	138	25
Mindanao	2025	8	12	21	84	138	138	25
Mindanao	2025	8	12	22	78	138	138	25
Mindanao	2025	8	12	23	72	138	138	25
Mindanao	2025	8	12	24	67	138	138	25
Mindanao	2025	8	13	1	65	138	138	25
Mindanao	2025	8	13	2	63	138	138	25
Mindanao	2025	8	13	3	61	138	138	25
Mindanao	2025	8	13	4	61	138	138	25
Mindanao	2025	8	13	5	64	138	138	25
Mindanao	2025	8	13	6	69	138	138	25
Mindanao	2025	8	13	7	67	138	138	25
Mindanao	2025	8	13	8	72	138	138	25
Mindanao	2025	8	13	9	83	138	138	25
Mindanao	2025	8	13	10	89	138	138	25
Mindanao	2025	8	13	11	94	138	138	25
Mindanao	2025	8	13	12	93	138	138	25
Mindanao	2025	8	13	13	93	138	138	25
Mindanao	2025	8	13	14	100	138	138	25
Mindanao	2025	8	13	15	101	138	138	25
Mindanao	2025	8	13	16	99	138	138	25
Mindanao	2025	8	13	17	93	138	138	25
Mindanao	2025	8	13	18	95	138	138	25
Mindanao	2025	8	13	19	98	138	138	25
Mindanao	2025	8	13	20	93	138	138	25
Mindanao	2025	8	13	21	90	138	138	25
Mindanao	2025	8	13	22	82	138	138	25
Mindanao	2025	8	13	23	77	138	138	25
Mindanao	2025	8	13	24	73	138	138	25
Mindanao	2025	8	14	1	69	138	138	25
Mindanao	2025	8	14	2	66	138	138	25
Mindanao	2025	8	14	3	62	138	138	25
Mindanao	2025	8	14	4	63	138	138	25
Mindanao	2025	8	14	5	64	138	138	25
Mindanao	2025	8	14	6	69	138	138	25
Mindanao	2025	8	14	7	69	138	138	25
Mindanao	2025	8	14	8	75	138	138	25
Mindanao	2025	8	14	9	87	138	138	25
Mindanao	2025	8	14	10	96	138	138	25
Mindanao	2025	8	14	11	100	138	138	25
Mindanao	2025	8	14	12	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	14	13	98	138	138	25
Mindanao	2025	8	14	14	105	138	138	25
Mindanao	2025	8	14	15	104	138	138	25
Mindanao	2025	8	14	16	101	138	138	25
Mindanao	2025	8	14	17	96	138	138	25
Mindanao	2025	8	14	18	96	138	138	25
Mindanao	2025	8	14	19	100	138	138	25
Mindanao	2025	8	14	20	97	138	138	25
Mindanao	2025	8	14	21	93	138	138	25
Mindanao	2025	8	14	22	87	138	138	25
Mindanao	2025	8	14	23	82	138	138	25
Mindanao	2025	8	14	24	75	138	138	25
Mindanao	2025	8	15	1	73	138	138	25
Mindanao	2025	8	15	2	67	138	138	25
Mindanao	2025	8	15	3	66	138	138	25
Mindanao	2025	8	15	4	65	138	138	25
Mindanao	2025	8	15	5	66	138	138	25
Mindanao	2025	8	15	6	71	138	138	25
Mindanao	2025	8	15	7	69	138	138	25
Mindanao	2025	8	15	8	76	138	138	25
Mindanao	2025	8	15	9	88	138	138	25
Mindanao	2025	8	15	10	96	138	138	25
Mindanao	2025	8	15	11	101	138	138	25
Mindanao	2025	8	15	12	102	138	138	25
Mindanao	2025	8	15	13	104	138	138	25
Mindanao	2025	8	15	14	109	138	138	25
Mindanao	2025	8	15	15	107	138	138	25
Mindanao	2025	8	15	16	105	138	138	25
Mindanao	2025	8	15	17	99	138	138	25
Mindanao	2025	8	15	18	98	138	138	25
Mindanao	2025	8	15	19	101	138	138	25
Mindanao	2025	8	15	20	98	138	138	25
Mindanao	2025	8	15	21	97	138	138	25
Mindanao	2025	8	15	22	91	138	138	25
Mindanao	2025	8	15	23	83	138	138	25
Mindanao	2025	8	15	24	78	138	138	25
Mindanao	2025	8	16	1	73	138	138	25
Mindanao	2025	8	16	2	70	138	138	25
Mindanao	2025	8	16	3	67	138	138	25
Mindanao	2025	8	16	4	66	138	138	25
Mindanao	2025	8	16	5	66	138	138	25
Mindanao	2025	8	16	6	69	138	138	25
Mindanao	2025	8	16	7	66	138	138	25
Mindanao	2025	8	16	8	69	138	138	25
Mindanao	2025	8	16	9	77	138	138	25
Mindanao	2025	8	16	10	84	138	138	25
Mindanao	2025	8	16	11	86	138	138	25
Mindanao	2025	8	16	12	86	138	138	25
Mindanao	2025	8	16	13	86	138	138	25
Mindanao	2025	8	16	14	93	138	138	25
Mindanao	2025	8	16	15	91	138	138	25
Mindanao	2025	8	16	16	88	138	138	25
Mindanao	2025	8	16	17	87	138	138	25
Mindanao	2025	8	16	18	90	138	138	25
Mindanao	2025	8	16	19	92	138	138	25
Mindanao	2025	8	16	20	89	138	138	25
Mindanao	2025	8	16	21	87	138	138	25
Mindanao	2025	8	16	22	81	138	138	25
Mindanao	2025	8	16	23	76	138	138	25
Mindanao	2025	8	16	24	71	138	138	25
Mindanao	2025	8	17	1	68	138	138	25
Mindanao	2025	8	17	2	65	138	138	25
Mindanao	2025	8	17	3	64	138	138	25
Mindanao	2025	8	17	4	60	138	138	25
Mindanao	2025	8	17	5	61	138	138	25
Mindanao	2025	8	17	6	62	138	138	25
Mindanao	2025	8	17	7	58	138	138	25
Mindanao	2025	8	17	8	50	138	138	25
Mindanao	2025	8	17	9	52	138	138	25
Mindanao	2025	8	17	10	60	138	138	25
Mindanao	2025	8	17	11	63	138	138	25
Mindanao	2025	8	17	12	63	138	138	25
Mindanao	2025	8	17	13	65	138	138	25
Mindanao	2025	8	17	14	65	138	138	25
Mindanao	2025	8	17	15	67	138	138	25
Mindanao	2025	8	17	16	64	138	138	25
Mindanao	2025	8	17	17	70	138	138	25
Mindanao	2025	8	17	18	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	17	19	79	138	138	25
Mindanao	2025	8	17	20	76	138	138	25
Mindanao	2025	8	17	21	74	138	138	25
Mindanao	2025	8	17	22	69	138	138	25
Mindanao	2025	8	17	23	63	138	138	25
Mindanao	2025	8	17	24	59	138	138	25
Mindanao	2025	8	18	1	58	138	138	25
Mindanao	2025	8	18	2	56	138	138	25
Mindanao	2025	8	18	3	54	138	138	25
Mindanao	2025	8	18	4	53	138	138	25
Mindanao	2025	8	18	5	55	138	138	25
Mindanao	2025	8	18	6	61	138	138	25
Mindanao	2025	8	18	7	61	138	138	25
Mindanao	2025	8	18	8	67	138	138	25
Mindanao	2025	8	18	9	78	138	138	25
Mindanao	2025	8	18	10	85	138	138	25
Mindanao	2025	8	18	11	91	138	138	25
Mindanao	2025	8	18	12	89	138	138	25
Mindanao	2025	8	18	13	91	138	138	25
Mindanao	2025	8	18	14	93	138	138	25
Mindanao	2025	8	18	15	98	138	138	25
Mindanao	2025	8	18	16	96	138	138	25
Mindanao	2025	8	18	17	88	138	138	25
Mindanao	2025	8	18	18	92	138	138	25
Mindanao	2025	8	18	19	94	138	138	25
Mindanao	2025	8	18	20	91	138	138	25
Mindanao	2025	8	18	21	87	138	138	25
Mindanao	2025	8	18	22	81	138	138	25
Mindanao	2025	8	18	23	77	138	138	25
Mindanao	2025	8	18	24	71	138	138	25
Mindanao	2025	8	19	1	68	138	138	25
Mindanao	2025	8	19	2	65	138	138	25
Mindanao	2025	8	19	3	63	138	138	25
Mindanao	2025	8	19	4	61	138	138	25
Mindanao	2025	8	19	5	62	138	138	25
Mindanao	2025	8	19	6	67	138	138	25
Mindanao	2025	8	19	7	64	138	138	25
Mindanao	2025	8	19	8	74	138	138	25
Mindanao	2025	8	19	9	86	138	138	25
Mindanao	2025	8	19	10	92	138	138	25
Mindanao	2025	8	19	11	100	138	138	25
Mindanao	2025	8	19	12	98	138	138	25
Mindanao	2025	8	19	13	101	138	138	25
Mindanao	2025	8	19	14	106	138	138	25
Mindanao	2025	8	19	15	104	138	138	25
Mindanao	2025	8	19	16	99	138	138	25
Mindanao	2025	8	19	17	93	138	138	25
Mindanao	2025	8	19	18	96	138	138	25
Mindanao	2025	8	19	19	99	138	138	25
Mindanao	2025	8	19	20	94	138	138	25
Mindanao	2025	8	19	21	89	138	138	25
Mindanao	2025	8	19	22	81	138	138	25
Mindanao	2025	8	19	23	77	138	138	25
Mindanao	2025	8	19	24	73	138	138	25
Mindanao	2025	8	20	1	69	138	138	25
Mindanao	2025	8	20	2	65	138	138	25
Mindanao	2025	8	20	3	61	138	138	25
Mindanao	2025	8	20	4	61	138	138	25
Mindanao	2025	8	20	5	63	138	138	25
Mindanao	2025	8	20	6	69	138	138	25
Mindanao	2025	8	20	7	67	138	138	25
Mindanao	2025	8	20	8	74	138	138	25
Mindanao	2025	8	20	9	86	138	138	25
Mindanao	2025	8	20	10	94	138	138	25
Mindanao	2025	8	20	11	102	138	138	25
Mindanao	2025	8	20	12	100	138	138	25
Mindanao	2025	8	20	13	101	138	138	25
Mindanao	2025	8	20	14	105	138	138	25
Mindanao	2025	8	20	15	102	138	138	25
Mindanao	2025	8	20	16	100	138	138	25
Mindanao	2025	8	20	17	95	138	138	25
Mindanao	2025	8	20	18	94	138	138	25
Mindanao	2025	8	20	19	94	138	138	25
Mindanao	2025	8	20	20	90	138	138	25
Mindanao	2025	8	20	21	86	138	138	25
Mindanao	2025	8	20	22	79	138	138	25
Mindanao	2025	8	20	23	75	138	138	25
Mindanao	2025	8	20	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	21	1	71	138	138	25
Mindanao	2025	8	21	2	65	138	138	25
Mindanao	2025	8	21	3	64	138	138	25
Mindanao	2025	8	21	4	63	138	138	25
Mindanao	2025	8	21	5	61	138	138	25
Mindanao	2025	8	21	6	62	138	138	25
Mindanao	2025	8	21	7	62	138	138	25
Mindanao	2025	8	21	8	65	138	138	25
Mindanao	2025	8	21	9	70	138	138	25
Mindanao	2025	8	21	10	73	138	138	25
Mindanao	2025	8	21	11	78	138	138	25
Mindanao	2025	8	21	12	79	138	138	25
Mindanao	2025	8	21	13	80	138	138	25
Mindanao	2025	8	21	14	82	138	138	25
Mindanao	2025	8	21	15	82	138	138	25
Mindanao	2025	8	21	16	80	138	138	25
Mindanao	2025	8	21	17	79	138	138	25
Mindanao	2025	8	21	18	88	138	138	25
Mindanao	2025	8	21	19	92	138	138	25
Mindanao	2025	8	21	20	90	138	138	25
Mindanao	2025	8	21	21	86	138	138	25
Mindanao	2025	8	21	22	80	138	138	25
Mindanao	2025	8	21	23	75	138	138	25
Mindanao	2025	8	21	24	70	138	138	25
Mindanao	2025	8	22	1	66	138	138	25
Mindanao	2025	8	22	2	63	138	138	25
Mindanao	2025	8	22	3	61	138	138	25
Mindanao	2025	8	22	4	60	138	138	25
Mindanao	2025	8	22	5	61	138	138	25
Mindanao	2025	8	22	6	66	138	138	25
Mindanao	2025	8	22	7	66	138	138	25
Mindanao	2025	8	22	8	71	138	138	25
Mindanao	2025	8	22	9	81	138	138	25
Mindanao	2025	8	22	10	88	138	138	25
Mindanao	2025	8	22	11	96	138	138	25
Mindanao	2025	8	22	12	93	138	138	25
Mindanao	2025	8	22	13	95	138	138	25
Mindanao	2025	8	22	14	100	138	138	25
Mindanao	2025	8	22	15	101	138	138	25
Mindanao	2025	8	22	16	99	138	138	25
Mindanao	2025	8	22	17	93	138	138	25
Mindanao	2025	8	22	18	94	138	138	25
Mindanao	2025	8	22	19	96	138	138	25
Mindanao	2025	8	22	20	93	138	138	25
Mindanao	2025	8	22	21	91	138	138	25
Mindanao	2025	8	22	22	85	138	138	25
Mindanao	2025	8	22	23	79	138	138	25
Mindanao	2025	8	22	24	74	138	138	25
Mindanao	2025	8	23	1	69	138	138	25
Mindanao	2025	8	23	2	68	138	138	25
Mindanao	2025	8	23	3	65	138	138	25
Mindanao	2025	8	23	4	64	138	138	25
Mindanao	2025	8	23	5	64	138	138	25
Mindanao	2025	8	23	6	67	138	138	25
Mindanao	2025	8	23	7	66	138	138	25
Mindanao	2025	8	23	8	71	138	138	25
Mindanao	2025	8	23	9	76	138	138	25
Mindanao	2025	8	23	10	81	138	138	25
Mindanao	2025	8	23	11	85	138	138	25
Mindanao	2025	8	23	12	82	138	138	25
Mindanao	2025	8	23	13	85	138	138	25
Mindanao	2025	8	23	14	90	138	138	25
Mindanao	2025	8	23	15	88	138	138	25
Mindanao	2025	8	23	16	84	138	138	25
Mindanao	2025	8	23	17	82	138	138	25
Mindanao	2025	8	23	18	88	138	138	25
Mindanao	2025	8	23	19	91	138	138	25
Mindanao	2025	8	23	20	89	138	138	25
Mindanao	2025	8	23	21	90	138	138	25
Mindanao	2025	8	23	22	84	138	138	25
Mindanao	2025	8	23	23	79	138	138	25
Mindanao	2025	8	23	24	74	138	138	25
Mindanao	2025	8	24	1	73	138	138	25
Mindanao	2025	8	24	2	70	138	138	25
Mindanao	2025	8	24	3	66	138	138	25
Mindanao	2025	8	24	4	64	138	138	25
Mindanao	2025	8	24	5	64	138	138	25
Mindanao	2025	8	24	6	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	24	7	63	138	138	25
Mindanao	2025	8	24	8	63	138	138	25
Mindanao	2025	8	24	9	70	138	138	25
Mindanao	2025	8	24	10	76	138	138	25
Mindanao	2025	8	24	11	79	138	138	25
Mindanao	2025	8	24	12	80	138	138	25
Mindanao	2025	8	24	13	83	138	138	25
Mindanao	2025	8	24	14	85	138	138	25
Mindanao	2025	8	24	15	85	138	138	25
Mindanao	2025	8	24	16	85	138	138	25
Mindanao	2025	8	24	17	83	138	138	25
Mindanao	2025	8	24	18	89	138	138	25
Mindanao	2025	8	24	19	95	138	138	25
Mindanao	2025	8	24	20	91	138	138	25
Mindanao	2025	8	24	21	90	138	138	25
Mindanao	2025	8	24	22	85	138	138	25
Mindanao	2025	8	24	23	80	138	138	25
Mindanao	2025	8	24	24	74	138	138	25
Mindanao	2025	8	25	1	74	138	138	25
Mindanao	2025	8	25	2	70	138	138	25
Mindanao	2025	8	25	3	68	138	138	25
Mindanao	2025	8	25	4	68	138	138	25
Mindanao	2025	8	25	5	72	138	138	25
Mindanao	2025	8	25	6	76	138	138	25
Mindanao	2025	8	25	7	68	138	138	25
Mindanao	2025	8	25	8	77	138	138	25
Mindanao	2025	8	25	9	91	138	138	25
Mindanao	2025	8	25	10	98	138	138	25
Mindanao	2025	8	25	11	103	138	138	25
Mindanao	2025	8	25	12	99	138	138	25
Mindanao	2025	8	25	13	104	138	138	25
Mindanao	2025	8	25	14	108	138	138	25
Mindanao	2025	8	25	15	108	138	138	25
Mindanao	2025	8	25	16	105	138	138	25
Mindanao	2025	8	25	17	97	138	138	25
Mindanao	2025	8	25	18	101	138	138	25
Mindanao	2025	8	25	19	100	138	138	25
Mindanao	2025	8	25	20	98	138	138	25
Mindanao	2025	8	25	21	94	138	138	25
Mindanao	2025	8	25	22	87	138	138	25
Mindanao	2025	8	25	23	81	138	138	25
Mindanao	2025	8	25	24	76	138	138	25
Mindanao	2025	8	26	1	67	138	138	25
Mindanao	2025	8	26	2	65	138	138	25
Mindanao	2025	8	26	3	62	138	138	25
Mindanao	2025	8	26	4	62	138	138	25
Mindanao	2025	8	26	5	66	138	138	25
Mindanao	2025	8	26	6	69	138	138	25
Mindanao	2025	8	26	7	62	138	138	25
Mindanao	2025	8	26	8	74	138	138	25
Mindanao	2025	8	26	9	86	138	138	25
Mindanao	2025	8	26	10	95	138	138	25
Mindanao	2025	8	26	11	100	138	138	25
Mindanao	2025	8	26	12	98	138	138	25
Mindanao	2025	8	26	13	99	138	138	25
Mindanao	2025	8	26	14	103	138	138	25
Mindanao	2025	8	26	15	102	138	138	25
Mindanao	2025	8	26	16	101	138	138	25
Mindanao	2025	8	26	17	94	138	138	25
Mindanao	2025	8	26	18	95	138	138	25
Mindanao	2025	8	26	19	96	138	138	25
Mindanao	2025	8	26	20	94	138	138	25
Mindanao	2025	8	26	21	89	138	138	25
Mindanao	2025	8	26	22	84	138	138	25
Mindanao	2025	8	26	23	77	138	138	25
Mindanao	2025	8	26	24	71	138	138	25
Mindanao	2025	8	27	1	70	138	138	25
Mindanao	2025	8	27	2	62	138	138	25
Mindanao	2025	8	27	3	63	138	138	25
Mindanao	2025	8	27	4	61	138	138	25
Mindanao	2025	8	27	5	65	138	138	25
Mindanao	2025	8	27	6	70	138	138	25
Mindanao	2025	8	27	7	68	138	138	25
Mindanao	2025	8	27	8	77	138	138	25
Mindanao	2025	8	27	9	80	138	138	25
Mindanao	2025	8	27	10	88	138	138	25
Mindanao	2025	8	27	11	94	138	138	25
Mindanao	2025	8	27	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	27	13	96	138	138	25
Mindanao	2025	8	27	14	101	138	138	25
Mindanao	2025	8	27	15	103	138	138	25
Mindanao	2025	8	27	16	102	138	138	25
Mindanao	2025	8	27	17	100	138	138	25
Mindanao	2025	8	27	18	101	138	138	25
Mindanao	2025	8	27	19	101	138	138	25
Mindanao	2025	8	27	20	97	138	138	25
Mindanao	2025	8	27	21	93	138	138	25
Mindanao	2025	8	27	22	83	138	138	25
Mindanao	2025	8	27	23	77	138	138	25
Mindanao	2025	8	27	24	75	138	138	25
Mindanao	2025	8	28	1	72	138	138	25
Mindanao	2025	8	28	2	69	138	138	25
Mindanao	2025	8	28	3	67	138	138	25
Mindanao	2025	8	28	4	67	138	138	25
Mindanao	2025	8	28	5	70	138	138	25
Mindanao	2025	8	28	6	77	138	138	25
Mindanao	2025	8	28	7	68	138	138	25
Mindanao	2025	8	28	8	75	138	138	25
Mindanao	2025	8	28	9	88	138	138	25
Mindanao	2025	8	28	10	96	138	138	25
Mindanao	2025	8	28	11	99	138	138	25
Mindanao	2025	8	28	12	99	138	138	25
Mindanao	2025	8	28	13	101	138	138	25
Mindanao	2025	8	28	14	107	138	138	25
Mindanao	2025	8	28	15	103	138	138	25
Mindanao	2025	8	28	16	102	138	138	25
Mindanao	2025	8	28	17	97	138	138	25
Mindanao	2025	8	28	18	100	138	138	25
Mindanao	2025	8	28	19	100	138	138	25
Mindanao	2025	8	28	20	96	138	138	25
Mindanao	2025	8	28	21	94	138	138	25
Mindanao	2025	8	28	22	87	138	138	25
Mindanao	2025	8	28	23	80	138	138	25
Mindanao	2025	8	28	24	73	138	138	25
Mindanao	2025	8	29	1	72	138	138	25
Mindanao	2025	8	29	2	68	138	138	25
Mindanao	2025	8	29	3	67	138	138	25
Mindanao	2025	8	29	4	66	138	138	25
Mindanao	2025	8	29	5	69	138	138	25
Mindanao	2025	8	29	6	73	138	138	25
Mindanao	2025	8	29	7	67	138	138	25
Mindanao	2025	8	29	8	74	138	138	25
Mindanao	2025	8	29	9	86	138	138	25
Mindanao	2025	8	29	10	96	138	138	25
Mindanao	2025	8	29	11	102	138	138	25
Mindanao	2025	8	29	12	100	138	138	25
Mindanao	2025	8	29	13	102	138	138	25
Mindanao	2025	8	29	14	106	138	138	25
Mindanao	2025	8	29	15	106	138	138	25
Mindanao	2025	8	29	16	106	138	138	25
Mindanao	2025	8	29	17	97	138	138	25
Mindanao	2025	8	29	18	100	138	138	25
Mindanao	2025	8	29	19	100	138	138	25
Mindanao	2025	8	29	20	97	138	138	25
Mindanao	2025	8	29	21	91	138	138	25
Mindanao	2025	8	29	22	84	138	138	25
Mindanao	2025	8	29	23	78	138	138	25
Mindanao	2025	8	29	24	73	138	138	25
Mindanao	2025	8	30	1	66	138	138	25
Mindanao	2025	8	30	2	66	138	138	25
Mindanao	2025	8	30	3	65	138	138	25
Mindanao	2025	8	30	4	65	138	138	25
Mindanao	2025	8	30	5	65	138	138	25
Mindanao	2025	8	30	6	69	138	138	25
Mindanao	2025	8	30	7	67	138	138	25
Mindanao	2025	8	30	8	72	138	138	25
Mindanao	2025	8	30	9	79	138	138	25
Mindanao	2025	8	30	10	85	138	138	25
Mindanao	2025	8	30	11	90	138	138	25
Mindanao	2025	8	30	12	89	138	138	25
Mindanao	2025	8	30	13	92	138	138	25
Mindanao	2025	8	30	14	98	138	138	25
Mindanao	2025	8	30	15	97	138	138	25
Mindanao	2025	8	30	16	93	138	138	25
Mindanao	2025	8	30	17	89	138	138	25
Mindanao	2025	8	30	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	8	30	19	99	138	138	25
Mindanao	2025	8	30	20	95	138	138	25
Mindanao	2025	8	30	21	91	138	138	25
Mindanao	2025	8	30	22	85	138	138	25
Mindanao	2025	8	30	23	81	138	138	25
Mindanao	2025	8	30	24	76	138	138	25
Mindanao	2025	8	31	1	73	138	138	25
Mindanao	2025	8	31	2	70	138	138	25
Mindanao	2025	8	31	3	66	138	138	25
Mindanao	2025	8	31	4	64	138	138	25
Mindanao	2025	8	31	5	64	138	138	25
Mindanao	2025	8	31	6	67	138	138	25
Mindanao	2025	8	31	7	63	138	138	25
Mindanao	2025	8	31	8	63	138	138	25
Mindanao	2025	8	31	9	70	138	138	25
Mindanao	2025	8	31	10	76	138	138	25
Mindanao	2025	8	31	11	79	138	138	25
Mindanao	2025	8	31	12	80	138	138	25
Mindanao	2025	8	31	13	83	138	138	25
Mindanao	2025	8	31	14	85	138	138	25
Mindanao	2025	8	31	15	85	138	138	25
Mindanao	2025	8	31	16	85	138	138	25
Mindanao	2025	8	31	17	83	138	138	25
Mindanao	2025	8	31	18	89	138	138	25
Mindanao	2025	8	31	19	95	138	138	25
Mindanao	2025	8	31	20	91	138	138	25
Mindanao	2025	8	31	21	90	138	138	25
Mindanao	2025	8	31	22	85	138	138	25
Mindanao	2025	8	31	23	80	138	138	25
Mindanao	2025	8	31	24	74	138	138	25
Mindanao	2025	9	1	1	71	138	138	25
Mindanao	2025	9	1	2	68	138	138	25
Mindanao	2025	9	1	3	65	138	138	25
Mindanao	2025	9	1	4	64	138	138	25
Mindanao	2025	9	1	5	64	138	138	25
Mindanao	2025	9	1	6	65	138	138	25
Mindanao	2025	9	1	7	66	138	138	25
Mindanao	2025	9	1	8	67	138	138	25
Mindanao	2025	9	1	9	74	138	138	25
Mindanao	2025	9	1	10	83	138	138	25
Mindanao	2025	9	1	11	88	138	138	25
Mindanao	2025	9	1	12	88	138	138	25
Mindanao	2025	9	1	13	87	138	138	25
Mindanao	2025	9	1	14	87	138	138	25
Mindanao	2025	9	1	15	85	138	138	25
Mindanao	2025	9	1	16	84	138	138	25
Mindanao	2025	9	1	17	85	138	138	25
Mindanao	2025	9	1	18	90	138	138	25
Mindanao	2025	9	1	19	90	138	138	25
Mindanao	2025	9	1	20	88	138	138	25
Mindanao	2025	9	1	21	84	138	138	25
Mindanao	2025	9	1	22	77	138	138	25
Mindanao	2025	9	1	23	69	138	138	25
Mindanao	2025	9	1	24	65	138	138	25
Mindanao	2025	9	2	1	63	138	138	25
Mindanao	2025	9	2	2	61	138	138	25
Mindanao	2025	9	2	3	60	138	138	25
Mindanao	2025	9	2	4	59	138	138	25
Mindanao	2025	9	2	5	66	138	138	25
Mindanao	2025	9	2	6	69	138	138	25
Mindanao	2025	9	2	7	61	138	138	25
Mindanao	2025	9	2	8	69	138	138	25
Mindanao	2025	9	2	9	82	138	138	25
Mindanao	2025	9	2	10	94	138	138	25
Mindanao	2025	9	2	11	98	138	138	25
Mindanao	2025	9	2	12	96	138	138	25
Mindanao	2025	9	2	13	101	138	138	25
Mindanao	2025	9	2	14	107	138	138	25
Mindanao	2025	9	2	15	107	138	138	25
Mindanao	2025	9	2	16	106	138	138	25
Mindanao	2025	9	2	17	99	138	138	25
Mindanao	2025	9	2	18	101	138	138	25
Mindanao	2025	9	2	19	103	138	138	25
Mindanao	2025	9	2	20	100	138	138	25
Mindanao	2025	9	2	21	96	138	138	25
Mindanao	2025	9	2	22	89	138	138	25
Mindanao	2025	9	2	23	83	138	138	25
Mindanao	2025	9	2	24	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	3	1	65	138	138	25
Mindanao	2025	9	3	2	63	138	138	25
Mindanao	2025	9	3	3	61	138	138	25
Mindanao	2025	9	3	4	61	138	138	25
Mindanao	2025	9	3	5	65	138	138	25
Mindanao	2025	9	3	6	70	138	138	25
Mindanao	2025	9	3	7	62	138	138	25
Mindanao	2025	9	3	8	73	138	138	25
Mindanao	2025	9	3	9	85	138	138	25
Mindanao	2025	9	3	10	93	138	138	25
Mindanao	2025	9	3	11	98	138	138	25
Mindanao	2025	9	3	12	96	138	138	25
Mindanao	2025	9	3	13	99	138	138	25
Mindanao	2025	9	3	14	105	138	138	25
Mindanao	2025	9	3	15	104	138	138	25
Mindanao	2025	9	3	16	100	138	138	25
Mindanao	2025	9	3	17	94	138	138	25
Mindanao	2025	9	3	18	98	138	138	25
Mindanao	2025	9	3	19	96	138	138	25
Mindanao	2025	9	3	20	93	138	138	25
Mindanao	2025	9	3	21	89	138	138	25
Mindanao	2025	9	3	22	82	138	138	25
Mindanao	2025	9	3	23	77	138	138	25
Mindanao	2025	9	3	24	72	138	138	25
Mindanao	2025	9	4	1	71	138	138	25
Mindanao	2025	9	4	2	70	138	138	25
Mindanao	2025	9	4	3	66	138	138	25
Mindanao	2025	9	4	4	66	138	138	25
Mindanao	2025	9	4	5	70	138	138	25
Mindanao	2025	9	4	6	72	138	138	25
Mindanao	2025	9	4	7	66	138	138	25
Mindanao	2025	9	4	8	76	138	138	25
Mindanao	2025	9	4	9	90	138	138	25
Mindanao	2025	9	4	10	92	138	138	25
Mindanao	2025	9	4	11	100	138	138	25
Mindanao	2025	9	4	12	98	138	138	25
Mindanao	2025	9	4	13	99	138	138	25
Mindanao	2025	9	4	14	101	138	138	25
Mindanao	2025	9	4	15	102	138	138	25
Mindanao	2025	9	4	16	102	138	138	25
Mindanao	2025	9	4	17	92	138	138	25
Mindanao	2025	9	4	18	94	138	138	25
Mindanao	2025	9	4	19	96	138	138	25
Mindanao	2025	9	4	20	94	138	138	25
Mindanao	2025	9	4	21	91	138	138	25
Mindanao	2025	9	4	22	83	138	138	25
Mindanao	2025	9	4	23	77	138	138	25
Mindanao	2025	9	4	24	72	138	138	25
Mindanao	2025	9	5	1	70	138	138	25
Mindanao	2025	9	5	2	65	138	138	25
Mindanao	2025	9	5	3	63	138	138	25
Mindanao	2025	9	5	4	62	138	138	25
Mindanao	2025	9	5	5	65	138	138	25
Mindanao	2025	9	5	6	68	138	138	25
Mindanao	2025	9	5	7	65	138	138	25
Mindanao	2025	9	5	8	76	138	138	25
Mindanao	2025	9	5	9	89	138	138	25
Mindanao	2025	9	5	10	98	138	138	25
Mindanao	2025	9	5	11	103	138	138	25
Mindanao	2025	9	5	12	101	138	138	25
Mindanao	2025	9	5	13	104	138	138	25
Mindanao	2025	9	5	14	105	138	138	25
Mindanao	2025	9	5	15	102	138	138	25
Mindanao	2025	9	5	16	107	138	138	25
Mindanao	2025	9	5	17	99	138	138	25
Mindanao	2025	9	5	18	103	138	138	25
Mindanao	2025	9	5	19	99	138	138	25
Mindanao	2025	9	5	20	98	138	138	25
Mindanao	2025	9	5	21	97	138	138	25
Mindanao	2025	9	5	22	90	138	138	25
Mindanao	2025	9	5	23	87	138	138	25
Mindanao	2025	9	5	24	81	138	138	25
Mindanao	2025	9	6	1	77	138	138	25
Mindanao	2025	9	6	2	74	138	138	25
Mindanao	2025	9	6	3	72	138	138	25
Mindanao	2025	9	6	4	70	138	138	25
Mindanao	2025	9	6	5	69	138	138	25
Mindanao	2025	9	6	6	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	6	7	71	138	138	25
Mindanao	2025	9	6	8	75	138	138	25
Mindanao	2025	9	6	9	83	138	138	25
Mindanao	2025	9	6	10	89	138	138	25
Mindanao	2025	9	6	11	95	138	138	25
Mindanao	2025	9	6	12	94	138	138	25
Mindanao	2025	9	6	13	93	138	138	25
Mindanao	2025	9	6	14	98	138	138	25
Mindanao	2025	9	6	15	100	138	138	25
Mindanao	2025	9	6	16	93	138	138	25
Mindanao	2025	9	6	17	90	138	138	25
Mindanao	2025	9	6	18	99	138	138	25
Mindanao	2025	9	6	19	97	138	138	25
Mindanao	2025	9	6	20	95	138	138	25
Mindanao	2025	9	6	21	91	138	138	25
Mindanao	2025	9	6	22	86	138	138	25
Mindanao	2025	9	6	23	80	138	138	25
Mindanao	2025	9	6	24	73	138	138	25
Mindanao	2025	9	7	1	71	138	138	25
Mindanao	2025	9	7	2	68	138	138	25
Mindanao	2025	9	7	3	65	138	138	25
Mindanao	2025	9	7	4	63	138	138	25
Mindanao	2025	9	7	5	62	138	138	25
Mindanao	2025	9	7	6	63	138	138	25
Mindanao	2025	9	7	7	62	138	138	25
Mindanao	2025	9	7	8	64	138	138	25
Mindanao	2025	9	7	9	67	138	138	25
Mindanao	2025	9	7	10	75	138	138	25
Mindanao	2025	9	7	11	78	138	138	25
Mindanao	2025	9	7	12	80	138	138	25
Mindanao	2025	9	7	13	81	138	138	25
Mindanao	2025	9	7	14	84	138	138	25
Mindanao	2025	9	7	15	82	138	138	25
Mindanao	2025	9	7	16	77	138	138	25
Mindanao	2025	9	7	17	82	138	138	25
Mindanao	2025	9	7	18	91	138	138	25
Mindanao	2025	9	7	19	89	138	138	25
Mindanao	2025	9	7	20	87	138	138	25
Mindanao	2025	9	7	21	84	138	138	25
Mindanao	2025	9	7	22	79	138	138	25
Mindanao	2025	9	7	23	73	138	138	25
Mindanao	2025	9	7	24	69	138	138	25
Mindanao	2025	9	8	1	65	138	138	25
Mindanao	2025	9	8	2	63	138	138	25
Mindanao	2025	9	8	3	61	138	138	25
Mindanao	2025	9	8	4	59	138	138	25
Mindanao	2025	9	8	5	66	138	138	25
Mindanao	2025	9	8	6	67	138	138	25
Mindanao	2025	9	8	7	61	138	138	25
Mindanao	2025	9	8	8	72	138	138	25
Mindanao	2025	9	8	9	84	138	138	25
Mindanao	2025	9	8	10	90	138	138	25
Mindanao	2025	9	8	11	97	138	138	25
Mindanao	2025	9	8	12	97	138	138	25
Mindanao	2025	9	8	13	97	138	138	25
Mindanao	2025	9	8	14	101	138	138	25
Mindanao	2025	9	8	15	99	138	138	25
Mindanao	2025	9	8	16	96	138	138	25
Mindanao	2025	9	8	17	93	138	138	25
Mindanao	2025	9	8	18	97	138	138	25
Mindanao	2025	9	8	19	91	138	138	25
Mindanao	2025	9	8	20	90	138	138	25
Mindanao	2025	9	8	21	85	138	138	25
Mindanao	2025	9	8	22	80	138	138	25
Mindanao	2025	9	8	23	75	138	138	25
Mindanao	2025	9	8	24	71	138	138	25
Mindanao	2025	9	9	1	66	138	138	25
Mindanao	2025	9	9	2	64	138	138	25
Mindanao	2025	9	9	3	62	138	138	25
Mindanao	2025	9	9	4	61	138	138	25
Mindanao	2025	9	9	5	67	138	138	25
Mindanao	2025	9	9	6	72	138	138	25
Mindanao	2025	9	9	7	64	138	138	25
Mindanao	2025	9	9	8	74	138	138	25
Mindanao	2025	9	9	9	85	138	138	25
Mindanao	2025	9	9	10	93	138	138	25
Mindanao	2025	9	9	11	98	138	138	25
Mindanao	2025	9	9	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	9	13	88	138	138	25
Mindanao	2025	9	9	14	98	138	138	25
Mindanao	2025	9	9	15	97	138	138	25
Mindanao	2025	9	9	16	97	138	138	25
Mindanao	2025	9	9	17	92	138	138	25
Mindanao	2025	9	9	18	97	138	138	25
Mindanao	2025	9	9	19	94	138	138	25
Mindanao	2025	9	9	20	89	138	138	25
Mindanao	2025	9	9	21	85	138	138	25
Mindanao	2025	9	9	22	79	138	138	25
Mindanao	2025	9	9	23	74	138	138	25
Mindanao	2025	9	9	24	69	138	138	25
Mindanao	2025	9	10	1	65	138	138	25
Mindanao	2025	9	10	2	63	138	138	25
Mindanao	2025	9	10	3	61	138	138	25
Mindanao	2025	9	10	4	61	138	138	25
Mindanao	2025	9	10	5	65	138	138	25
Mindanao	2025	9	10	6	70	138	138	25
Mindanao	2025	9	10	7	62	138	138	25
Mindanao	2025	9	10	8	73	138	138	25
Mindanao	2025	9	10	9	85	138	138	25
Mindanao	2025	9	10	10	93	138	138	25
Mindanao	2025	9	10	11	98	138	138	25
Mindanao	2025	9	10	12	96	138	138	25
Mindanao	2025	9	10	13	99	138	138	25
Mindanao	2025	9	10	14	105	138	138	25
Mindanao	2025	9	10	15	104	138	138	25
Mindanao	2025	9	10	16	100	138	138	25
Mindanao	2025	9	10	17	94	138	138	25
Mindanao	2025	9	10	18	98	138	138	25
Mindanao	2025	9	10	19	96	138	138	25
Mindanao	2025	9	10	20	93	138	138	25
Mindanao	2025	9	10	21	89	138	138	25
Mindanao	2025	9	10	22	82	138	138	25
Mindanao	2025	9	10	23	77	138	138	25
Mindanao	2025	9	10	24	72	138	138	25
Mindanao	2025	9	11	1	68	138	138	25
Mindanao	2025	9	11	2	66	138	138	25
Mindanao	2025	9	11	3	64	138	138	25
Mindanao	2025	9	11	4	60	138	138	25
Mindanao	2025	9	11	5	66	138	138	25
Mindanao	2025	9	11	6	71	138	138	25
Mindanao	2025	9	11	7	63	138	138	25
Mindanao	2025	9	11	8	75	138	138	25
Mindanao	2025	9	11	9	88	138	138	25
Mindanao	2025	9	11	10	96	138	138	25
Mindanao	2025	9	11	11	100	138	138	25
Mindanao	2025	9	11	12	98	138	138	25
Mindanao	2025	9	11	13	100	138	138	25
Mindanao	2025	9	11	14	104	138	138	25
Mindanao	2025	9	11	15	103	138	138	25
Mindanao	2025	9	11	16	100	138	138	25
Mindanao	2025	9	11	17	96	138	138	25
Mindanao	2025	9	11	18	97	138	138	25
Mindanao	2025	9	11	19	93	138	138	25
Mindanao	2025	9	11	20	90	138	138	25
Mindanao	2025	9	11	21	85	138	138	25
Mindanao	2025	9	11	22	78	138	138	25
Mindanao	2025	9	11	23	74	138	138	25
Mindanao	2025	9	11	24	69	138	138	25
Mindanao	2025	9	12	1	66	138	138	25
Mindanao	2025	9	12	2	63	138	138	25
Mindanao	2025	9	12	3	60	138	138	25
Mindanao	2025	9	12	4	60	138	138	25
Mindanao	2025	9	12	5	65	138	138	25
Mindanao	2025	9	12	6	69	138	138	25
Mindanao	2025	9	12	7	65	138	138	25
Mindanao	2025	9	12	8	72	138	138	25
Mindanao	2025	9	12	9	84	138	138	25
Mindanao	2025	9	12	10	93	138	138	25
Mindanao	2025	9	12	11	98	138	138	25
Mindanao	2025	9	12	12	96	138	138	25
Mindanao	2025	9	12	13	100	138	138	25
Mindanao	2025	9	12	14	105	138	138	25
Mindanao	2025	9	12	15	103	138	138	25
Mindanao	2025	9	12	16	101	138	138	25
Mindanao	2025	9	12	17	94	138	138	25
Mindanao	2025	9	12	18	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	12	19	93	138	138	25
Mindanao	2025	9	12	20	92	138	138	25
Mindanao	2025	9	12	21	86	138	138	25
Mindanao	2025	9	12	22	80	138	138	25
Mindanao	2025	9	12	23	77	138	138	25
Mindanao	2025	9	12	24	73	138	138	25
Mindanao	2025	9	13	1	69	138	138	25
Mindanao	2025	9	13	2	65	138	138	25
Mindanao	2025	9	13	3	62	138	138	25
Mindanao	2025	9	13	4	62	138	138	25
Mindanao	2025	9	13	5	63	138	138	25
Mindanao	2025	9	13	6	66	138	138	25
Mindanao	2025	9	13	7	63	138	138	25
Mindanao	2025	9	13	8	67	138	138	25
Mindanao	2025	9	13	9	76	138	138	25
Mindanao	2025	9	13	10	83	138	138	25
Mindanao	2025	9	13	11	87	138	138	25
Mindanao	2025	9	13	12	88	138	138	25
Mindanao	2025	9	13	13	91	138	138	25
Mindanao	2025	9	13	14	95	138	138	25
Mindanao	2025	9	13	15	94	138	138	25
Mindanao	2025	9	13	16	89	138	138	25
Mindanao	2025	9	13	17	85	138	138	25
Mindanao	2025	9	13	18	92	138	138	25
Mindanao	2025	9	13	19	93	138	138	25
Mindanao	2025	9	13	20	92	138	138	25
Mindanao	2025	9	13	21	87	138	138	25
Mindanao	2025	9	13	22	81	138	138	25
Mindanao	2025	9	13	23	76	138	138	25
Mindanao	2025	9	13	24	71	138	138	25
Mindanao	2025	9	14	1	67	138	138	25
Mindanao	2025	9	14	2	64	138	138	25
Mindanao	2025	9	14	3	62	138	138	25
Mindanao	2025	9	14	4	60	138	138	25
Mindanao	2025	9	14	5	60	138	138	25
Mindanao	2025	9	14	6	62	138	138	25
Mindanao	2025	9	14	7	58	138	138	25
Mindanao	2025	9	14	8	60	138	138	25
Mindanao	2025	9	14	9	62	138	138	25
Mindanao	2025	9	14	10	70	138	138	25
Mindanao	2025	9	14	11	73	138	138	25
Mindanao	2025	9	14	12	74	138	138	25
Mindanao	2025	9	14	13	75	138	138	25
Mindanao	2025	9	14	14	81	138	138	25
Mindanao	2025	9	14	15	79	138	138	25
Mindanao	2025	9	14	16	79	138	138	25
Mindanao	2025	9	14	17	79	138	138	25
Mindanao	2025	9	14	18	90	138	138	25
Mindanao	2025	9	14	19	90	138	138	25
Mindanao	2025	9	14	20	87	138	138	25
Mindanao	2025	9	14	21	86	138	138	25
Mindanao	2025	9	14	22	79	138	138	25
Mindanao	2025	9	14	23	74	138	138	25
Mindanao	2025	9	14	24	70	138	138	25
Mindanao	2025	9	15	1	65	138	138	25
Mindanao	2025	9	15	2	61	138	138	25
Mindanao	2025	9	15	3	60	138	138	25
Mindanao	2025	9	15	4	59	138	138	25
Mindanao	2025	9	15	5	66	138	138	25
Mindanao	2025	9	15	6	65	138	138	25
Mindanao	2025	9	15	7	61	138	138	25
Mindanao	2025	9	15	8	72	138	138	25
Mindanao	2025	9	15	9	86	138	138	25
Mindanao	2025	9	15	10	98	138	138	25
Mindanao	2025	9	15	11	101	138	138	25
Mindanao	2025	9	15	12	100	138	138	25
Mindanao	2025	9	15	13	102	138	138	25
Mindanao	2025	9	15	14	109	138	138	25
Mindanao	2025	9	15	15	106	138	138	25
Mindanao	2025	9	15	16	104	138	138	25
Mindanao	2025	9	15	17	96	138	138	25
Mindanao	2025	9	15	18	102	138	138	25
Mindanao	2025	9	15	19	99	138	138	25
Mindanao	2025	9	15	20	96	138	138	25
Mindanao	2025	9	15	21	93	138	138	25
Mindanao	2025	9	15	22	86	138	138	25
Mindanao	2025	9	15	23	80	138	138	25
Mindanao	2025	9	15	24	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	16	1	72	138	138	25
Mindanao	2025	9	16	2	68	138	138	25
Mindanao	2025	9	16	3	66	138	138	25
Mindanao	2025	9	16	4	65	138	138	25
Mindanao	2025	9	16	5	72	138	138	25
Mindanao	2025	9	16	6	71	138	138	25
Mindanao	2025	9	16	7	66	138	138	25
Mindanao	2025	9	16	8	78	138	138	25
Mindanao	2025	9	16	9	92	138	138	25
Mindanao	2025	9	16	10	98	138	138	25
Mindanao	2025	9	16	11	104	138	138	25
Mindanao	2025	9	16	12	102	138	138	25
Mindanao	2025	9	16	13	104	138	138	25
Mindanao	2025	9	16	14	109	138	138	25
Mindanao	2025	9	16	15	108	138	138	25
Mindanao	2025	9	16	16	101	138	138	25
Mindanao	2025	9	16	17	98	138	138	25
Mindanao	2025	9	16	18	101	138	138	25
Mindanao	2025	9	16	19	100	138	138	25
Mindanao	2025	9	16	20	95	138	138	25
Mindanao	2025	9	16	21	91	138	138	25
Mindanao	2025	9	16	22	82	138	138	25
Mindanao	2025	9	16	23	78	138	138	25
Mindanao	2025	9	16	24	72	138	138	25
Mindanao	2025	9	17	1	69	138	138	25
Mindanao	2025	9	17	2	66	138	138	25
Mindanao	2025	9	17	3	63	138	138	25
Mindanao	2025	9	17	4	64	138	138	25
Mindanao	2025	9	17	5	68	138	138	25
Mindanao	2025	9	17	6	70	138	138	25
Mindanao	2025	9	17	7	63	138	138	25
Mindanao	2025	9	17	8	76	138	138	25
Mindanao	2025	9	17	9	89	138	138	25
Mindanao	2025	9	17	10	99	138	138	25
Mindanao	2025	9	17	11	103	138	138	25
Mindanao	2025	9	17	12	101	138	138	25
Mindanao	2025	9	17	13	103	138	138	25
Mindanao	2025	9	17	14	108	138	138	25
Mindanao	2025	9	17	15	104	138	138	25
Mindanao	2025	9	17	16	100	138	138	25
Mindanao	2025	9	17	17	94	138	138	25
Mindanao	2025	9	17	18	100	138	138	25
Mindanao	2025	9	17	19	94	138	138	25
Mindanao	2025	9	17	20	96	138	138	25
Mindanao	2025	9	17	21	91	138	138	25
Mindanao	2025	9	17	22	84	138	138	25
Mindanao	2025	9	17	23	79	138	138	25
Mindanao	2025	9	17	24	75	138	138	25
Mindanao	2025	9	18	1	72	138	138	25
Mindanao	2025	9	18	2	69	138	138	25
Mindanao	2025	9	18	3	66	138	138	25
Mindanao	2025	9	18	4	64	138	138	25
Mindanao	2025	9	18	5	70	138	138	25
Mindanao	2025	9	18	6	73	138	138	25
Mindanao	2025	9	18	7	69	138	138	25
Mindanao	2025	9	18	8	75	138	138	25
Mindanao	2025	9	18	9	89	138	138	25
Mindanao	2025	9	18	10	97	138	138	25
Mindanao	2025	9	18	11	100	138	138	25
Mindanao	2025	9	18	12	96	138	138	25
Mindanao	2025	9	18	13	97	138	138	25
Mindanao	2025	9	18	14	100	138	138	25
Mindanao	2025	9	18	15	98	138	138	25
Mindanao	2025	9	18	16	95	138	138	25
Mindanao	2025	9	18	17	91	138	138	25
Mindanao	2025	9	18	18	97	138	138	25
Mindanao	2025	9	18	19	92	138	138	25
Mindanao	2025	9	18	20	90	138	138	25
Mindanao	2025	9	18	21	85	138	138	25
Mindanao	2025	9	18	22	79	138	138	25
Mindanao	2025	9	18	23	74	138	138	25
Mindanao	2025	9	18	24	70	138	138	25
Mindanao	2025	9	19	1	66	138	138	25
Mindanao	2025	9	19	2	64	138	138	25
Mindanao	2025	9	19	3	62	138	138	25
Mindanao	2025	9	19	4	60	138	138	25
Mindanao	2025	9	19	5	63	138	138	25
Mindanao	2025	9	19	6	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	19	7	64	138	138	25
Mindanao	2025	9	19	8	73	138	138	25
Mindanao	2025	9	19	9	86	138	138	25
Mindanao	2025	9	19	10	89	138	138	25
Mindanao	2025	9	19	11	95	138	138	25
Mindanao	2025	9	19	12	95	138	138	25
Mindanao	2025	9	19	13	98	138	138	25
Mindanao	2025	9	19	14	106	138	138	25
Mindanao	2025	9	19	15	104	138	138	25
Mindanao	2025	9	19	16	100	138	138	25
Mindanao	2025	9	19	17	95	138	138	25
Mindanao	2025	9	19	18	102	138	138	25
Mindanao	2025	9	19	19	97	138	138	25
Mindanao	2025	9	19	20	93	138	138	25
Mindanao	2025	9	19	21	90	138	138	25
Mindanao	2025	9	19	22	84	138	138	25
Mindanao	2025	9	19	23	79	138	138	25
Mindanao	2025	9	19	24	74	138	138	25
Mindanao	2025	9	20	1	71	138	138	25
Mindanao	2025	9	20	2	67	138	138	25
Mindanao	2025	9	20	3	65	138	138	25
Mindanao	2025	9	20	4	63	138	138	25
Mindanao	2025	9	20	5	64	138	138	25
Mindanao	2025	9	20	6	66	138	138	25
Mindanao	2025	9	20	7	63	138	138	25
Mindanao	2025	9	20	8	71	138	138	25
Mindanao	2025	9	20	9	79	138	138	25
Mindanao	2025	9	20	10	87	138	138	25
Mindanao	2025	9	20	11	91	138	138	25
Mindanao	2025	9	20	12	91	138	138	25
Mindanao	2025	9	20	13	93	138	138	25
Mindanao	2025	9	20	14	98	138	138	25
Mindanao	2025	9	20	15	97	138	138	25
Mindanao	2025	9	20	16	94	138	138	25
Mindanao	2025	9	20	17	89	138	138	25
Mindanao	2025	9	20	18	100	138	138	25
Mindanao	2025	9	20	19	99	138	138	25
Mindanao	2025	9	20	20	94	138	138	25
Mindanao	2025	9	20	21	92	138	138	25
Mindanao	2025	9	20	22	87	138	138	25
Mindanao	2025	9	20	23	82	138	138	25
Mindanao	2025	9	20	24	77	138	138	25
Mindanao	2025	9	21	1	73	138	138	25
Mindanao	2025	9	21	2	70	138	138	25
Mindanao	2025	9	21	3	67	138	138	25
Mindanao	2025	9	21	4	64	138	138	25
Mindanao	2025	9	21	5	64	138	138	25
Mindanao	2025	9	21	6	65	138	138	25
Mindanao	2025	9	21	7	65	138	138	25
Mindanao	2025	9	21	8	64	138	138	25
Mindanao	2025	9	21	9	69	138	138	25
Mindanao	2025	9	21	10	75	138	138	25
Mindanao	2025	9	21	11	80	138	138	25
Mindanao	2025	9	21	12	81	138	138	25
Mindanao	2025	9	21	13	83	138	138	25
Mindanao	2025	9	21	14	86	138	138	25
Mindanao	2025	9	21	15	84	138	138	25
Mindanao	2025	9	21	16	82	138	138	25
Mindanao	2025	9	21	17	78	138	138	25
Mindanao	2025	9	21	18	91	138	138	25
Mindanao	2025	9	21	19	92	138	138	25
Mindanao	2025	9	21	20	90	138	138	25
Mindanao	2025	9	21	21	88	138	138	25
Mindanao	2025	9	21	22	82	138	138	25
Mindanao	2025	9	21	23	77	138	138	25
Mindanao	2025	9	21	24	73	138	138	25
Mindanao	2025	9	22	1	69	138	138	25
Mindanao	2025	9	22	2	66	138	138	25
Mindanao	2025	9	22	3	62	138	138	25
Mindanao	2025	9	22	4	63	138	138	25
Mindanao	2025	9	22	5	67	138	138	25
Mindanao	2025	9	22	6	70	138	138	25
Mindanao	2025	9	22	7	62	138	138	25
Mindanao	2025	9	22	8	73	138	138	25
Mindanao	2025	9	22	9	88	138	138	25
Mindanao	2025	9	22	10	97	138	138	25
Mindanao	2025	9	22	11	102	138	138	25
Mindanao	2025	9	22	12	101	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	22	13	103	138	138	25
Mindanao	2025	9	22	14	109	138	138	25
Mindanao	2025	9	22	15	108	138	138	25
Mindanao	2025	9	22	16	105	138	138	25
Mindanao	2025	9	22	17	96	138	138	25
Mindanao	2025	9	22	18	104	138	138	25
Mindanao	2025	9	22	19	101	138	138	25
Mindanao	2025	9	22	20	99	138	138	25
Mindanao	2025	9	22	21	94	138	138	25
Mindanao	2025	9	22	22	88	138	138	25
Mindanao	2025	9	22	23	82	138	138	25
Mindanao	2025	9	22	24	77	138	138	25
Mindanao	2025	9	23	1	74	138	138	25
Mindanao	2025	9	23	2	71	138	138	25
Mindanao	2025	9	23	3	68	138	138	25
Mindanao	2025	9	23	4	67	138	138	25
Mindanao	2025	9	23	5	71	138	138	25
Mindanao	2025	9	23	6	74	138	138	25
Mindanao	2025	9	23	7	68	138	138	25
Mindanao	2025	9	23	8	78	138	138	25
Mindanao	2025	9	23	9	91	138	138	25
Mindanao	2025	9	23	10	97	138	138	25
Mindanao	2025	9	23	11	104	138	138	25
Mindanao	2025	9	23	12	104	138	138	25
Mindanao	2025	9	23	13	105	138	138	25
Mindanao	2025	9	23	14	111	138	138	25
Mindanao	2025	9	23	15	108	138	138	25
Mindanao	2025	9	23	16	102	138	138	25
Mindanao	2025	9	23	17	97	138	138	25
Mindanao	2025	9	23	18	101	138	138	25
Mindanao	2025	9	23	19	97	138	138	25
Mindanao	2025	9	23	20	95	138	138	25
Mindanao	2025	9	23	21	91	138	138	25
Mindanao	2025	9	23	22	83	138	138	25
Mindanao	2025	9	23	23	76	138	138	25
Mindanao	2025	9	23	24	73	138	138	25
Mindanao	2025	9	24	1	71	138	138	25
Mindanao	2025	9	24	2	67	138	138	25
Mindanao	2025	9	24	3	64	138	138	25
Mindanao	2025	9	24	4	64	138	138	25
Mindanao	2025	9	24	5	69	138	138	25
Mindanao	2025	9	24	6	72	138	138	25
Mindanao	2025	9	24	7	65	138	138	25
Mindanao	2025	9	24	8	76	138	138	25
Mindanao	2025	9	24	9	89	138	138	25
Mindanao	2025	9	24	10	98	138	138	25
Mindanao	2025	9	24	11	102	138	138	25
Mindanao	2025	9	24	12	101	138	138	25
Mindanao	2025	9	24	13	104	138	138	25
Mindanao	2025	9	24	14	108	138	138	25
Mindanao	2025	9	24	15	107	138	138	25
Mindanao	2025	9	24	16	103	138	138	25
Mindanao	2025	9	24	17	96	138	138	25
Mindanao	2025	9	24	18	103	138	138	25
Mindanao	2025	9	24	19	99	138	138	25
Mindanao	2025	9	24	20	97	138	138	25
Mindanao	2025	9	24	21	93	138	138	25
Mindanao	2025	9	24	22	87	138	138	25
Mindanao	2025	9	24	23	81	138	138	25
Mindanao	2025	9	24	24	76	138	138	25
Mindanao	2025	9	25	1	72	138	138	25
Mindanao	2025	9	25	2	71	138	138	25
Mindanao	2025	9	25	3	67	138	138	25
Mindanao	2025	9	25	4	65	138	138	25
Mindanao	2025	9	25	5	70	138	138	25
Mindanao	2025	9	25	6	73	138	138	25
Mindanao	2025	9	25	7	66	138	138	25
Mindanao	2025	9	25	8	77	138	138	25
Mindanao	2025	9	25	9	89	138	138	25
Mindanao	2025	9	25	10	96	138	138	25
Mindanao	2025	9	25	11	103	138	138	25
Mindanao	2025	9	25	12	101	138	138	25
Mindanao	2025	9	25	13	103	138	138	25
Mindanao	2025	9	25	14	108	138	138	25
Mindanao	2025	9	25	15	106	138	138	25
Mindanao	2025	9	25	16	102	138	138	25
Mindanao	2025	9	25	17	96	138	138	25
Mindanao	2025	9	25	18	104	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	25	19	100	138	138	25
Mindanao	2025	9	25	20	96	138	138	25
Mindanao	2025	9	25	21	94	138	138	25
Mindanao	2025	9	25	22	86	138	138	25
Mindanao	2025	9	25	23	81	138	138	25
Mindanao	2025	9	25	24	76	138	138	25
Mindanao	2025	9	26	1	72	138	138	25
Mindanao	2025	9	26	2	69	138	138	25
Mindanao	2025	9	26	3	65	138	138	25
Mindanao	2025	9	26	4	65	138	138	25
Mindanao	2025	9	26	5	69	138	138	25
Mindanao	2025	9	26	6	73	138	138	25
Mindanao	2025	9	26	7	67	138	138	25
Mindanao	2025	9	26	8	78	138	138	25
Mindanao	2025	9	26	9	90	138	138	25
Mindanao	2025	9	26	10	97	138	138	25
Mindanao	2025	9	26	11	102	138	138	25
Mindanao	2025	9	26	12	101	138	138	25
Mindanao	2025	9	26	13	103	138	138	25
Mindanao	2025	9	26	14	107	138	138	25
Mindanao	2025	9	26	15	105	138	138	25
Mindanao	2025	9	26	16	101	138	138	25
Mindanao	2025	9	26	17	96	138	138	25
Mindanao	2025	9	26	18	101	138	138	25
Mindanao	2025	9	26	19	93	138	138	25
Mindanao	2025	9	26	20	91	138	138	25
Mindanao	2025	9	26	21	88	138	138	25
Mindanao	2025	9	26	22	82	138	138	25
Mindanao	2025	9	26	23	78	138	138	25
Mindanao	2025	9	26	24	72	138	138	25
Mindanao	2025	9	27	1	69	138	138	25
Mindanao	2025	9	27	2	66	138	138	25
Mindanao	2025	9	27	3	64	138	138	25
Mindanao	2025	9	27	4	63	138	138	25
Mindanao	2025	9	27	5	63	138	138	25
Mindanao	2025	9	27	6	65	138	138	25
Mindanao	2025	9	27	7	64	138	138	25
Mindanao	2025	9	27	8	70	138	138	25
Mindanao	2025	9	27	9	77	138	138	25
Mindanao	2025	9	27	10	82	138	138	25
Mindanao	2025	9	27	11	87	138	138	25
Mindanao	2025	9	27	12	86	138	138	25
Mindanao	2025	9	27	13	88	138	138	25
Mindanao	2025	9	27	14	92	138	138	25
Mindanao	2025	9	27	15	88	138	138	25
Mindanao	2025	9	27	16	86	138	138	25
Mindanao	2025	9	27	17	85	138	138	25
Mindanao	2025	9	27	18	96	138	138	25
Mindanao	2025	9	27	19	91	138	138	25
Mindanao	2025	9	27	20	88	138	138	25
Mindanao	2025	9	27	21	85	138	138	25
Mindanao	2025	9	27	22	81	138	138	25
Mindanao	2025	9	27	23	75	138	138	25
Mindanao	2025	9	27	24	71	138	138	25
Mindanao	2025	9	28	1	68	138	138	25
Mindanao	2025	9	28	2	65	138	138	25
Mindanao	2025	9	28	3	60	138	138	25
Mindanao	2025	9	28	4	59	138	138	25
Mindanao	2025	9	28	5	60	138	138	25
Mindanao	2025	9	28	6	60	138	138	25
Mindanao	2025	9	28	7	60	138	138	25
Mindanao	2025	9	28	8	61	138	138	25
Mindanao	2025	9	28	9	65	138	138	25
Mindanao	2025	9	28	10	67	138	138	25
Mindanao	2025	9	28	11	73	138	138	25
Mindanao	2025	9	28	12	72	138	138	25
Mindanao	2025	9	28	13	73	138	138	25
Mindanao	2025	9	28	14	73	138	138	25
Mindanao	2025	9	28	15	72	138	138	25
Mindanao	2025	9	28	16	70	138	138	25
Mindanao	2025	9	28	17	74	138	138	25
Mindanao	2025	9	28	18	87	138	138	25
Mindanao	2025	9	28	19	79	138	138	25
Mindanao	2025	9	28	20	78	138	138	25
Mindanao	2025	9	28	21	75	138	138	25
Mindanao	2025	9	28	22	68	138	138	25
Mindanao	2025	9	28	23	65	138	138	25
Mindanao	2025	9	28	24	62	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	9	29	1	60	138	138	25
Mindanao	2025	9	29	2	58	138	138	25
Mindanao	2025	9	29	3	56	138	138	25
Mindanao	2025	9	29	4	57	138	138	25
Mindanao	2025	9	29	5	62	138	138	25
Mindanao	2025	9	29	6	63	138	138	25
Mindanao	2025	9	29	7	59	138	138	25
Mindanao	2025	9	29	8	70	138	138	25
Mindanao	2025	9	29	9	82	138	138	25
Mindanao	2025	9	29	10	90	138	138	25
Mindanao	2025	9	29	11	97	138	138	25
Mindanao	2025	9	29	12	94	138	138	25
Mindanao	2025	9	29	13	97	138	138	25
Mindanao	2025	9	29	14	103	138	138	25
Mindanao	2025	9	29	15	103	138	138	25
Mindanao	2025	9	29	16	98	138	138	25
Mindanao	2025	9	29	17	93	138	138	25
Mindanao	2025	9	29	18	103	138	138	25
Mindanao	2025	9	29	19	98	138	138	25
Mindanao	2025	9	29	20	94	138	138	25
Mindanao	2025	9	29	21	92	138	138	25
Mindanao	2025	9	29	22	85	138	138	25
Mindanao	2025	9	29	23	80	138	138	25
Mindanao	2025	9	29	24	74	138	138	25
Mindanao	2025	9	30	1	70	138	138	25
Mindanao	2025	9	30	2	68	138	138	25
Mindanao	2025	9	30	3	65	138	138	25
Mindanao	2025	9	30	4	64	138	138	25
Mindanao	2025	9	30	5	70	138	138	25
Mindanao	2025	9	30	6	72	138	138	25
Mindanao	2025	9	30	7	65	138	138	25
Mindanao	2025	9	30	8	77	138	138	25
Mindanao	2025	9	30	9	88	138	138	25
Mindanao	2025	9	30	10	97	138	138	25
Mindanao	2025	9	30	11	102	138	138	25
Mindanao	2025	9	30	12	100	138	138	25
Mindanao	2025	9	30	13	100	138	138	25
Mindanao	2025	9	30	14	106	138	138	25
Mindanao	2025	9	30	15	103	138	138	25
Mindanao	2025	9	30	16	100	138	138	25
Mindanao	2025	9	30	17	95	138	138	25
Mindanao	2025	9	30	18	103	138	138	25
Mindanao	2025	9	30	19	99	138	138	25
Mindanao	2025	9	30	20	96	138	138	25
Mindanao	2025	9	30	21	92	138	138	25
Mindanao	2025	9	30	22	84	138	138	25
Mindanao	2025	9	30	23	81	138	138	25
Mindanao	2025	9	30	24	75	138	138	25
Mindanao	2025	10	1	1	73	138	138	25
Mindanao	2025	10	1	2	69	138	138	25
Mindanao	2025	10	1	3	65	138	138	25
Mindanao	2025	10	1	4	67	138	138	25
Mindanao	2025	10	1	5	70	138	138	25
Mindanao	2025	10	1	6	72	138	138	25
Mindanao	2025	10	1	7	66	138	138	25
Mindanao	2025	10	1	8	76	138	138	25
Mindanao	2025	10	1	9	87	138	138	25
Mindanao	2025	10	1	10	96	138	138	25
Mindanao	2025	10	1	11	100	138	138	25
Mindanao	2025	10	1	12	99	138	138	25
Mindanao	2025	10	1	13	99	138	138	25
Mindanao	2025	10	1	14	103	138	138	25
Mindanao	2025	10	1	15	100	138	138	25
Mindanao	2025	10	1	16	97	138	138	25
Mindanao	2025	10	1	17	93	138	138	25
Mindanao	2025	10	1	18	98	138	138	25
Mindanao	2025	10	1	19	93	138	138	25
Mindanao	2025	10	1	20	89	138	138	25
Mindanao	2025	10	1	21	86	138	138	25
Mindanao	2025	10	1	22	79	138	138	25
Mindanao	2025	10	1	23	75	138	138	25
Mindanao	2025	10	1	24	71	138	138	25
Mindanao	2025	10	2	1	67	138	138	25
Mindanao	2025	10	2	2	64	138	138	25
Mindanao	2025	10	2	3	63	138	138	25
Mindanao	2025	10	2	4	62	138	138	25
Mindanao	2025	10	2	5	64	138	138	25
Mindanao	2025	10	2	6	68	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	2	7	62	138	138	25
Mindanao	2025	10	2	8	72	138	138	25
Mindanao	2025	10	2	9	85	138	138	25
Mindanao	2025	10	2	10	90	138	138	25
Mindanao	2025	10	2	11	98	138	138	25
Mindanao	2025	10	2	12	96	138	138	25
Mindanao	2025	10	2	13	99	138	138	25
Mindanao	2025	10	2	14	104	138	138	25
Mindanao	2025	10	2	15	100	138	138	25
Mindanao	2025	10	2	16	98	138	138	25
Mindanao	2025	10	2	17	93	138	138	25
Mindanao	2025	10	2	18	99	138	138	25
Mindanao	2025	10	2	19	95	138	138	25
Mindanao	2025	10	2	20	91	138	138	25
Mindanao	2025	10	2	21	87	138	138	25
Mindanao	2025	10	2	22	82	138	138	25
Mindanao	2025	10	2	23	78	138	138	25
Mindanao	2025	10	2	24	70	138	138	25
Mindanao	2025	10	3	1	68	138	138	25
Mindanao	2025	10	3	2	67	138	138	25
Mindanao	2025	10	3	3	64	138	138	25
Mindanao	2025	10	3	4	63	138	138	25
Mindanao	2025	10	3	5	67	138	138	25
Mindanao	2025	10	3	6	70	138	138	25
Mindanao	2025	10	3	7	65	138	138	25
Mindanao	2025	10	3	8	74	138	138	25
Mindanao	2025	10	3	9	85	138	138	25
Mindanao	2025	10	3	10	94	138	138	25
Mindanao	2025	10	3	11	97	138	138	25
Mindanao	2025	10	3	12	96	138	138	25
Mindanao	2025	10	3	13	97	138	138	25
Mindanao	2025	10	3	14	98	138	138	25
Mindanao	2025	10	3	15	96	138	138	25
Mindanao	2025	10	3	16	93	138	138	25
Mindanao	2025	10	3	17	88	138	138	25
Mindanao	2025	10	3	18	95	138	138	25
Mindanao	2025	10	3	19	91	138	138	25
Mindanao	2025	10	3	20	90	138	138	25
Mindanao	2025	10	3	21	86	138	138	25
Mindanao	2025	10	3	22	80	138	138	25
Mindanao	2025	10	3	23	76	138	138	25
Mindanao	2025	10	3	24	71	138	138	25
Mindanao	2025	10	4	1	68	138	138	25
Mindanao	2025	10	4	2	65	138	138	25
Mindanao	2025	10	4	3	62	138	138	25
Mindanao	2025	10	4	4	61	138	138	25
Mindanao	2025	10	4	5	62	138	138	25
Mindanao	2025	10	4	6	64	138	138	25
Mindanao	2025	10	4	7	63	138	138	25
Mindanao	2025	10	4	8	67	138	138	25
Mindanao	2025	10	4	9	77	138	138	25
Mindanao	2025	10	4	10	83	138	138	25
Mindanao	2025	10	4	11	90	138	138	25
Mindanao	2025	10	4	12	89	138	138	25
Mindanao	2025	10	4	13	88	138	138	25
Mindanao	2025	10	4	14	90	138	138	25
Mindanao	2025	10	4	15	90	138	138	25
Mindanao	2025	10	4	16	87	138	138	25
Mindanao	2025	10	4	17	86	138	138	25
Mindanao	2025	10	4	18	95	138	138	25
Mindanao	2025	10	4	19	90	138	138	25
Mindanao	2025	10	4	20	87	138	138	25
Mindanao	2025	10	4	21	85	138	138	25
Mindanao	2025	10	4	22	79	138	138	25
Mindanao	2025	10	4	23	74	138	138	25
Mindanao	2025	10	4	24	68	138	138	25
Mindanao	2025	10	5	1	65	138	138	25
Mindanao	2025	10	5	2	63	138	138	25
Mindanao	2025	10	5	3	60	138	138	25
Mindanao	2025	10	5	4	56	138	138	25
Mindanao	2025	10	5	5	57	138	138	25
Mindanao	2025	10	5	6	57	138	138	25
Mindanao	2025	10	5	7	56	138	138	25
Mindanao	2025	10	5	8	58	138	138	25
Mindanao	2025	10	5	9	67	138	138	25
Mindanao	2025	10	5	10	72	138	138	25
Mindanao	2025	10	5	11	76	138	138	25
Mindanao	2025	10	5	12	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	5	13	77	138	138	25
Mindanao	2025	10	5	14	73	138	138	25
Mindanao	2025	10	5	15	77	138	138	25
Mindanao	2025	10	5	16	75	138	138	25
Mindanao	2025	10	5	17	72	138	138	25
Mindanao	2025	10	5	18	85	138	138	25
Mindanao	2025	10	5	19	82	138	138	25
Mindanao	2025	10	5	20	83	138	138	25
Mindanao	2025	10	5	21	80	138	138	25
Mindanao	2025	10	5	22	74	138	138	25
Mindanao	2025	10	5	23	69	138	138	25
Mindanao	2025	10	5	24	67	138	138	25
Mindanao	2025	10	6	1	63	138	138	25
Mindanao	2025	10	6	2	62	138	138	25
Mindanao	2025	10	6	3	59	138	138	25
Mindanao	2025	10	6	4	58	138	138	25
Mindanao	2025	10	6	5	62	138	138	25
Mindanao	2025	10	6	6	65	138	138	25
Mindanao	2025	10	6	7	59	138	138	25
Mindanao	2025	10	6	8	71	138	138	25
Mindanao	2025	10	6	9	83	138	138	25
Mindanao	2025	10	6	10	92	138	138	25
Mindanao	2025	10	6	11	94	138	138	25
Mindanao	2025	10	6	12	93	138	138	25
Mindanao	2025	10	6	13	91	138	138	25
Mindanao	2025	10	6	14	96	138	138	25
Mindanao	2025	10	6	15	97	138	138	25
Mindanao	2025	10	6	16	94	138	138	25
Mindanao	2025	10	6	17	90	138	138	25
Mindanao	2025	10	6	18	99	138	138	25
Mindanao	2025	10	6	19	93	138	138	25
Mindanao	2025	10	6	20	90	138	138	25
Mindanao	2025	10	6	21	86	138	138	25
Mindanao	2025	10	6	22	80	138	138	25
Mindanao	2025	10	6	23	74	138	138	25
Mindanao	2025	10	6	24	69	138	138	25
Mindanao	2025	10	7	1	66	138	138	25
Mindanao	2025	10	7	2	64	138	138	25
Mindanao	2025	10	7	3	61	138	138	25
Mindanao	2025	10	7	4	59	138	138	25
Mindanao	2025	10	7	5	67	138	138	25
Mindanao	2025	10	7	6	68	138	138	25
Mindanao	2025	10	7	7	61	138	138	25
Mindanao	2025	10	7	8	72	138	138	25
Mindanao	2025	10	7	9	86	138	138	25
Mindanao	2025	10	7	10	93	138	138	25
Mindanao	2025	10	7	11	99	138	138	25
Mindanao	2025	10	7	12	96	138	138	25
Mindanao	2025	10	7	13	99	138	138	25
Mindanao	2025	10	7	14	103	138	138	25
Mindanao	2025	10	7	15	98	138	138	25
Mindanao	2025	10	7	16	92	138	138	25
Mindanao	2025	10	7	17	84	138	138	25
Mindanao	2025	10	7	18	92	138	138	25
Mindanao	2025	10	7	19	85	138	138	25
Mindanao	2025	10	7	20	84	138	138	25
Mindanao	2025	10	7	21	80	138	138	25
Mindanao	2025	10	7	22	76	138	138	25
Mindanao	2025	10	7	23	71	138	138	25
Mindanao	2025	10	7	24	64	138	138	25
Mindanao	2025	10	8	1	63	138	138	25
Mindanao	2025	10	8	2	61	138	138	25
Mindanao	2025	10	8	3	60	138	138	25
Mindanao	2025	10	8	4	57	138	138	25
Mindanao	2025	10	8	5	63	138	138	25
Mindanao	2025	10	8	6	67	138	138	25
Mindanao	2025	10	8	7	60	138	138	25
Mindanao	2025	10	8	8	71	138	138	25
Mindanao	2025	10	8	9	82	138	138	25
Mindanao	2025	10	8	10	88	138	138	25
Mindanao	2025	10	8	11	91	138	138	25
Mindanao	2025	10	8	12	84	138	138	25
Mindanao	2025	10	8	13	87	138	138	25
Mindanao	2025	10	8	14	90	138	138	25
Mindanao	2025	10	8	15	92	138	138	25
Mindanao	2025	10	8	16	91	138	138	25
Mindanao	2025	10	8	17	88	138	138	25
Mindanao	2025	10	8	18	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	8	19	87	138	138	25
Mindanao	2025	10	8	20	85	138	138	25
Mindanao	2025	10	8	21	81	138	138	25
Mindanao	2025	10	8	22	74	138	138	25
Mindanao	2025	10	8	23	70	138	138	25
Mindanao	2025	10	8	24	64	138	138	25
Mindanao	2025	10	9	1	62	138	138	25
Mindanao	2025	10	9	2	60	138	138	25
Mindanao	2025	10	9	3	59	138	138	25
Mindanao	2025	10	9	4	59	138	138	25
Mindanao	2025	10	9	5	64	138	138	25
Mindanao	2025	10	9	6	67	138	138	25
Mindanao	2025	10	9	7	61	138	138	25
Mindanao	2025	10	9	8	70	138	138	25
Mindanao	2025	10	9	9	82	138	138	25
Mindanao	2025	10	9	10	92	138	138	25
Mindanao	2025	10	9	11	97	138	138	25
Mindanao	2025	10	9	12	96	138	138	25
Mindanao	2025	10	9	13	98	138	138	25
Mindanao	2025	10	9	14	103	138	138	25
Mindanao	2025	10	9	15	101	138	138	25
Mindanao	2025	10	9	16	99	138	138	25
Mindanao	2025	10	9	17	93	138	138	25
Mindanao	2025	10	9	18	103	138	138	25
Mindanao	2025	10	9	19	97	138	138	25
Mindanao	2025	10	9	20	91	138	138	25
Mindanao	2025	10	9	21	85	138	138	25
Mindanao	2025	10	9	22	79	138	138	25
Mindanao	2025	10	9	23	75	138	138	25
Mindanao	2025	10	9	24	69	138	138	25
Mindanao	2025	10	10	1	65	138	138	25
Mindanao	2025	10	10	2	63	138	138	25
Mindanao	2025	10	10	3	60	138	138	25
Mindanao	2025	10	10	4	62	138	138	25
Mindanao	2025	10	10	5	65	138	138	25
Mindanao	2025	10	10	6	69	138	138	25
Mindanao	2025	10	10	7	64	138	138	25
Mindanao	2025	10	10	8	74	138	138	25
Mindanao	2025	10	10	9	88	138	138	25
Mindanao	2025	10	10	10	95	138	138	25
Mindanao	2025	10	10	11	100	138	138	25
Mindanao	2025	10	10	12	100	138	138	25
Mindanao	2025	10	10	13	102	138	138	25
Mindanao	2025	10	10	14	106	138	138	25
Mindanao	2025	10	10	15	104	138	138	25
Mindanao	2025	10	10	16	101	138	138	25
Mindanao	2025	10	10	17	93	138	138	25
Mindanao	2025	10	10	18	102	138	138	25
Mindanao	2025	10	10	19	96	138	138	25
Mindanao	2025	10	10	20	94	138	138	25
Mindanao	2025	10	10	21	89	138	138	25
Mindanao	2025	10	10	22	83	138	138	25
Mindanao	2025	10	10	23	79	138	138	25
Mindanao	2025	10	10	24	73	138	138	25
Mindanao	2025	10	11	1	69	138	138	25
Mindanao	2025	10	11	2	67	138	138	25
Mindanao	2025	10	11	3	64	138	138	25
Mindanao	2025	10	11	4	62	138	138	25
Mindanao	2025	10	11	5	65	138	138	25
Mindanao	2025	10	11	6	65	138	138	25
Mindanao	2025	10	11	7	64	138	138	25
Mindanao	2025	10	11	8	67	138	138	25
Mindanao	2025	10	11	9	78	138	138	25
Mindanao	2025	10	11	10	85	138	138	25
Mindanao	2025	10	11	11	88	138	138	25
Mindanao	2025	10	11	12	89	138	138	25
Mindanao	2025	10	11	13	91	138	138	25
Mindanao	2025	10	11	14	94	138	138	25
Mindanao	2025	10	11	15	93	138	138	25
Mindanao	2025	10	11	16	86	138	138	25
Mindanao	2025	10	11	17	84	138	138	25
Mindanao	2025	10	11	18	100	138	138	25
Mindanao	2025	10	11	19	95	138	138	25
Mindanao	2025	10	11	20	92	138	138	25
Mindanao	2025	10	11	21	89	138	138	25
Mindanao	2025	10	11	22	83	138	138	25
Mindanao	2025	10	11	23	78	138	138	25
Mindanao	2025	10	11	24	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	12	1	69	138	138	25
Mindanao	2025	10	12	2	65	138	138	25
Mindanao	2025	10	12	3	63	138	138	25
Mindanao	2025	10	12	4	62	138	138	25
Mindanao	2025	10	12	5	63	138	138	25
Mindanao	2025	10	12	6	61	138	138	25
Mindanao	2025	10	12	7	60	138	138	25
Mindanao	2025	10	12	8	61	138	138	25
Mindanao	2025	10	12	9	67	138	138	25
Mindanao	2025	10	12	10	72	138	138	25
Mindanao	2025	10	12	11	76	138	138	25
Mindanao	2025	10	12	12	76	138	138	25
Mindanao	2025	10	12	13	78	138	138	25
Mindanao	2025	10	12	14	77	138	138	25
Mindanao	2025	10	12	15	75	138	138	25
Mindanao	2025	10	12	16	76	138	138	25
Mindanao	2025	10	12	17	77	138	138	25
Mindanao	2025	10	12	18	87	138	138	25
Mindanao	2025	10	12	19	87	138	138	25
Mindanao	2025	10	12	20	83	138	138	25
Mindanao	2025	10	12	21	80	138	138	25
Mindanao	2025	10	12	22	76	138	138	25
Mindanao	2025	10	12	23	71	138	138	25
Mindanao	2025	10	12	24	67	138	138	25
Mindanao	2025	10	13	1	64	138	138	25
Mindanao	2025	10	13	2	61	138	138	25
Mindanao	2025	10	13	3	58	138	138	25
Mindanao	2025	10	13	4	60	138	138	25
Mindanao	2025	10	13	5	65	138	138	25
Mindanao	2025	10	13	6	66	138	138	25
Mindanao	2025	10	13	7	59	138	138	25
Mindanao	2025	10	13	8	73	138	138	25
Mindanao	2025	10	13	9	86	138	138	25
Mindanao	2025	10	13	10	95	138	138	25
Mindanao	2025	10	13	11	101	138	138	25
Mindanao	2025	10	13	12	100	138	138	25
Mindanao	2025	10	13	13	101	138	138	25
Mindanao	2025	10	13	14	108	138	138	25
Mindanao	2025	10	13	15	105	138	138	25
Mindanao	2025	10	13	16	103	138	138	25
Mindanao	2025	10	13	17	96	138	138	25
Mindanao	2025	10	13	18	103	138	138	25
Mindanao	2025	10	13	19	98	138	138	25
Mindanao	2025	10	13	20	93	138	138	25
Mindanao	2025	10	13	21	90	138	138	25
Mindanao	2025	10	13	22	81	138	138	25
Mindanao	2025	10	13	23	77	138	138	25
Mindanao	2025	10	13	24	72	138	138	25
Mindanao	2025	10	14	1	70	138	138	25
Mindanao	2025	10	14	2	65	138	138	25
Mindanao	2025	10	14	3	64	138	138	25
Mindanao	2025	10	14	4	63	138	138	25
Mindanao	2025	10	14	5	67	138	138	25
Mindanao	2025	10	14	6	69	138	138	25
Mindanao	2025	10	14	7	64	138	138	25
Mindanao	2025	10	14	8	73	138	138	25
Mindanao	2025	10	14	9	87	138	138	25
Mindanao	2025	10	14	10	97	138	138	25
Mindanao	2025	10	14	11	103	138	138	25
Mindanao	2025	10	14	12	101	138	138	25
Mindanao	2025	10	14	13	102	138	138	25
Mindanao	2025	10	14	14	107	138	138	25
Mindanao	2025	10	14	15	106	138	138	25
Mindanao	2025	10	14	16	102	138	138	25
Mindanao	2025	10	14	17	96	138	138	25
Mindanao	2025	10	14	18	104	138	138	25
Mindanao	2025	10	14	19	97	138	138	25
Mindanao	2025	10	14	20	94	138	138	25
Mindanao	2025	10	14	21	89	138	138	25
Mindanao	2025	10	14	22	83	138	138	25
Mindanao	2025	10	14	23	79	138	138	25
Mindanao	2025	10	14	24	74	138	138	25
Mindanao	2025	10	15	1	70	138	138	25
Mindanao	2025	10	15	2	67	138	138	25
Mindanao	2025	10	15	3	66	138	138	25
Mindanao	2025	10	15	4	65	138	138	25
Mindanao	2025	10	15	5	68	138	138	25
Mindanao	2025	10	15	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	15	7	63	138	138	25
Mindanao	2025	10	15	8	75	138	138	25
Mindanao	2025	10	15	9	88	138	138	25
Mindanao	2025	10	15	10	97	138	138	25
Mindanao	2025	10	15	11	101	138	138	25
Mindanao	2025	10	15	12	98	138	138	25
Mindanao	2025	10	15	13	99	138	138	25
Mindanao	2025	10	15	14	103	138	138	25
Mindanao	2025	10	15	15	101	138	138	25
Mindanao	2025	10	15	16	99	138	138	25
Mindanao	2025	10	15	17	94	138	138	25
Mindanao	2025	10	15	18	103	138	138	25
Mindanao	2025	10	15	19	96	138	138	25
Mindanao	2025	10	15	20	92	138	138	25
Mindanao	2025	10	15	21	88	138	138	25
Mindanao	2025	10	15	22	83	138	138	25
Mindanao	2025	10	15	23	76	138	138	25
Mindanao	2025	10	15	24	74	138	138	25
Mindanao	2025	10	16	1	70	138	138	25
Mindanao	2025	10	16	2	67	138	138	25
Mindanao	2025	10	16	3	64	138	138	25
Mindanao	2025	10	16	4	65	138	138	25
Mindanao	2025	10	16	5	68	138	138	25
Mindanao	2025	10	16	6	70	138	138	25
Mindanao	2025	10	16	7	63	138	138	25
Mindanao	2025	10	16	8	76	138	138	25
Mindanao	2025	10	16	9	88	138	138	25
Mindanao	2025	10	16	10	96	138	138	25
Mindanao	2025	10	16	11	102	138	138	25
Mindanao	2025	10	16	12	101	138	138	25
Mindanao	2025	10	16	13	104	138	138	25
Mindanao	2025	10	16	14	107	138	138	25
Mindanao	2025	10	16	15	99	138	138	25
Mindanao	2025	10	16	16	98	138	138	25
Mindanao	2025	10	16	17	98	138	138	25
Mindanao	2025	10	16	18	104	138	138	25
Mindanao	2025	10	16	19	100	138	138	25
Mindanao	2025	10	16	20	95	138	138	25
Mindanao	2025	10	16	21	92	138	138	25
Mindanao	2025	10	16	22	84	138	138	25
Mindanao	2025	10	16	23	79	138	138	25
Mindanao	2025	10	16	24	74	138	138	25
Mindanao	2025	10	17	1	70	138	138	25
Mindanao	2025	10	17	2	67	138	138	25
Mindanao	2025	10	17	3	64	138	138	25
Mindanao	2025	10	17	4	62	138	138	25
Mindanao	2025	10	17	5	67	138	138	25
Mindanao	2025	10	17	6	69	138	138	25
Mindanao	2025	10	17	7	64	138	138	25
Mindanao	2025	10	17	8	76	138	138	25
Mindanao	2025	10	17	9	86	138	138	25
Mindanao	2025	10	17	10	98	138	138	25
Mindanao	2025	10	17	11	102	138	138	25
Mindanao	2025	10	17	12	100	138	138	25
Mindanao	2025	10	17	13	101	138	138	25
Mindanao	2025	10	17	14	105	138	138	25
Mindanao	2025	10	17	15	102	138	138	25
Mindanao	2025	10	17	16	97	138	138	25
Mindanao	2025	10	17	17	91	138	138	25
Mindanao	2025	10	17	18	96	138	138	25
Mindanao	2025	10	17	19	91	138	138	25
Mindanao	2025	10	17	20	89	138	138	25
Mindanao	2025	10	17	21	86	138	138	25
Mindanao	2025	10	17	22	79	138	138	25
Mindanao	2025	10	17	23	75	138	138	25
Mindanao	2025	10	17	24	71	138	138	25
Mindanao	2025	10	18	1	67	138	138	25
Mindanao	2025	10	18	2	66	138	138	25
Mindanao	2025	10	18	3	62	138	138	25
Mindanao	2025	10	18	4	61	138	138	25
Mindanao	2025	10	18	5	62	138	138	25
Mindanao	2025	10	18	6	63	138	138	25
Mindanao	2025	10	18	7	58	138	138	25
Mindanao	2025	10	18	8	64	138	138	25
Mindanao	2025	10	18	9	72	138	138	25
Mindanao	2025	10	18	10	78	138	138	25
Mindanao	2025	10	18	11	83	138	138	25
Mindanao	2025	10	18	12	81	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	18	13	83	138	138	25
Mindanao	2025	10	18	14	84	138	138	25
Mindanao	2025	10	18	15	84	138	138	25
Mindanao	2025	10	18	16	82	138	138	25
Mindanao	2025	10	18	17	84	138	138	25
Mindanao	2025	10	18	18	92	138	138	25
Mindanao	2025	10	18	19	91	138	138	25
Mindanao	2025	10	18	20	90	138	138	25
Mindanao	2025	10	18	21	85	138	138	25
Mindanao	2025	10	18	22	82	138	138	25
Mindanao	2025	10	18	23	75	138	138	25
Mindanao	2025	10	18	24	72	138	138	25
Mindanao	2025	10	19	1	68	138	138	25
Mindanao	2025	10	19	2	65	138	138	25
Mindanao	2025	10	19	3	63	138	138	25
Mindanao	2025	10	19	4	61	138	138	25
Mindanao	2025	10	19	5	61	138	138	25
Mindanao	2025	10	19	6	61	138	138	25
Mindanao	2025	10	19	7	58	138	138	25
Mindanao	2025	10	19	8	60	138	138	25
Mindanao	2025	10	19	9	65	138	138	25
Mindanao	2025	10	19	10	73	138	138	25
Mindanao	2025	10	19	11	78	138	138	25
Mindanao	2025	10	19	12	79	138	138	25
Mindanao	2025	10	19	13	80	138	138	25
Mindanao	2025	10	19	14	81	138	138	25
Mindanao	2025	10	19	15	80	138	138	25
Mindanao	2025	10	19	16	77	138	138	25
Mindanao	2025	10	19	17	80	138	138	25
Mindanao	2025	10	19	18	89	138	138	25
Mindanao	2025	10	19	19	86	138	138	25
Mindanao	2025	10	19	20	83	138	138	25
Mindanao	2025	10	19	21	81	138	138	25
Mindanao	2025	10	19	22	73	138	138	25
Mindanao	2025	10	19	23	70	138	138	25
Mindanao	2025	10	19	24	66	138	138	25
Mindanao	2025	10	20	1	64	138	138	25
Mindanao	2025	10	20	2	61	138	138	25
Mindanao	2025	10	20	3	60	138	138	25
Mindanao	2025	10	20	4	60	138	138	25
Mindanao	2025	10	20	5	64	138	138	25
Mindanao	2025	10	20	6	67	138	138	25
Mindanao	2025	10	20	7	60	138	138	25
Mindanao	2025	10	20	8	70	138	138	25
Mindanao	2025	10	20	9	82	138	138	25
Mindanao	2025	10	20	10	91	138	138	25
Mindanao	2025	10	20	11	97	138	138	25
Mindanao	2025	10	20	12	96	138	138	25
Mindanao	2025	10	20	13	96	138	138	25
Mindanao	2025	10	20	14	101	138	138	25
Mindanao	2025	10	20	15	99	138	138	25
Mindanao	2025	10	20	16	96	138	138	25
Mindanao	2025	10	20	17	93	138	138	25
Mindanao	2025	10	20	18	98	138	138	25
Mindanao	2025	10	20	19	93	138	138	25
Mindanao	2025	10	20	20	89	138	138	25
Mindanao	2025	10	20	21	85	138	138	25
Mindanao	2025	10	20	22	78	138	138	25
Mindanao	2025	10	20	23	74	138	138	25
Mindanao	2025	10	20	24	69	138	138	25
Mindanao	2025	10	21	1	65	138	138	25
Mindanao	2025	10	21	2	63	138	138	25
Mindanao	2025	10	21	3	61	138	138	25
Mindanao	2025	10	21	4	61	138	138	25
Mindanao	2025	10	21	5	65	138	138	25
Mindanao	2025	10	21	6	69	138	138	25
Mindanao	2025	10	21	7	65	138	138	25
Mindanao	2025	10	21	8	73	138	138	25
Mindanao	2025	10	21	9	85	138	138	25
Mindanao	2025	10	21	10	93	138	138	25
Mindanao	2025	10	21	11	95	138	138	25
Mindanao	2025	10	21	12	96	138	138	25
Mindanao	2025	10	21	13	99	138	138	25
Mindanao	2025	10	21	14	104	138	138	25
Mindanao	2025	10	21	15	102	138	138	25
Mindanao	2025	10	21	16	99	138	138	25
Mindanao	2025	10	21	17	95	138	138	25
Mindanao	2025	10	21	18	101	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	21	19	96	138	138	25
Mindanao	2025	10	21	20	94	138	138	25
Mindanao	2025	10	21	21	90	138	138	25
Mindanao	2025	10	21	22	84	138	138	25
Mindanao	2025	10	21	23	77	138	138	25
Mindanao	2025	10	21	24	73	138	138	25
Mindanao	2025	10	22	1	70	138	138	25
Mindanao	2025	10	22	2	66	138	138	25
Mindanao	2025	10	22	3	65	138	138	25
Mindanao	2025	10	22	4	64	138	138	25
Mindanao	2025	10	22	5	68	138	138	25
Mindanao	2025	10	22	6	71	138	138	25
Mindanao	2025	10	22	7	63	138	138	25
Mindanao	2025	10	22	8	73	138	138	25
Mindanao	2025	10	22	9	86	138	138	25
Mindanao	2025	10	22	10	94	138	138	25
Mindanao	2025	10	22	11	100	138	138	25
Mindanao	2025	10	22	12	98	138	138	25
Mindanao	2025	10	22	13	100	138	138	25
Mindanao	2025	10	22	14	105	138	138	25
Mindanao	2025	10	22	15	102	138	138	25
Mindanao	2025	10	22	16	99	138	138	25
Mindanao	2025	10	22	17	94	138	138	25
Mindanao	2025	10	22	18	100	138	138	25
Mindanao	2025	10	22	19	94	138	138	25
Mindanao	2025	10	22	20	91	138	138	25
Mindanao	2025	10	22	21	84	138	138	25
Mindanao	2025	10	22	22	80	138	138	25
Mindanao	2025	10	22	23	74	138	138	25
Mindanao	2025	10	22	24	68	138	138	25
Mindanao	2025	10	23	1	66	138	138	25
Mindanao	2025	10	23	2	64	138	138	25
Mindanao	2025	10	23	3	61	138	138	25
Mindanao	2025	10	23	4	60	138	138	25
Mindanao	2025	10	23	5	67	138	138	25
Mindanao	2025	10	23	6	69	138	138	25
Mindanao	2025	10	23	7	63	138	138	25
Mindanao	2025	10	23	8	73	138	138	25
Mindanao	2025	10	23	9	85	138	138	25
Mindanao	2025	10	23	10	94	138	138	25
Mindanao	2025	10	23	11	100	138	138	25
Mindanao	2025	10	23	12	97	138	138	25
Mindanao	2025	10	23	13	96	138	138	25
Mindanao	2025	10	23	14	101	138	138	25
Mindanao	2025	10	23	15	99	138	138	25
Mindanao	2025	10	23	16	97	138	138	25
Mindanao	2025	10	23	17	92	138	138	25
Mindanao	2025	10	23	18	103	138	138	25
Mindanao	2025	10	23	19	96	138	138	25
Mindanao	2025	10	23	20	93	138	138	25
Mindanao	2025	10	23	21	88	138	138	25
Mindanao	2025	10	23	22	82	138	138	25
Mindanao	2025	10	23	23	75	138	138	25
Mindanao	2025	10	23	24	72	138	138	25
Mindanao	2025	10	24	1	68	138	138	25
Mindanao	2025	10	24	2	65	138	138	25
Mindanao	2025	10	24	3	63	138	138	25
Mindanao	2025	10	24	4	62	138	138	25
Mindanao	2025	10	24	5	67	138	138	25
Mindanao	2025	10	24	6	69	138	138	25
Mindanao	2025	10	24	7	65	138	138	25
Mindanao	2025	10	24	8	73	138	138	25
Mindanao	2025	10	24	9	88	138	138	25
Mindanao	2025	10	24	10	96	138	138	25
Mindanao	2025	10	24	11	101	138	138	25
Mindanao	2025	10	24	12	96	138	138	25
Mindanao	2025	10	24	13	100	138	138	25
Mindanao	2025	10	24	14	105	138	138	25
Mindanao	2025	10	24	15	103	138	138	25
Mindanao	2025	10	24	16	101	138	138	25
Mindanao	2025	10	24	17	100	138	138	25
Mindanao	2025	10	24	18	107	138	138	25
Mindanao	2025	10	24	19	103	138	138	25
Mindanao	2025	10	24	20	99	138	138	25
Mindanao	2025	10	24	21	96	138	138	25
Mindanao	2025	10	24	22	89	138	138	25
Mindanao	2025	10	24	23	82	138	138	25
Mindanao	2025	10	24	24	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	25	1	69	138	138	25
Mindanao	2025	10	25	2	66	138	138	25
Mindanao	2025	10	25	3	64	138	138	25
Mindanao	2025	10	25	4	61	138	138	25
Mindanao	2025	10	25	5	63	138	138	25
Mindanao	2025	10	25	6	67	138	138	25
Mindanao	2025	10	25	7	65	138	138	25
Mindanao	2025	10	25	8	69	138	138	25
Mindanao	2025	10	25	9	79	138	138	25
Mindanao	2025	10	25	10	84	138	138	25
Mindanao	2025	10	25	11	91	138	138	25
Mindanao	2025	10	25	12	89	138	138	25
Mindanao	2025	10	25	13	89	138	138	25
Mindanao	2025	10	25	14	93	138	138	25
Mindanao	2025	10	25	15	93	138	138	25
Mindanao	2025	10	25	16	89	138	138	25
Mindanao	2025	10	25	17	88	138	138	25
Mindanao	2025	10	25	18	95	138	138	25
Mindanao	2025	10	25	19	91	138	138	25
Mindanao	2025	10	25	20	88	138	138	25
Mindanao	2025	10	25	21	84	138	138	25
Mindanao	2025	10	25	22	80	138	138	25
Mindanao	2025	10	25	23	74	138	138	25
Mindanao	2025	10	25	24	69	138	138	25
Mindanao	2025	10	26	1	65	138	138	25
Mindanao	2025	10	26	2	64	138	138	25
Mindanao	2025	10	26	3	60	138	138	25
Mindanao	2025	10	26	4	58	138	138	25
Mindanao	2025	10	26	5	59	138	138	25
Mindanao	2025	10	26	6	60	138	138	25
Mindanao	2025	10	26	7	59	138	138	25
Mindanao	2025	10	26	8	60	138	138	25
Mindanao	2025	10	26	9	64	138	138	25
Mindanao	2025	10	26	10	70	138	138	25
Mindanao	2025	10	26	11	74	138	138	25
Mindanao	2025	10	26	12	74	138	138	25
Mindanao	2025	10	26	13	72	138	138	25
Mindanao	2025	10	26	14	75	138	138	25
Mindanao	2025	10	26	15	75	138	138	25
Mindanao	2025	10	26	16	74	138	138	25
Mindanao	2025	10	26	17	76	138	138	25
Mindanao	2025	10	26	18	87	138	138	25
Mindanao	2025	10	26	19	85	138	138	25
Mindanao	2025	10	26	20	83	138	138	25
Mindanao	2025	10	26	21	79	138	138	25
Mindanao	2025	10	26	22	74	138	138	25
Mindanao	2025	10	26	23	69	138	138	25
Mindanao	2025	10	26	24	65	138	138	25
Mindanao	2025	10	27	1	62	138	138	25
Mindanao	2025	10	27	2	60	138	138	25
Mindanao	2025	10	27	3	58	138	138	25
Mindanao	2025	10	27	4	58	138	138	25
Mindanao	2025	10	27	5	64	138	138	25
Mindanao	2025	10	27	6	68	138	138	25
Mindanao	2025	10	27	7	61	138	138	25
Mindanao	2025	10	27	8	73	138	138	25
Mindanao	2025	10	27	9	86	138	138	25
Mindanao	2025	10	27	10	94	138	138	25
Mindanao	2025	10	27	11	99	138	138	25
Mindanao	2025	10	27	12	95	138	138	25
Mindanao	2025	10	27	13	98	138	138	25
Mindanao	2025	10	27	14	102	138	138	25
Mindanao	2025	10	27	15	101	138	138	25
Mindanao	2025	10	27	16	100	138	138	25
Mindanao	2025	10	27	17	87	138	138	25
Mindanao	2025	10	27	18	92	138	138	25
Mindanao	2025	10	27	19	90	138	138	25
Mindanao	2025	10	27	20	86	138	138	25
Mindanao	2025	10	27	21	84	138	138	25
Mindanao	2025	10	27	22	78	138	138	25
Mindanao	2025	10	27	23	74	138	138	25
Mindanao	2025	10	27	24	71	138	138	25
Mindanao	2025	10	28	1	68	138	138	25
Mindanao	2025	10	28	2	64	138	138	25
Mindanao	2025	10	28	3	63	138	138	25
Mindanao	2025	10	28	4	63	138	138	25
Mindanao	2025	10	28	5	67	138	138	25
Mindanao	2025	10	28	6	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	28	7	62	138	138	25
Mindanao	2025	10	28	8	71	138	138	25
Mindanao	2025	10	28	9	81	138	138	25
Mindanao	2025	10	28	10	87	138	138	25
Mindanao	2025	10	28	11	93	138	138	25
Mindanao	2025	10	28	12	89	138	138	25
Mindanao	2025	10	28	13	92	138	138	25
Mindanao	2025	10	28	14	95	138	138	25
Mindanao	2025	10	28	15	94	138	138	25
Mindanao	2025	10	28	16	90	138	138	25
Mindanao	2025	10	28	17	87	138	138	25
Mindanao	2025	10	28	18	92	138	138	25
Mindanao	2025	10	28	19	86	138	138	25
Mindanao	2025	10	28	20	84	138	138	25
Mindanao	2025	10	28	21	80	138	138	25
Mindanao	2025	10	28	22	76	138	138	25
Mindanao	2025	10	28	23	74	138	138	25
Mindanao	2025	10	28	24	69	138	138	25
Mindanao	2025	10	29	1	66	138	138	25
Mindanao	2025	10	29	2	64	138	138	25
Mindanao	2025	10	29	3	62	138	138	25
Mindanao	2025	10	29	4	62	138	138	25
Mindanao	2025	10	29	5	67	138	138	25
Mindanao	2025	10	29	6	69	138	138	25
Mindanao	2025	10	29	7	63	138	138	25
Mindanao	2025	10	29	8	72	138	138	25
Mindanao	2025	10	29	9	85	138	138	25
Mindanao	2025	10	29	10	92	138	138	25
Mindanao	2025	10	29	11	96	138	138	25
Mindanao	2025	10	29	12	93	138	138	25
Mindanao	2025	10	29	13	94	138	138	25
Mindanao	2025	10	29	14	99	138	138	25
Mindanao	2025	10	29	15	96	138	138	25
Mindanao	2025	10	29	16	95	138	138	25
Mindanao	2025	10	29	17	94	138	138	25
Mindanao	2025	10	29	18	101	138	138	25
Mindanao	2025	10	29	19	95	138	138	25
Mindanao	2025	10	29	20	91	138	138	25
Mindanao	2025	10	29	21	87	138	138	25
Mindanao	2025	10	29	22	79	138	138	25
Mindanao	2025	10	29	23	75	138	138	25
Mindanao	2025	10	29	24	70	138	138	25
Mindanao	2025	10	30	1	68	138	138	25
Mindanao	2025	10	30	2	65	138	138	25
Mindanao	2025	10	30	3	64	138	138	25
Mindanao	2025	10	30	4	62	138	138	25
Mindanao	2025	10	30	5	66	138	138	25
Mindanao	2025	10	30	6	72	138	138	25
Mindanao	2025	10	30	7	65	138	138	25
Mindanao	2025	10	30	8	75	138	138	25
Mindanao	2025	10	30	9	87	138	138	25
Mindanao	2025	10	30	10	94	138	138	25
Mindanao	2025	10	30	11	99	138	138	25
Mindanao	2025	10	30	12	96	138	138	25
Mindanao	2025	10	30	13	97	138	138	25
Mindanao	2025	10	30	14	101	138	138	25
Mindanao	2025	10	30	15	101	138	138	25
Mindanao	2025	10	30	16	98	138	138	25
Mindanao	2025	10	30	17	95	138	138	25
Mindanao	2025	10	30	18	102	138	138	25
Mindanao	2025	10	30	19	95	138	138	25
Mindanao	2025	10	30	20	91	138	138	25
Mindanao	2025	10	30	21	87	138	138	25
Mindanao	2025	10	30	22	80	138	138	25
Mindanao	2025	10	30	23	75	138	138	25
Mindanao	2025	10	30	24	71	138	138	25
Mindanao	2025	10	31	1	67	138	138	25
Mindanao	2025	10	31	2	63	138	138	25
Mindanao	2025	10	31	3	60	138	138	25
Mindanao	2025	10	31	4	60	138	138	25
Mindanao	2025	10	31	5	63	138	138	25
Mindanao	2025	10	31	6	68	138	138	25
Mindanao	2025	10	31	7	62	138	138	25
Mindanao	2025	10	31	8	70	138	138	25
Mindanao	2025	10	31	9	79	138	138	25
Mindanao	2025	10	31	10	85	138	138	25
Mindanao	2025	10	31	11	86	138	138	25
Mindanao	2025	10	31	12	81	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	10	31	13	82	138	138	25
Mindanao	2025	10	31	14	85	138	138	25
Mindanao	2025	10	31	15	84	138	138	25
Mindanao	2025	10	31	16	85	138	138	25
Mindanao	2025	10	31	17	85	138	138	25
Mindanao	2025	10	31	18	87	138	138	25
Mindanao	2025	10	31	19	82	138	138	25
Mindanao	2025	10	31	20	76	138	138	25
Mindanao	2025	10	31	21	74	138	138	25
Mindanao	2025	10	31	22	67	138	138	25
Mindanao	2025	10	31	23	63	138	138	25
Mindanao	2025	10	31	24	61	138	138	25
Mindanao	2025	11	1	1	65	138	138	25
Mindanao	2025	11	1	2	63	138	138	25
Mindanao	2025	11	1	3	59	138	138	25
Mindanao	2025	11	1	4	57	138	138	25
Mindanao	2025	11	1	5	59	138	138	25
Mindanao	2025	11	1	6	58	138	138	25
Mindanao	2025	11	1	7	57	138	138	25
Mindanao	2025	11	1	8	58	138	138	25
Mindanao	2025	11	1	9	61	138	138	25
Mindanao	2025	11	1	10	69	138	138	25
Mindanao	2025	11	1	11	72	138	138	25
Mindanao	2025	11	1	12	73	138	138	25
Mindanao	2025	11	1	13	72	138	138	25
Mindanao	2025	11	1	14	73	138	138	25
Mindanao	2025	11	1	15	73	138	138	25
Mindanao	2025	11	1	16	70	138	138	25
Mindanao	2025	11	1	17	73	138	138	25
Mindanao	2025	11	1	18	84	138	138	25
Mindanao	2025	11	1	19	81	138	138	25
Mindanao	2025	11	1	20	79	138	138	25
Mindanao	2025	11	1	21	78	138	138	25
Mindanao	2025	11	1	22	73	138	138	25
Mindanao	2025	11	1	23	67	138	138	25
Mindanao	2025	11	1	24	63	138	138	25
Mindanao	2025	11	2	1	61	138	138	25
Mindanao	2025	11	2	2	56	138	138	25
Mindanao	2025	11	2	3	57	138	138	25
Mindanao	2025	11	2	4	56	138	138	25
Mindanao	2025	11	2	5	57	138	138	25
Mindanao	2025	11	2	6	58	138	138	25
Mindanao	2025	11	2	7	57	138	138	25
Mindanao	2025	11	2	8	60	138	138	25
Mindanao	2025	11	2	9	65	138	138	25
Mindanao	2025	11	2	10	71	138	138	25
Mindanao	2025	11	2	11	75	138	138	25
Mindanao	2025	11	2	12	77	138	138	25
Mindanao	2025	11	2	13	78	138	138	25
Mindanao	2025	11	2	14	80	138	138	25
Mindanao	2025	11	2	15	79	138	138	25
Mindanao	2025	11	2	16	78	138	138	25
Mindanao	2025	11	2	17	77	138	138	25
Mindanao	2025	11	2	18	90	138	138	25
Mindanao	2025	11	2	19	85	138	138	25
Mindanao	2025	11	2	20	84	138	138	25
Mindanao	2025	11	2	21	81	138	138	25
Mindanao	2025	11	2	22	76	138	138	25
Mindanao	2025	11	2	23	71	138	138	25
Mindanao	2025	11	2	24	68	138	138	25
Mindanao	2025	11	3	1	62	138	138	25
Mindanao	2025	11	3	2	60	138	138	25
Mindanao	2025	11	3	3	57	138	138	25
Mindanao	2025	11	3	4	56	138	138	25
Mindanao	2025	11	3	5	56	138	138	25
Mindanao	2025	11	3	6	58	138	138	25
Mindanao	2025	11	3	7	58	138	138	25
Mindanao	2025	11	3	8	63	138	138	25
Mindanao	2025	11	3	9	71	138	138	25
Mindanao	2025	11	3	10	77	138	138	25
Mindanao	2025	11	3	11	81	138	138	25
Mindanao	2025	11	3	12	75	138	138	25
Mindanao	2025	11	3	13	78	138	138	25
Mindanao	2025	11	3	14	86	138	138	25
Mindanao	2025	11	3	15	85	138	138	25
Mindanao	2025	11	3	16	83	138	138	25
Mindanao	2025	11	3	17	82	138	138	25
Mindanao	2025	11	3	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	3	19	89	138	138	25
Mindanao	2025	11	3	20	88	138	138	25
Mindanao	2025	11	3	21	84	138	138	25
Mindanao	2025	11	3	22	78	138	138	25
Mindanao	2025	11	3	23	75	138	138	25
Mindanao	2025	11	3	24	70	138	138	25
Mindanao	2025	11	4	1	71	138	138	25
Mindanao	2025	11	4	2	68	138	138	25
Mindanao	2025	11	4	3	65	138	138	25
Mindanao	2025	11	4	4	65	138	138	25
Mindanao	2025	11	4	5	69	138	138	25
Mindanao	2025	11	4	6	72	138	138	25
Mindanao	2025	11	4	7	64	138	138	25
Mindanao	2025	11	4	8	77	138	138	25
Mindanao	2025	11	4	9	90	138	138	25
Mindanao	2025	11	4	10	98	138	138	25
Mindanao	2025	11	4	11	102	138	138	25
Mindanao	2025	11	4	12	100	138	138	25
Mindanao	2025	11	4	13	100	138	138	25
Mindanao	2025	11	4	14	104	138	138	25
Mindanao	2025	11	4	15	102	138	138	25
Mindanao	2025	11	4	16	99	138	138	25
Mindanao	2025	11	4	17	94	138	138	25
Mindanao	2025	11	4	18	102	138	138	25
Mindanao	2025	11	4	19	97	138	138	25
Mindanao	2025	11	4	20	93	138	138	25
Mindanao	2025	11	4	21	91	138	138	25
Mindanao	2025	11	4	22	84	138	138	25
Mindanao	2025	11	4	23	79	138	138	25
Mindanao	2025	11	4	24	73	138	138	25
Mindanao	2025	11	5	1	62	138	138	25
Mindanao	2025	11	5	2	60	138	138	25
Mindanao	2025	11	5	3	58	138	138	25
Mindanao	2025	11	5	4	57	138	138	25
Mindanao	2025	11	5	5	59	138	138	25
Mindanao	2025	11	5	6	62	138	138	25
Mindanao	2025	11	5	7	60	138	138	25
Mindanao	2025	11	5	8	68	138	138	25
Mindanao	2025	11	5	9	78	138	138	25
Mindanao	2025	11	5	10	83	138	138	25
Mindanao	2025	11	5	11	91	138	138	25
Mindanao	2025	11	5	12	90	138	138	25
Mindanao	2025	11	5	13	91	138	138	25
Mindanao	2025	11	5	14	90	138	138	25
Mindanao	2025	11	5	15	87	138	138	25
Mindanao	2025	11	5	16	88	138	138	25
Mindanao	2025	11	5	17	87	138	138	25
Mindanao	2025	11	5	18	93	138	138	25
Mindanao	2025	11	5	19	88	138	138	25
Mindanao	2025	11	5	20	86	138	138	25
Mindanao	2025	11	5	21	84	138	138	25
Mindanao	2025	11	5	22	77	138	138	25
Mindanao	2025	11	5	23	73	138	138	25
Mindanao	2025	11	5	24	69	138	138	25
Mindanao	2025	11	6	1	66	138	138	25
Mindanao	2025	11	6	2	64	138	138	25
Mindanao	2025	11	6	3	62	138	138	25
Mindanao	2025	11	6	4	61	138	138	25
Mindanao	2025	11	6	5	64	138	138	25
Mindanao	2025	11	6	6	70	138	138	25
Mindanao	2025	11	6	7	63	138	138	25
Mindanao	2025	11	6	8	70	138	138	25
Mindanao	2025	11	6	9	80	138	138	25
Mindanao	2025	11	6	10	87	138	138	25
Mindanao	2025	11	6	11	91	138	138	25
Mindanao	2025	11	6	12	86	138	138	25
Mindanao	2025	11	6	13	89	138	138	25
Mindanao	2025	11	6	14	91	138	138	25
Mindanao	2025	11	6	15	89	138	138	25
Mindanao	2025	11	6	16	89	138	138	25
Mindanao	2025	11	6	17	87	138	138	25
Mindanao	2025	11	6	18	96	138	138	25
Mindanao	2025	11	6	19	92	138	138	25
Mindanao	2025	11	6	20	86	138	138	25
Mindanao	2025	11	6	21	82	138	138	25
Mindanao	2025	11	6	22	76	138	138	25
Mindanao	2025	11	6	23	71	138	138	25
Mindanao	2025	11	6	24	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	7	1	63	138	138	25
Mindanao	2025	11	7	2	61	138	138	25
Mindanao	2025	11	7	3	59	138	138	25
Mindanao	2025	11	7	4	60	138	138	25
Mindanao	2025	11	7	5	64	138	138	25
Mindanao	2025	11	7	6	68	138	138	25
Mindanao	2025	11	7	7	61	138	138	25
Mindanao	2025	11	7	8	71	138	138	25
Mindanao	2025	11	7	9	83	138	138	25
Mindanao	2025	11	7	10	94	138	138	25
Mindanao	2025	11	7	11	99	138	138	25
Mindanao	2025	11	7	12	96	138	138	25
Mindanao	2025	11	7	13	98	138	138	25
Mindanao	2025	11	7	14	104	138	138	25
Mindanao	2025	11	7	15	103	138	138	25
Mindanao	2025	11	7	16	98	138	138	25
Mindanao	2025	11	7	17	96	138	138	25
Mindanao	2025	11	7	18	101	138	138	25
Mindanao	2025	11	7	19	95	138	138	25
Mindanao	2025	11	7	20	91	138	138	25
Mindanao	2025	11	7	21	87	138	138	25
Mindanao	2025	11	7	22	81	138	138	25
Mindanao	2025	11	7	23	77	138	138	25
Mindanao	2025	11	7	24	73	138	138	25
Mindanao	2025	11	8	1	69	138	138	25
Mindanao	2025	11	8	2	66	138	138	25
Mindanao	2025	11	8	3	64	138	138	25
Mindanao	2025	11	8	4	62	138	138	25
Mindanao	2025	11	8	5	64	138	138	25
Mindanao	2025	11	8	6	66	138	138	25
Mindanao	2025	11	8	7	63	138	138	25
Mindanao	2025	11	8	8	68	138	138	25
Mindanao	2025	11	8	9	73	138	138	25
Mindanao	2025	11	8	10	80	138	138	25
Mindanao	2025	11	8	11	85	138	138	25
Mindanao	2025	11	8	12	83	138	138	25
Mindanao	2025	11	8	13	85	138	138	25
Mindanao	2025	11	8	14	89	138	138	25
Mindanao	2025	11	8	15	88	138	138	25
Mindanao	2025	11	8	16	86	138	138	25
Mindanao	2025	11	8	17	85	138	138	25
Mindanao	2025	11	8	18	93	138	138	25
Mindanao	2025	11	8	19	95	138	138	25
Mindanao	2025	11	8	20	90	138	138	25
Mindanao	2025	11	8	21	87	138	138	25
Mindanao	2025	11	8	22	81	138	138	25
Mindanao	2025	11	8	23	76	138	138	25
Mindanao	2025	11	8	24	72	138	138	25
Mindanao	2025	11	9	1	67	138	138	25
Mindanao	2025	11	9	2	64	138	138	25
Mindanao	2025	11	9	3	62	138	138	25
Mindanao	2025	11	9	4	61	138	138	25
Mindanao	2025	11	9	5	62	138	138	25
Mindanao	2025	11	9	6	62	138	138	25
Mindanao	2025	11	9	7	56	138	138	25
Mindanao	2025	11	9	8	55	138	138	25
Mindanao	2025	11	9	9	61	138	138	25
Mindanao	2025	11	9	10	71	138	138	25
Mindanao	2025	11	9	11	74	138	138	25
Mindanao	2025	11	9	12	77	138	138	25
Mindanao	2025	11	9	13	79	138	138	25
Mindanao	2025	11	9	14	80	138	138	25
Mindanao	2025	11	9	15	78	138	138	25
Mindanao	2025	11	9	16	72	138	138	25
Mindanao	2025	11	9	17	75	138	138	25
Mindanao	2025	11	9	18	90	138	138	25
Mindanao	2025	11	9	19	91	138	138	25
Mindanao	2025	11	9	20	90	138	138	25
Mindanao	2025	11	9	21	87	138	138	25
Mindanao	2025	11	9	22	80	138	138	25
Mindanao	2025	11	9	23	75	138	138	25
Mindanao	2025	11	9	24	70	138	138	25
Mindanao	2025	11	10	1	66	138	138	25
Mindanao	2025	11	10	2	63	138	138	25
Mindanao	2025	11	10	3	61	138	138	25
Mindanao	2025	11	10	4	62	138	138	25
Mindanao	2025	11	10	5	65	138	138	25
Mindanao	2025	11	10	6	68	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	10	7	61	138	138	25
Mindanao	2025	11	10	8	73	138	138	25
Mindanao	2025	11	10	9	87	138	138	25
Mindanao	2025	11	10	10	95	138	138	25
Mindanao	2025	11	10	11	102	138	138	25
Mindanao	2025	11	10	12	99	138	138	25
Mindanao	2025	11	10	13	99	138	138	25
Mindanao	2025	11	10	14	106	138	138	25
Mindanao	2025	11	10	15	105	138	138	25
Mindanao	2025	11	10	16	99	138	138	25
Mindanao	2025	11	10	17	97	138	138	25
Mindanao	2025	11	10	18	104	138	138	25
Mindanao	2025	11	10	19	99	138	138	25
Mindanao	2025	11	10	20	98	138	138	25
Mindanao	2025	11	10	21	91	138	138	25
Mindanao	2025	11	10	22	84	138	138	25
Mindanao	2025	11	10	23	79	138	138	25
Mindanao	2025	11	10	24	75	138	138	25
Mindanao	2025	11	11	1	71	138	138	25
Mindanao	2025	11	11	2	68	138	138	25
Mindanao	2025	11	11	3	65	138	138	25
Mindanao	2025	11	11	4	65	138	138	25
Mindanao	2025	11	11	5	69	138	138	25
Mindanao	2025	11	11	6	72	138	138	25
Mindanao	2025	11	11	7	64	138	138	25
Mindanao	2025	11	11	8	77	138	138	25
Mindanao	2025	11	11	9	90	138	138	25
Mindanao	2025	11	11	10	98	138	138	25
Mindanao	2025	11	11	11	102	138	138	25
Mindanao	2025	11	11	12	100	138	138	25
Mindanao	2025	11	11	13	100	138	138	25
Mindanao	2025	11	11	14	104	138	138	25
Mindanao	2025	11	11	15	102	138	138	25
Mindanao	2025	11	11	16	99	138	138	25
Mindanao	2025	11	11	17	94	138	138	25
Mindanao	2025	11	11	18	102	138	138	25
Mindanao	2025	11	11	19	97	138	138	25
Mindanao	2025	11	11	20	93	138	138	25
Mindanao	2025	11	11	21	91	138	138	25
Mindanao	2025	11	11	22	84	138	138	25
Mindanao	2025	11	11	23	79	138	138	25
Mindanao	2025	11	11	24	73	138	138	25
Mindanao	2025	11	12	1	71	138	138	25
Mindanao	2025	11	12	2	67	138	138	25
Mindanao	2025	11	12	3	66	138	138	25
Mindanao	2025	11	12	4	66	138	138	25
Mindanao	2025	11	12	5	69	138	138	25
Mindanao	2025	11	12	6	73	138	138	25
Mindanao	2025	11	12	7	66	138	138	25
Mindanao	2025	11	12	8	75	138	138	25
Mindanao	2025	11	12	9	87	138	138	25
Mindanao	2025	11	12	10	92	138	138	25
Mindanao	2025	11	12	11	97	138	138	25
Mindanao	2025	11	12	12	97	138	138	25
Mindanao	2025	11	12	13	97	138	138	25
Mindanao	2025	11	12	14	102	138	138	25
Mindanao	2025	11	12	15	103	138	138	25
Mindanao	2025	11	12	16	100	138	138	25
Mindanao	2025	11	12	17	97	138	138	25
Mindanao	2025	11	12	18	105	138	138	25
Mindanao	2025	11	12	19	98	138	138	25
Mindanao	2025	11	12	20	95	138	138	25
Mindanao	2025	11	12	21	87	138	138	25
Mindanao	2025	11	12	22	81	138	138	25
Mindanao	2025	11	12	23	77	138	138	25
Mindanao	2025	11	12	24	74	138	138	25
Mindanao	2025	11	13	1	70	138	138	25
Mindanao	2025	11	13	2	68	138	138	25
Mindanao	2025	11	13	3	63	138	138	25
Mindanao	2025	11	13	4	65	138	138	25
Mindanao	2025	11	13	5	68	138	138	25
Mindanao	2025	11	13	6	72	138	138	25
Mindanao	2025	11	13	7	66	138	138	25
Mindanao	2025	11	13	8	76	138	138	25
Mindanao	2025	11	13	9	87	138	138	25
Mindanao	2025	11	13	10	98	138	138	25
Mindanao	2025	11	13	11	102	138	138	25
Mindanao	2025	11	13	12	100	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	13	13	101	138	138	25
Mindanao	2025	11	13	14	104	138	138	25
Mindanao	2025	11	13	15	104	138	138	25
Mindanao	2025	11	13	16	99	138	138	25
Mindanao	2025	11	13	17	95	138	138	25
Mindanao	2025	11	13	18	100	138	138	25
Mindanao	2025	11	13	19	94	138	138	25
Mindanao	2025	11	13	20	90	138	138	25
Mindanao	2025	11	13	21	85	138	138	25
Mindanao	2025	11	13	22	81	138	138	25
Mindanao	2025	11	13	23	74	138	138	25
Mindanao	2025	11	13	24	71	138	138	25
Mindanao	2025	11	14	1	70	138	138	25
Mindanao	2025	11	14	2	66	138	138	25
Mindanao	2025	11	14	3	64	138	138	25
Mindanao	2025	11	14	4	64	138	138	25
Mindanao	2025	11	14	5	67	138	138	25
Mindanao	2025	11	14	6	71	138	138	25
Mindanao	2025	11	14	7	64	138	138	25
Mindanao	2025	11	14	8	72	138	138	25
Mindanao	2025	11	14	9	83	138	138	25
Mindanao	2025	11	14	10	92	138	138	25
Mindanao	2025	11	14	11	98	138	138	25
Mindanao	2025	11	14	12	95	138	138	25
Mindanao	2025	11	14	13	95	138	138	25
Mindanao	2025	11	14	14	100	138	138	25
Mindanao	2025	11	14	15	97	138	138	25
Mindanao	2025	11	14	16	93	138	138	25
Mindanao	2025	11	14	17	93	138	138	25
Mindanao	2025	11	14	18	97	138	138	25
Mindanao	2025	11	14	19	91	138	138	25
Mindanao	2025	11	14	20	88	138	138	25
Mindanao	2025	11	14	21	84	138	138	25
Mindanao	2025	11	14	22	76	138	138	25
Mindanao	2025	11	14	23	71	138	138	25
Mindanao	2025	11	14	24	68	138	138	25
Mindanao	2025	11	15	1	66	138	138	25
Mindanao	2025	11	15	2	64	138	138	25
Mindanao	2025	11	15	3	60	138	138	25
Mindanao	2025	11	15	4	59	138	138	25
Mindanao	2025	11	15	5	62	138	138	25
Mindanao	2025	11	15	6	65	138	138	25
Mindanao	2025	11	15	7	63	138	138	25
Mindanao	2025	11	15	8	69	138	138	25
Mindanao	2025	11	15	9	77	138	138	25
Mindanao	2025	11	15	10	85	138	138	25
Mindanao	2025	11	15	11	89	138	138	25
Mindanao	2025	11	15	12	88	138	138	25
Mindanao	2025	11	15	13	88	138	138	25
Mindanao	2025	11	15	14	91	138	138	25
Mindanao	2025	11	15	15	90	138	138	25
Mindanao	2025	11	15	16	88	138	138	25
Mindanao	2025	11	15	17	88	138	138	25
Mindanao	2025	11	15	18	100	138	138	25
Mindanao	2025	11	15	19	94	138	138	25
Mindanao	2025	11	15	20	89	138	138	25
Mindanao	2025	11	15	21	87	138	138	25
Mindanao	2025	11	15	22	81	138	138	25
Mindanao	2025	11	15	23	76	138	138	25
Mindanao	2025	11	15	24	70	138	138	25
Mindanao	2025	11	16	1	69	138	138	25
Mindanao	2025	11	16	2	62	138	138	25
Mindanao	2025	11	16	3	61	138	138	25
Mindanao	2025	11	16	4	60	138	138	25
Mindanao	2025	11	16	5	61	138	138	25
Mindanao	2025	11	16	6	61	138	138	25
Mindanao	2025	11	16	7	59	138	138	25
Mindanao	2025	11	16	8	60	138	138	25
Mindanao	2025	11	16	9	64	138	138	25
Mindanao	2025	11	16	10	69	138	138	25
Mindanao	2025	11	16	11	75	138	138	25
Mindanao	2025	11	16	12	76	138	138	25
Mindanao	2025	11	16	13	79	138	138	25
Mindanao	2025	11	16	14	80	138	138	25
Mindanao	2025	11	16	15	80	138	138	25
Mindanao	2025	11	16	16	77	138	138	25
Mindanao	2025	11	16	17	79	138	138	25
Mindanao	2025	11	16	18	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	16	19	86	138	138	25
Mindanao	2025	11	16	20	84	138	138	25
Mindanao	2025	11	16	21	84	138	138	25
Mindanao	2025	11	16	22	78	138	138	25
Mindanao	2025	11	16	23	73	138	138	25
Mindanao	2025	11	16	24	67	138	138	25
Mindanao	2025	11	17	1	64	138	138	25
Mindanao	2025	11	17	2	60	138	138	25
Mindanao	2025	11	17	3	60	138	138	25
Mindanao	2025	11	17	4	60	138	138	25
Mindanao	2025	11	17	5	65	138	138	25
Mindanao	2025	11	17	6	67	138	138	25
Mindanao	2025	11	17	7	60	138	138	25
Mindanao	2025	11	17	8	73	138	138	25
Mindanao	2025	11	17	9	87	138	138	25
Mindanao	2025	11	17	10	95	138	138	25
Mindanao	2025	11	17	11	84	138	138	25
Mindanao	2025	11	17	12	98	138	138	25
Mindanao	2025	11	17	13	99	138	138	25
Mindanao	2025	11	17	14	105	138	138	25
Mindanao	2025	11	17	15	105	138	138	25
Mindanao	2025	11	17	16	100	138	138	25
Mindanao	2025	11	17	17	97	138	138	25
Mindanao	2025	11	17	18	104	138	138	25
Mindanao	2025	11	17	19	95	138	138	25
Mindanao	2025	11	17	20	93	138	138	25
Mindanao	2025	11	17	21	90	138	138	25
Mindanao	2025	11	17	22	83	138	138	25
Mindanao	2025	11	17	23	77	138	138	25
Mindanao	2025	11	17	24	71	138	138	25
Mindanao	2025	11	18	1	70	138	138	25
Mindanao	2025	11	18	2	67	138	138	25
Mindanao	2025	11	18	3	66	138	138	25
Mindanao	2025	11	18	4	65	138	138	25
Mindanao	2025	11	18	5	69	138	138	25
Mindanao	2025	11	18	6	73	138	138	25
Mindanao	2025	11	18	7	63	138	138	25
Mindanao	2025	11	18	8	76	138	138	25
Mindanao	2025	11	18	9	89	138	138	25
Mindanao	2025	11	18	10	92	138	138	25
Mindanao	2025	11	18	11	93	138	138	25
Mindanao	2025	11	18	12	91	138	138	25
Mindanao	2025	11	18	13	98	138	138	25
Mindanao	2025	11	18	14	100	138	138	25
Mindanao	2025	11	18	15	96	138	138	25
Mindanao	2025	11	18	16	95	138	138	25
Mindanao	2025	11	18	17	94	138	138	25
Mindanao	2025	11	18	18	97	138	138	25
Mindanao	2025	11	18	19	93	138	138	25
Mindanao	2025	11	18	20	94	138	138	25
Mindanao	2025	11	18	21	90	138	138	25
Mindanao	2025	11	18	22	84	138	138	25
Mindanao	2025	11	18	23	79	138	138	25
Mindanao	2025	11	18	24	76	138	138	25
Mindanao	2025	11	19	1	71	138	138	25
Mindanao	2025	11	19	2	67	138	138	25
Mindanao	2025	11	19	3	66	138	138	25
Mindanao	2025	11	19	4	67	138	138	25
Mindanao	2025	11	19	5	69	138	138	25
Mindanao	2025	11	19	6	71	138	138	25
Mindanao	2025	11	19	7	64	138	138	25
Mindanao	2025	11	19	8	75	138	138	25
Mindanao	2025	11	19	9	86	138	138	25
Mindanao	2025	11	19	10	95	138	138	25
Mindanao	2025	11	19	11	98	138	138	25
Mindanao	2025	11	19	12	96	138	138	25
Mindanao	2025	11	19	13	99	138	138	25
Mindanao	2025	11	19	14	101	138	138	25
Mindanao	2025	11	19	15	94	138	138	25
Mindanao	2025	11	19	16	92	138	138	25
Mindanao	2025	11	19	17	87	138	138	25
Mindanao	2025	11	19	18	95	138	138	25
Mindanao	2025	11	19	19	92	138	138	25
Mindanao	2025	11	19	20	87	138	138	25
Mindanao	2025	11	19	21	83	138	138	25
Mindanao	2025	11	19	22	78	138	138	25
Mindanao	2025	11	19	23	72	138	138	25
Mindanao	2025	11	19	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	20	1	66	138	138	25
Mindanao	2025	11	20	2	65	138	138	25
Mindanao	2025	11	20	3	62	138	138	25
Mindanao	2025	11	20	4	62	138	138	25
Mindanao	2025	11	20	5	63	138	138	25
Mindanao	2025	11	20	6	65	138	138	25
Mindanao	2025	11	20	7	61	138	138	25
Mindanao	2025	11	20	8	71	138	138	25
Mindanao	2025	11	20	9	80	138	138	25
Mindanao	2025	11	20	10	86	138	138	25
Mindanao	2025	11	20	11	88	138	138	25
Mindanao	2025	11	20	12	82	138	138	25
Mindanao	2025	11	20	13	84	138	138	25
Mindanao	2025	11	20	14	87	138	138	25
Mindanao	2025	11	20	15	87	138	138	25
Mindanao	2025	11	20	16	88	138	138	25
Mindanao	2025	11	20	17	86	138	138	25
Mindanao	2025	11	20	18	96	138	138	25
Mindanao	2025	11	20	19	92	138	138	25
Mindanao	2025	11	20	20	88	138	138	25
Mindanao	2025	11	20	21	83	138	138	25
Mindanao	2025	11	20	22	76	138	138	25
Mindanao	2025	11	20	23	73	138	138	25
Mindanao	2025	11	20	24	69	138	138	25
Mindanao	2025	11	21	1	66	138	138	25
Mindanao	2025	11	21	2	64	138	138	25
Mindanao	2025	11	21	3	61	138	138	25
Mindanao	2025	11	21	4	61	138	138	25
Mindanao	2025	11	21	5	62	138	138	25
Mindanao	2025	11	21	6	70	138	138	25
Mindanao	2025	11	21	7	63	138	138	25
Mindanao	2025	11	21	8	68	138	138	25
Mindanao	2025	11	21	9	81	138	138	25
Mindanao	2025	11	21	10	85	138	138	25
Mindanao	2025	11	21	11	89	138	138	25
Mindanao	2025	11	21	12	86	138	138	25
Mindanao	2025	11	21	13	84	138	138	25
Mindanao	2025	11	21	14	87	138	138	25
Mindanao	2025	11	21	15	90	138	138	25
Mindanao	2025	11	21	16	92	138	138	25
Mindanao	2025	11	21	17	88	138	138	25
Mindanao	2025	11	21	18	93	138	138	25
Mindanao	2025	11	21	19	87	138	138	25
Mindanao	2025	11	21	20	86	138	138	25
Mindanao	2025	11	21	21	82	138	138	25
Mindanao	2025	11	21	22	74	138	138	25
Mindanao	2025	11	21	23	70	138	138	25
Mindanao	2025	11	21	24	67	138	138	25
Mindanao	2025	11	22	1	66	138	138	25
Mindanao	2025	11	22	2	64	138	138	25
Mindanao	2025	11	22	3	62	138	138	25
Mindanao	2025	11	22	4	61	138	138	25
Mindanao	2025	11	22	5	62	138	138	25
Mindanao	2025	11	22	6	67	138	138	25
Mindanao	2025	11	22	7	67	138	138	25
Mindanao	2025	11	22	8	63	138	138	25
Mindanao	2025	11	22	9	69	138	138	25
Mindanao	2025	11	22	10	75	138	138	25
Mindanao	2025	11	22	11	78	138	138	25
Mindanao	2025	11	22	12	77	138	138	25
Mindanao	2025	11	22	13	76	138	138	25
Mindanao	2025	11	22	14	79	138	138	25
Mindanao	2025	11	22	15	79	138	138	25
Mindanao	2025	11	22	16	78	138	138	25
Mindanao	2025	11	22	17	80	138	138	25
Mindanao	2025	11	22	18	88	138	138	25
Mindanao	2025	11	22	19	83	138	138	25
Mindanao	2025	11	22	20	83	138	138	25
Mindanao	2025	11	22	21	79	138	138	25
Mindanao	2025	11	22	22	73	138	138	25
Mindanao	2025	11	22	23	69	138	138	25
Mindanao	2025	11	22	24	62	138	138	25
Mindanao	2025	11	23	1	60	138	138	25
Mindanao	2025	11	23	2	60	138	138	25
Mindanao	2025	11	23	3	58	138	138	25
Mindanao	2025	11	23	4	56	138	138	25
Mindanao	2025	11	23	5	57	138	138	25
Mindanao	2025	11	23	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	23	7	57	138	138	25
Mindanao	2025	11	23	8	61	138	138	25
Mindanao	2025	11	23	9	61	138	138	25
Mindanao	2025	11	23	10	62	138	138	25
Mindanao	2025	11	23	11	65	138	138	25
Mindanao	2025	11	23	12	66	138	138	25
Mindanao	2025	11	23	13	66	138	138	25
Mindanao	2025	11	23	14	67	138	138	25
Mindanao	2025	11	23	15	69	138	138	25
Mindanao	2025	11	23	16	71	138	138	25
Mindanao	2025	11	23	17	75	138	138	25
Mindanao	2025	11	23	18	83	138	138	25
Mindanao	2025	11	23	19	82	138	138	25
Mindanao	2025	11	23	20	80	138	138	25
Mindanao	2025	11	23	21	77	138	138	25
Mindanao	2025	11	23	22	71	138	138	25
Mindanao	2025	11	23	23	66	138	138	25
Mindanao	2025	11	23	24	62	138	138	25
Mindanao	2025	11	24	1	60	138	138	25
Mindanao	2025	11	24	2	58	138	138	25
Mindanao	2025	11	24	3	58	138	138	25
Mindanao	2025	11	24	4	58	138	138	25
Mindanao	2025	11	24	5	64	138	138	25
Mindanao	2025	11	24	6	66	138	138	25
Mindanao	2025	11	24	7	60	138	138	25
Mindanao	2025	11	24	8	70	138	138	25
Mindanao	2025	11	24	9	81	138	138	25
Mindanao	2025	11	24	10	90	138	138	25
Mindanao	2025	11	24	11	92	138	138	25
Mindanao	2025	11	24	12	92	138	138	25
Mindanao	2025	11	24	13	93	138	138	25
Mindanao	2025	11	24	14	95	138	138	25
Mindanao	2025	11	24	15	95	138	138	25
Mindanao	2025	11	24	16	94	138	138	25
Mindanao	2025	11	24	17	88	138	138	25
Mindanao	2025	11	24	18	92	138	138	25
Mindanao	2025	11	24	19	88	138	138	25
Mindanao	2025	11	24	20	86	138	138	25
Mindanao	2025	11	24	21	79	138	138	25
Mindanao	2025	11	24	22	73	138	138	25
Mindanao	2025	11	24	23	70	138	138	25
Mindanao	2025	11	24	24	66	138	138	25
Mindanao	2025	11	25	1	64	138	138	25
Mindanao	2025	11	25	2	61	138	138	25
Mindanao	2025	11	25	3	60	138	138	25
Mindanao	2025	11	25	4	60	138	138	25
Mindanao	2025	11	25	5	65	138	138	25
Mindanao	2025	11	25	6	71	138	138	25
Mindanao	2025	11	25	7	62	138	138	25
Mindanao	2025	11	25	8	71	138	138	25
Mindanao	2025	11	25	9	83	138	138	25
Mindanao	2025	11	25	10	91	138	138	25
Mindanao	2025	11	25	11	95	138	138	25
Mindanao	2025	11	25	12	89	138	138	25
Mindanao	2025	11	25	13	94	138	138	25
Mindanao	2025	11	25	14	101	138	138	25
Mindanao	2025	11	25	15	99	138	138	25
Mindanao	2025	11	25	16	99	138	138	25
Mindanao	2025	11	25	17	95	138	138	25
Mindanao	2025	11	25	18	99	138	138	25
Mindanao	2025	11	25	19	93	138	138	25
Mindanao	2025	11	25	20	91	138	138	25
Mindanao	2025	11	25	21	88	138	138	25
Mindanao	2025	11	25	22	81	138	138	25
Mindanao	2025	11	25	23	75	138	138	25
Mindanao	2025	11	25	24	69	138	138	25
Mindanao	2025	11	26	1	66	138	138	25
Mindanao	2025	11	26	2	65	138	138	25
Mindanao	2025	11	26	3	63	138	138	25
Mindanao	2025	11	26	4	62	138	138	25
Mindanao	2025	11	26	5	67	138	138	25
Mindanao	2025	11	26	6	72	138	138	25
Mindanao	2025	11	26	7	63	138	138	25
Mindanao	2025	11	26	8	71	138	138	25
Mindanao	2025	11	26	9	85	138	138	25
Mindanao	2025	11	26	10	90	138	138	25
Mindanao	2025	11	26	11	96	138	138	25
Mindanao	2025	11	26	12	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	26	13	98	138	138	25
Mindanao	2025	11	26	14	100	138	138	25
Mindanao	2025	11	26	15	97	138	138	25
Mindanao	2025	11	26	16	95	138	138	25
Mindanao	2025	11	26	17	93	138	138	25
Mindanao	2025	11	26	18	98	138	138	25
Mindanao	2025	11	26	19	90	138	138	25
Mindanao	2025	11	26	20	90	138	138	25
Mindanao	2025	11	26	21	85	138	138	25
Mindanao	2025	11	26	22	79	138	138	25
Mindanao	2025	11	26	23	72	138	138	25
Mindanao	2025	11	26	24	69	138	138	25
Mindanao	2025	11	27	1	64	138	138	25
Mindanao	2025	11	27	2	62	138	138	25
Mindanao	2025	11	27	3	61	138	138	25
Mindanao	2025	11	27	4	61	138	138	25
Mindanao	2025	11	27	5	67	138	138	25
Mindanao	2025	11	27	6	70	138	138	25
Mindanao	2025	11	27	7	63	138	138	25
Mindanao	2025	11	27	8	73	138	138	25
Mindanao	2025	11	27	9	85	138	138	25
Mindanao	2025	11	27	10	88	138	138	25
Mindanao	2025	11	27	11	94	138	138	25
Mindanao	2025	11	27	12	91	138	138	25
Mindanao	2025	11	27	13	90	138	138	25
Mindanao	2025	11	27	14	99	138	138	25
Mindanao	2025	11	27	15	98	138	138	25
Mindanao	2025	11	27	16	97	138	138	25
Mindanao	2025	11	27	17	92	138	138	25
Mindanao	2025	11	27	18	102	138	138	25
Mindanao	2025	11	27	19	96	138	138	25
Mindanao	2025	11	27	20	90	138	138	25
Mindanao	2025	11	27	21	88	138	138	25
Mindanao	2025	11	27	22	82	138	138	25
Mindanao	2025	11	27	23	78	138	138	25
Mindanao	2025	11	27	24	73	138	138	25
Mindanao	2025	11	28	1	67	138	138	25
Mindanao	2025	11	28	2	66	138	138	25
Mindanao	2025	11	28	3	63	138	138	25
Mindanao	2025	11	28	4	64	138	138	25
Mindanao	2025	11	28	5	68	138	138	25
Mindanao	2025	11	28	6	71	138	138	25
Mindanao	2025	11	28	7	64	138	138	25
Mindanao	2025	11	28	8	73	138	138	25
Mindanao	2025	11	28	9	88	138	138	25
Mindanao	2025	11	28	10	92	138	138	25
Mindanao	2025	11	28	11	98	138	138	25
Mindanao	2025	11	28	12	97	138	138	25
Mindanao	2025	11	28	13	97	138	138	25
Mindanao	2025	11	28	14	100	138	138	25
Mindanao	2025	11	28	15	98	138	138	25
Mindanao	2025	11	28	16	96	138	138	25
Mindanao	2025	11	28	17	91	138	138	25
Mindanao	2025	11	28	18	96	138	138	25
Mindanao	2025	11	28	19	89	138	138	25
Mindanao	2025	11	28	20	86	138	138	25
Mindanao	2025	11	28	21	84	138	138	25
Mindanao	2025	11	28	22	79	138	138	25
Mindanao	2025	11	28	23	74	138	138	25
Mindanao	2025	11	28	24	69	138	138	25
Mindanao	2025	11	29	1	66	138	138	25
Mindanao	2025	11	29	2	63	138	138	25
Mindanao	2025	11	29	3	60	138	138	25
Mindanao	2025	11	29	4	60	138	138	25
Mindanao	2025	11	29	5	61	138	138	25
Mindanao	2025	11	29	6	64	138	138	25
Mindanao	2025	11	29	7	62	138	138	25
Mindanao	2025	11	29	8	68	138	138	25
Mindanao	2025	11	29	9	74	138	138	25
Mindanao	2025	11	29	10	81	138	138	25
Mindanao	2025	11	29	11	85	138	138	25
Mindanao	2025	11	29	12	84	138	138	25
Mindanao	2025	11	29	13	86	138	138	25
Mindanao	2025	11	29	14	92	138	138	25
Mindanao	2025	11	29	15	91	138	138	25
Mindanao	2025	11	29	16	88	138	138	25
Mindanao	2025	11	29	17	85	138	138	25
Mindanao	2025	11	29	18	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	11	29	19	94	138	138	25
Mindanao	2025	11	29	20	90	138	138	25
Mindanao	2025	11	29	21	85	138	138	25
Mindanao	2025	11	29	22	80	138	138	25
Mindanao	2025	11	29	23	75	138	138	25
Mindanao	2025	11	29	24	69	138	138	25
Mindanao	2025	11	30	1	68	138	138	25
Mindanao	2025	11	30	2	67	138	138	25
Mindanao	2025	11	30	3	64	138	138	25
Mindanao	2025	11	30	4	62	138	138	25
Mindanao	2025	11	30	5	62	138	138	25
Mindanao	2025	11	30	6	66	138	138	25
Mindanao	2025	11	30	7	63	138	138	25
Mindanao	2025	11	30	8	64	138	138	25
Mindanao	2025	11	30	9	74	138	138	25
Mindanao	2025	11	30	10	78	138	138	25
Mindanao	2025	11	30	11	82	138	138	25
Mindanao	2025	11	30	12	81	138	138	25
Mindanao	2025	11	30	13	82	138	138	25
Mindanao	2025	11	30	14	83	138	138	25
Mindanao	2025	11	30	15	81	138	138	25
Mindanao	2025	11	30	16	79	138	138	25
Mindanao	2025	11	30	17	82	138	138	25
Mindanao	2025	11	30	18	89	138	138	25
Mindanao	2025	11	30	19	85	138	138	25
Mindanao	2025	11	30	20	79	138	138	25
Mindanao	2025	11	30	21	74	138	138	25
Mindanao	2025	11	30	22	69	138	138	25
Mindanao	2025	11	30	23	65	138	138	25
Mindanao	2025	11	30	24	61	138	138	25
Mindanao	2025	12	1	1	60	138	138	25
Mindanao	2025	12	1	2	58	138	138	25
Mindanao	2025	12	1	3	56	138	138	25
Mindanao	2025	12	1	4	56	138	138	25
Mindanao	2025	12	1	5	60	138	138	25
Mindanao	2025	12	1	6	65	138	138	25
Mindanao	2025	12	1	7	58	138	138	25
Mindanao	2025	12	1	8	70	138	138	25
Mindanao	2025	12	1	9	84	138	138	25
Mindanao	2025	12	1	10	92	138	138	25
Mindanao	2025	12	1	11	98	138	138	25
Mindanao	2025	12	1	12	97	138	138	25
Mindanao	2025	12	1	13	101	138	138	25
Mindanao	2025	12	1	14	105	138	138	25
Mindanao	2025	12	1	15	105	138	138	25
Mindanao	2025	12	1	16	104	138	138	25
Mindanao	2025	12	1	17	98	138	138	25
Mindanao	2025	12	1	18	105	138	138	25
Mindanao	2025	12	1	19	99	138	138	25
Mindanao	2025	12	1	20	97	138	138	25
Mindanao	2025	12	1	21	93	138	138	25
Mindanao	2025	12	1	22	87	138	138	25
Mindanao	2025	12	1	23	79	138	138	25
Mindanao	2025	12	1	24	75	138	138	25
Mindanao	2025	12	2	1	71	138	138	25
Mindanao	2025	12	2	2	68	138	138	25
Mindanao	2025	12	2	3	67	138	138	25
Mindanao	2025	12	2	4	65	138	138	25
Mindanao	2025	12	2	5	69	138	138	25
Mindanao	2025	12	2	6	72	138	138	25
Mindanao	2025	12	2	7	64	138	138	25
Mindanao	2025	12	2	8	74	138	138	25
Mindanao	2025	12	2	9	87	138	138	25
Mindanao	2025	12	2	10	95	138	138	25
Mindanao	2025	12	2	11	100	138	138	25
Mindanao	2025	12	2	12	97	138	138	25
Mindanao	2025	12	2	13	98	138	138	25
Mindanao	2025	12	2	14	102	138	138	25
Mindanao	2025	12	2	15	101	138	138	25
Mindanao	2025	12	2	16	92	138	138	25
Mindanao	2025	12	2	17	88	138	138	25
Mindanao	2025	12	2	18	100	138	138	25
Mindanao	2025	12	2	19	96	138	138	25
Mindanao	2025	12	2	20	93	138	138	25
Mindanao	2025	12	2	21	89	138	138	25
Mindanao	2025	12	2	22	83	138	138	25
Mindanao	2025	12	2	23	77	138	138	25
Mindanao	2025	12	2	24	74	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	3	1	67	138	138	25
Mindanao	2025	12	3	2	63	138	138	25
Mindanao	2025	12	3	3	61	138	138	25
Mindanao	2025	12	3	4	60	138	138	25
Mindanao	2025	12	3	5	66	138	138	25
Mindanao	2025	12	3	6	71	138	138	25
Mindanao	2025	12	3	7	62	138	138	25
Mindanao	2025	12	3	8	71	138	138	25
Mindanao	2025	12	3	9	83	138	138	25
Mindanao	2025	12	3	10	93	138	138	25
Mindanao	2025	12	3	11	96	138	138	25
Mindanao	2025	12	3	12	94	138	138	25
Mindanao	2025	12	3	13	97	138	138	25
Mindanao	2025	12	3	14	101	138	138	25
Mindanao	2025	12	3	15	101	138	138	25
Mindanao	2025	12	3	16	98	138	138	25
Mindanao	2025	12	3	17	95	138	138	25
Mindanao	2025	12	3	18	103	138	138	25
Mindanao	2025	12	3	19	96	138	138	25
Mindanao	2025	12	3	20	93	138	138	25
Mindanao	2025	12	3	21	88	138	138	25
Mindanao	2025	12	3	22	84	138	138	25
Mindanao	2025	12	3	23	77	138	138	25
Mindanao	2025	12	3	24	72	138	138	25
Mindanao	2025	12	4	1	59	138	138	25
Mindanao	2025	12	4	2	59	138	138	25
Mindanao	2025	12	4	3	58	138	138	25
Mindanao	2025	12	4	4	58	138	138	25
Mindanao	2025	12	4	5	62	138	138	25
Mindanao	2025	12	4	6	67	138	138	25
Mindanao	2025	12	4	7	60	138	138	25
Mindanao	2025	12	4	8	69	138	138	25
Mindanao	2025	12	4	9	81	138	138	25
Mindanao	2025	12	4	10	88	138	138	25
Mindanao	2025	12	4	11	94	138	138	25
Mindanao	2025	12	4	12	90	138	138	25
Mindanao	2025	12	4	13	92	138	138	25
Mindanao	2025	12	4	14	95	138	138	25
Mindanao	2025	12	4	15	94	138	138	25
Mindanao	2025	12	4	16	92	138	138	25
Mindanao	2025	12	4	17	90	138	138	25
Mindanao	2025	12	4	18	98	138	138	25
Mindanao	2025	12	4	19	93	138	138	25
Mindanao	2025	12	4	20	90	138	138	25
Mindanao	2025	12	4	21	83	138	138	25
Mindanao	2025	12	4	22	78	138	138	25
Mindanao	2025	12	4	23	73	138	138	25
Mindanao	2025	12	4	24	69	138	138	25
Mindanao	2025	12	5	1	65	138	138	25
Mindanao	2025	12	5	2	61	138	138	25
Mindanao	2025	12	5	3	61	138	138	25
Mindanao	2025	12	5	4	61	138	138	25
Mindanao	2025	12	5	5	64	138	138	25
Mindanao	2025	12	5	6	70	138	138	25
Mindanao	2025	12	5	7	63	138	138	25
Mindanao	2025	12	5	8	71	138	138	25
Mindanao	2025	12	5	9	84	138	138	25
Mindanao	2025	12	5	10	92	138	138	25
Mindanao	2025	12	5	11	97	138	138	25
Mindanao	2025	12	5	12	94	138	138	25
Mindanao	2025	12	5	13	97	138	138	25
Mindanao	2025	12	5	14	100	138	138	25
Mindanao	2025	12	5	15	98	138	138	25
Mindanao	2025	12	5	16	95	138	138	25
Mindanao	2025	12	5	17	91	138	138	25
Mindanao	2025	12	5	18	101	138	138	25
Mindanao	2025	12	5	19	94	138	138	25
Mindanao	2025	12	5	20	92	138	138	25
Mindanao	2025	12	5	21	87	138	138	25
Mindanao	2025	12	5	22	81	138	138	25
Mindanao	2025	12	5	23	75	138	138	25
Mindanao	2025	12	5	24	71	138	138	25
Mindanao	2025	12	6	1	67	138	138	25
Mindanao	2025	12	6	2	64	138	138	25
Mindanao	2025	12	6	3	62	138	138	25
Mindanao	2025	12	6	4	61	138	138	25
Mindanao	2025	12	6	5	61	138	138	25
Mindanao	2025	12	6	6	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	6	7	62	138	138	25
Mindanao	2025	12	6	8	69	138	138	25
Mindanao	2025	12	6	9	76	138	138	25
Mindanao	2025	12	6	10	84	138	138	25
Mindanao	2025	12	6	11	87	138	138	25
Mindanao	2025	12	6	12	88	138	138	25
Mindanao	2025	12	6	13	90	138	138	25
Mindanao	2025	12	6	14	95	138	138	25
Mindanao	2025	12	6	15	94	138	138	25
Mindanao	2025	12	6	16	87	138	138	25
Mindanao	2025	12	6	17	87	138	138	25
Mindanao	2025	12	6	18	100	138	138	25
Mindanao	2025	12	6	19	94	138	138	25
Mindanao	2025	12	6	20	90	138	138	25
Mindanao	2025	12	6	21	89	138	138	25
Mindanao	2025	12	6	22	83	138	138	25
Mindanao	2025	12	6	23	76	138	138	25
Mindanao	2025	12	6	24	70	138	138	25
Mindanao	2025	12	7	1	66	138	138	25
Mindanao	2025	12	7	2	64	138	138	25
Mindanao	2025	12	7	3	61	138	138	25
Mindanao	2025	12	7	4	60	138	138	25
Mindanao	2025	12	7	5	60	138	138	25
Mindanao	2025	12	7	6	61	138	138	25
Mindanao	2025	12	7	7	56	138	138	25
Mindanao	2025	12	7	8	58	138	138	25
Mindanao	2025	12	7	9	62	138	138	25
Mindanao	2025	12	7	10	67	138	138	25
Mindanao	2025	12	7	11	72	138	138	25
Mindanao	2025	12	7	12	75	138	138	25
Mindanao	2025	12	7	13	76	138	138	25
Mindanao	2025	12	7	14	76	138	138	25
Mindanao	2025	12	7	15	75	138	138	25
Mindanao	2025	12	7	16	74	138	138	25
Mindanao	2025	12	7	17	77	138	138	25
Mindanao	2025	12	7	18	90	138	138	25
Mindanao	2025	12	7	19	88	138	138	25
Mindanao	2025	12	7	20	86	138	138	25
Mindanao	2025	12	7	21	83	138	138	25
Mindanao	2025	12	7	22	76	138	138	25
Mindanao	2025	12	7	23	72	138	138	25
Mindanao	2025	12	7	24	68	138	138	25
Mindanao	2025	12	8	1	69	138	138	25
Mindanao	2025	12	8	2	65	138	138	25
Mindanao	2025	12	8	3	64	138	138	25
Mindanao	2025	12	8	4	62	138	138	25
Mindanao	2025	12	8	5	64	138	138	25
Mindanao	2025	12	8	6	67	138	138	25
Mindanao	2025	12	8	7	66	138	138	25
Mindanao	2025	12	8	8	68	138	138	25
Mindanao	2025	12	8	9	76	138	138	25
Mindanao	2025	12	8	10	82	138	138	25
Mindanao	2025	12	8	11	88	138	138	25
Mindanao	2025	12	8	12	86	138	138	25
Mindanao	2025	12	8	13	87	138	138	25
Mindanao	2025	12	8	14	87	138	138	25
Mindanao	2025	12	8	15	85	138	138	25
Mindanao	2025	12	8	16	85	138	138	25
Mindanao	2025	12	8	17	85	138	138	25
Mindanao	2025	12	8	18	95	138	138	25
Mindanao	2025	12	8	19	89	138	138	25
Mindanao	2025	12	8	20	86	138	138	25
Mindanao	2025	12	8	21	82	138	138	25
Mindanao	2025	12	8	22	78	138	138	25
Mindanao	2025	12	8	23	73	138	138	25
Mindanao	2025	12	8	24	69	138	138	25
Mindanao	2025	12	9	1	63	138	138	25
Mindanao	2025	12	9	2	62	138	138	25
Mindanao	2025	12	9	3	60	138	138	25
Mindanao	2025	12	9	4	58	138	138	25
Mindanao	2025	12	9	5	64	138	138	25
Mindanao	2025	12	9	6	69	138	138	25
Mindanao	2025	12	9	7	60	138	138	25
Mindanao	2025	12	9	8	69	138	138	25
Mindanao	2025	12	9	9	83	138	138	25
Mindanao	2025	12	9	10	91	138	138	25
Mindanao	2025	12	9	11	96	138	138	25
Mindanao	2025	12	9	12	93	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	9	13	94	138	138	25
Mindanao	2025	12	9	14	99	138	138	25
Mindanao	2025	12	9	15	99	138	138	25
Mindanao	2025	12	9	16	94	138	138	25
Mindanao	2025	12	9	17	90	138	138	25
Mindanao	2025	12	9	18	101	138	138	25
Mindanao	2025	12	9	19	96	138	138	25
Mindanao	2025	12	9	20	92	138	138	25
Mindanao	2025	12	9	21	87	138	138	25
Mindanao	2025	12	9	22	80	138	138	25
Mindanao	2025	12	9	23	75	138	138	25
Mindanao	2025	12	9	24	69	138	138	25
Mindanao	2025	12	10	1	67	138	138	25
Mindanao	2025	12	10	2	63	138	138	25
Mindanao	2025	12	10	3	61	138	138	25
Mindanao	2025	12	10	4	60	138	138	25
Mindanao	2025	12	10	5	66	138	138	25
Mindanao	2025	12	10	6	71	138	138	25
Mindanao	2025	12	10	7	62	138	138	25
Mindanao	2025	12	10	8	71	138	138	25
Mindanao	2025	12	10	9	83	138	138	25
Mindanao	2025	12	10	10	93	138	138	25
Mindanao	2025	12	10	11	96	138	138	25
Mindanao	2025	12	10	12	94	138	138	25
Mindanao	2025	12	10	13	97	138	138	25
Mindanao	2025	12	10	14	101	138	138	25
Mindanao	2025	12	10	15	101	138	138	25
Mindanao	2025	12	10	16	98	138	138	25
Mindanao	2025	12	10	17	95	138	138	25
Mindanao	2025	12	10	18	103	138	138	25
Mindanao	2025	12	10	19	96	138	138	25
Mindanao	2025	12	10	20	93	138	138	25
Mindanao	2025	12	10	21	88	138	138	25
Mindanao	2025	12	10	22	84	138	138	25
Mindanao	2025	12	10	23	77	138	138	25
Mindanao	2025	12	10	24	72	138	138	25
Mindanao	2025	12	11	1	69	138	138	25
Mindanao	2025	12	11	2	66	138	138	25
Mindanao	2025	12	11	3	64	138	138	25
Mindanao	2025	12	11	4	64	138	138	25
Mindanao	2025	12	11	5	66	138	138	25
Mindanao	2025	12	11	6	70	138	138	25
Mindanao	2025	12	11	7	65	138	138	25
Mindanao	2025	12	11	8	72	138	138	25
Mindanao	2025	12	11	9	84	138	138	25
Mindanao	2025	12	11	10	92	138	138	25
Mindanao	2025	12	11	11	96	138	138	25
Mindanao	2025	12	11	12	94	138	138	25
Mindanao	2025	12	11	13	93	138	138	25
Mindanao	2025	12	11	14	99	138	138	25
Mindanao	2025	12	11	15	97	138	138	25
Mindanao	2025	12	11	16	95	138	138	25
Mindanao	2025	12	11	17	93	138	138	25
Mindanao	2025	12	11	18	99	138	138	25
Mindanao	2025	12	11	19	93	138	138	25
Mindanao	2025	12	11	20	90	138	138	25
Mindanao	2025	12	11	21	86	138	138	25
Mindanao	2025	12	11	22	80	138	138	25
Mindanao	2025	12	11	23	74	138	138	25
Mindanao	2025	12	11	24	71	138	138	25
Mindanao	2025	12	12	1	64	138	138	25
Mindanao	2025	12	12	2	63	138	138	25
Mindanao	2025	12	12	3	62	138	138	25
Mindanao	2025	12	12	4	61	138	138	25
Mindanao	2025	12	12	5	66	138	138	25
Mindanao	2025	12	12	6	70	138	138	25
Mindanao	2025	12	12	7	63	138	138	25
Mindanao	2025	12	12	8	71	138	138	25
Mindanao	2025	12	12	9	81	138	138	25
Mindanao	2025	12	12	10	89	138	138	25
Mindanao	2025	12	12	11	94	138	138	25
Mindanao	2025	12	12	12	90	138	138	25
Mindanao	2025	12	12	13	90	138	138	25
Mindanao	2025	12	12	14	95	138	138	25
Mindanao	2025	12	12	15	92	138	138	25
Mindanao	2025	12	12	16	92	138	138	25
Mindanao	2025	12	12	17	89	138	138	25
Mindanao	2025	12	12	18	96	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	12	19	92	138	138	25
Mindanao	2025	12	12	20	89	138	138	25
Mindanao	2025	12	12	21	84	138	138	25
Mindanao	2025	12	12	22	78	138	138	25
Mindanao	2025	12	12	23	72	138	138	25
Mindanao	2025	12	12	24	69	138	138	25
Mindanao	2025	12	13	1	64	138	138	25
Mindanao	2025	12	13	2	62	138	138	25
Mindanao	2025	12	13	3	61	138	138	25
Mindanao	2025	12	13	4	59	138	138	25
Mindanao	2025	12	13	5	61	138	138	25
Mindanao	2025	12	13	6	64	138	138	25
Mindanao	2025	12	13	7	61	138	138	25
Mindanao	2025	12	13	8	68	138	138	25
Mindanao	2025	12	13	9	76	138	138	25
Mindanao	2025	12	13	10	83	138	138	25
Mindanao	2025	12	13	11	88	138	138	25
Mindanao	2025	12	13	12	87	138	138	25
Mindanao	2025	12	13	13	88	138	138	25
Mindanao	2025	12	13	14	91	138	138	25
Mindanao	2025	12	13	15	90	138	138	25
Mindanao	2025	12	13	16	90	138	138	25
Mindanao	2025	12	13	17	87	138	138	25
Mindanao	2025	12	13	18	100	138	138	25
Mindanao	2025	12	13	19	94	138	138	25
Mindanao	2025	12	13	20	89	138	138	25
Mindanao	2025	12	13	21	86	138	138	25
Mindanao	2025	12	13	22	80	138	138	25
Mindanao	2025	12	13	23	73	138	138	25
Mindanao	2025	12	13	24	69	138	138	25
Mindanao	2025	12	14	1	63	138	138	25
Mindanao	2025	12	14	2	60	138	138	25
Mindanao	2025	12	14	3	56	138	138	25
Mindanao	2025	12	14	4	56	138	138	25
Mindanao	2025	12	14	5	57	138	138	25
Mindanao	2025	12	14	6	59	138	138	25
Mindanao	2025	12	14	7	59	138	138	25
Mindanao	2025	12	14	8	59	138	138	25
Mindanao	2025	12	14	9	65	138	138	25
Mindanao	2025	12	14	10	71	138	138	25
Mindanao	2025	12	14	11	76	138	138	25
Mindanao	2025	12	14	12	77	138	138	25
Mindanao	2025	12	14	13	77	138	138	25
Mindanao	2025	12	14	14	79	138	138	25
Mindanao	2025	12	14	15	78	138	138	25
Mindanao	2025	12	14	16	77	138	138	25
Mindanao	2025	12	14	17	78	138	138	25
Mindanao	2025	12	14	18	93	138	138	25
Mindanao	2025	12	14	19	92	138	138	25
Mindanao	2025	12	14	20	88	138	138	25
Mindanao	2025	12	14	21	86	138	138	25
Mindanao	2025	12	14	22	79	138	138	25
Mindanao	2025	12	14	23	74	138	138	25
Mindanao	2025	12	14	24	70	138	138	25
Mindanao	2025	12	15	1	65	138	138	25
Mindanao	2025	12	15	2	61	138	138	25
Mindanao	2025	12	15	3	60	138	138	25
Mindanao	2025	12	15	4	59	138	138	25
Mindanao	2025	12	15	5	64	138	138	25
Mindanao	2025	12	15	6	67	138	138	25
Mindanao	2025	12	15	7	60	138	138	25
Mindanao	2025	12	15	8	72	138	138	25
Mindanao	2025	12	15	9	85	138	138	25
Mindanao	2025	12	15	10	95	138	138	25
Mindanao	2025	12	15	11	100	138	138	25
Mindanao	2025	12	15	12	98	138	138	25
Mindanao	2025	12	15	13	100	138	138	25
Mindanao	2025	12	15	14	105	138	138	25
Mindanao	2025	12	15	15	104	138	138	25
Mindanao	2025	12	15	16	102	138	138	25
Mindanao	2025	12	15	17	98	138	138	25
Mindanao	2025	12	15	18	105	138	138	25
Mindanao	2025	12	15	19	101	138	138	25
Mindanao	2025	12	15	20	99	138	138	25
Mindanao	2025	12	15	21	95	138	138	25
Mindanao	2025	12	15	22	87	138	138	25
Mindanao	2025	12	15	23	81	138	138	25
Mindanao	2025	12	15	24	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	16	1	71	138	138	25
Mindanao	2025	12	16	2	69	138	138	25
Mindanao	2025	12	16	3	67	138	138	25
Mindanao	2025	12	16	4	66	138	138	25
Mindanao	2025	12	16	5	69	138	138	25
Mindanao	2025	12	16	6	73	138	138	25
Mindanao	2025	12	16	7	67	138	138	25
Mindanao	2025	12	16	8	76	138	138	25
Mindanao	2025	12	16	9	90	138	138	25
Mindanao	2025	12	16	10	99	138	138	25
Mindanao	2025	12	16	11	103	138	138	25
Mindanao	2025	12	16	12	101	138	138	25
Mindanao	2025	12	16	13	103	138	138	25
Mindanao	2025	12	16	14	105	138	138	25
Mindanao	2025	12	16	15	104	138	138	25
Mindanao	2025	12	16	16	102	138	138	25
Mindanao	2025	12	16	17	95	138	138	25
Mindanao	2025	12	16	18	102	138	138	25
Mindanao	2025	12	16	19	96	138	138	25
Mindanao	2025	12	16	20	95	138	138	25
Mindanao	2025	12	16	21	92	138	138	25
Mindanao	2025	12	16	22	85	138	138	25
Mindanao	2025	12	16	23	79	138	138	25
Mindanao	2025	12	16	24	75	138	138	25
Mindanao	2025	12	17	1	71	138	138	25
Mindanao	2025	12	17	2	69	138	138	25
Mindanao	2025	12	17	3	65	138	138	25
Mindanao	2025	12	17	4	66	138	138	25
Mindanao	2025	12	17	5	68	138	138	25
Mindanao	2025	12	17	6	73	138	138	25
Mindanao	2025	12	17	7	65	138	138	25
Mindanao	2025	12	17	8	72	138	138	25
Mindanao	2025	12	17	9	85	138	138	25
Mindanao	2025	12	17	10	93	138	138	25
Mindanao	2025	12	17	11	98	138	138	25
Mindanao	2025	12	17	12	93	138	138	25
Mindanao	2025	12	17	13	96	138	138	25
Mindanao	2025	12	17	14	98	138	138	25
Mindanao	2025	12	17	15	100	138	138	25
Mindanao	2025	12	17	16	96	138	138	25
Mindanao	2025	12	17	17	95	138	138	25
Mindanao	2025	12	17	18	103	138	138	25
Mindanao	2025	12	17	19	96	138	138	25
Mindanao	2025	12	17	20	94	138	138	25
Mindanao	2025	12	17	21	90	138	138	25
Mindanao	2025	12	17	22	83	138	138	25
Mindanao	2025	12	17	23	78	138	138	25
Mindanao	2025	12	17	24	73	138	138	25
Mindanao	2025	12	18	1	69	138	138	25
Mindanao	2025	12	18	2	66	138	138	25
Mindanao	2025	12	18	3	64	138	138	25
Mindanao	2025	12	18	4	64	138	138	25
Mindanao	2025	12	18	5	66	138	138	25
Mindanao	2025	12	18	6	70	138	138	25
Mindanao	2025	12	18	7	65	138	138	25
Mindanao	2025	12	18	8	72	138	138	25
Mindanao	2025	12	18	9	84	138	138	25
Mindanao	2025	12	18	10	92	138	138	25
Mindanao	2025	12	18	11	96	138	138	25
Mindanao	2025	12	18	12	94	138	138	25
Mindanao	2025	12	18	13	93	138	138	25
Mindanao	2025	12	18	14	99	138	138	25
Mindanao	2025	12	18	15	97	138	138	25
Mindanao	2025	12	18	16	95	138	138	25
Mindanao	2025	12	18	17	93	138	138	25
Mindanao	2025	12	18	18	99	138	138	25
Mindanao	2025	12	18	19	93	138	138	25
Mindanao	2025	12	18	20	90	138	138	25
Mindanao	2025	12	18	21	86	138	138	25
Mindanao	2025	12	18	22	80	138	138	25
Mindanao	2025	12	18	23	74	138	138	25
Mindanao	2025	12	18	24	71	138	138	25
Mindanao	2025	12	19	1	67	138	138	25
Mindanao	2025	12	19	2	64	138	138	25
Mindanao	2025	12	19	3	63	138	138	25
Mindanao	2025	12	19	4	62	138	138	25
Mindanao	2025	12	19	5	65	138	138	25
Mindanao	2025	12	19	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	19	7	67	138	138	25
Mindanao	2025	12	19	8	73	138	138	25
Mindanao	2025	12	19	9	82	138	138	25
Mindanao	2025	12	19	10	88	138	138	25
Mindanao	2025	12	19	11	94	138	138	25
Mindanao	2025	12	19	12	92	138	138	25
Mindanao	2025	12	19	13	94	138	138	25
Mindanao	2025	12	19	14	100	138	138	25
Mindanao	2025	12	19	15	97	138	138	25
Mindanao	2025	12	19	16	96	138	138	25
Mindanao	2025	12	19	17	92	138	138	25
Mindanao	2025	12	19	18	102	138	138	25
Mindanao	2025	12	19	19	96	138	138	25
Mindanao	2025	12	19	20	92	138	138	25
Mindanao	2025	12	19	21	88	138	138	25
Mindanao	2025	12	19	22	84	138	138	25
Mindanao	2025	12	19	23	78	138	138	25
Mindanao	2025	12	19	24	73	138	138	25
Mindanao	2025	12	20	1	69	138	138	25
Mindanao	2025	12	20	2	65	138	138	25
Mindanao	2025	12	20	3	63	138	138	25
Mindanao	2025	12	20	4	62	138	138	25
Mindanao	2025	12	20	5	62	138	138	25
Mindanao	2025	12	20	6	65	138	138	25
Mindanao	2025	12	20	7	64	138	138	25
Mindanao	2025	12	20	8	67	138	138	25
Mindanao	2025	12	20	9	77	138	138	25
Mindanao	2025	12	20	10	84	138	138	25
Mindanao	2025	12	20	11	87	138	138	25
Mindanao	2025	12	20	12	86	138	138	25
Mindanao	2025	12	20	13	88	138	138	25
Mindanao	2025	12	20	14	92	138	138	25
Mindanao	2025	12	20	15	92	138	138	25
Mindanao	2025	12	20	16	88	138	138	25
Mindanao	2025	12	20	17	86	138	138	25
Mindanao	2025	12	20	18	99	138	138	25
Mindanao	2025	12	20	19	95	138	138	25
Mindanao	2025	12	20	20	91	138	138	25
Mindanao	2025	12	20	21	87	138	138	25
Mindanao	2025	12	20	22	82	138	138	25
Mindanao	2025	12	20	23	77	138	138	25
Mindanao	2025	12	20	24	71	138	138	25
Mindanao	2025	12	21	1	68	138	138	25
Mindanao	2025	12	21	2	64	138	138	25
Mindanao	2025	12	21	3	63	138	138	25
Mindanao	2025	12	21	4	61	138	138	25
Mindanao	2025	12	21	5	61	138	138	25
Mindanao	2025	12	21	6	63	138	138	25
Mindanao	2025	12	21	7	60	138	138	25
Mindanao	2025	12	21	8	61	138	138	25
Mindanao	2025	12	21	9	65	138	138	25
Mindanao	2025	12	21	10	72	138	138	25
Mindanao	2025	12	21	11	76	138	138	25
Mindanao	2025	12	21	12	76	138	138	25
Mindanao	2025	12	21	13	76	138	138	25
Mindanao	2025	12	21	14	78	138	138	25
Mindanao	2025	12	21	15	76	138	138	25
Mindanao	2025	12	21	16	75	138	138	25
Mindanao	2025	12	21	17	73	138	138	25
Mindanao	2025	12	21	18	87	138	138	25
Mindanao	2025	12	21	19	83	138	138	25
Mindanao	2025	12	21	20	81	138	138	25
Mindanao	2025	12	21	21	79	138	138	25
Mindanao	2025	12	21	22	74	138	138	25
Mindanao	2025	12	21	23	67	138	138	25
Mindanao	2025	12	21	24	64	138	138	25
Mindanao	2025	12	22	1	62	138	138	25
Mindanao	2025	12	22	2	58	138	138	25
Mindanao	2025	12	22	3	58	138	138	25
Mindanao	2025	12	22	4	59	138	138	25
Mindanao	2025	12	22	5	58	138	138	25
Mindanao	2025	12	22	6	63	138	138	25
Mindanao	2025	12	22	7	64	138	138	25
Mindanao	2025	12	22	8	69	138	138	25
Mindanao	2025	12	22	9	80	138	138	25
Mindanao	2025	12	22	10	87	138	138	25
Mindanao	2025	12	22	11	90	138	138	25
Mindanao	2025	12	22	12	86	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	22	13	86	138	138	25
Mindanao	2025	12	22	14	90	138	138	25
Mindanao	2025	12	22	15	92	138	138	25
Mindanao	2025	12	22	16	91	138	138	25
Mindanao	2025	12	22	17	89	138	138	25
Mindanao	2025	12	22	18	97	138	138	25
Mindanao	2025	12	22	19	91	138	138	25
Mindanao	2025	12	22	20	87	138	138	25
Mindanao	2025	12	22	21	84	138	138	25
Mindanao	2025	12	22	22	79	138	138	25
Mindanao	2025	12	22	23	72	138	138	25
Mindanao	2025	12	22	24	68	138	138	25
Mindanao	2025	12	23	1	64	138	138	25
Mindanao	2025	12	23	2	61	138	138	25
Mindanao	2025	12	23	3	59	138	138	25
Mindanao	2025	12	23	4	60	138	138	25
Mindanao	2025	12	23	5	60	138	138	25
Mindanao	2025	12	23	6	65	138	138	25
Mindanao	2025	12	23	7	63	138	138	25
Mindanao	2025	12	23	8	70	138	138	25
Mindanao	2025	12	23	9	82	138	138	25
Mindanao	2025	12	23	10	87	138	138	25
Mindanao	2025	12	23	11	93	138	138	25
Mindanao	2025	12	23	12	90	138	138	25
Mindanao	2025	12	23	13	93	138	138	25
Mindanao	2025	12	23	14	97	138	138	25
Mindanao	2025	12	23	15	96	138	138	25
Mindanao	2025	12	23	16	94	138	138	25
Mindanao	2025	12	23	17	92	138	138	25
Mindanao	2025	12	23	18	99	138	138	25
Mindanao	2025	12	23	19	93	138	138	25
Mindanao	2025	12	23	20	89	138	138	25
Mindanao	2025	12	23	21	84	138	138	25
Mindanao	2025	12	23	22	78	138	138	25
Mindanao	2025	12	23	23	73	138	138	25
Mindanao	2025	12	23	24	68	138	138	25
Mindanao	2025	12	24	1	66	138	138	25
Mindanao	2025	12	24	2	63	138	138	25
Mindanao	2025	12	24	3	61	138	138	25
Mindanao	2025	12	24	4	59	138	138	25
Mindanao	2025	12	24	5	59	138	138	25
Mindanao	2025	12	24	6	60	138	138	25
Mindanao	2025	12	24	7	60	138	138	25
Mindanao	2025	12	24	8	63	138	138	25
Mindanao	2025	12	24	9	69	138	138	25
Mindanao	2025	12	24	10	72	138	138	25
Mindanao	2025	12	24	11	76	138	138	25
Mindanao	2025	12	24	12	76	138	138	25
Mindanao	2025	12	24	13	77	138	138	25
Mindanao	2025	12	24	14	78	138	138	25
Mindanao	2025	12	24	15	77	138	138	25
Mindanao	2025	12	24	16	76	138	138	25
Mindanao	2025	12	24	17	76	138	138	25
Mindanao	2025	12	24	18	85	138	138	25
Mindanao	2025	12	24	19	75	138	138	25
Mindanao	2025	12	24	20	72	138	138	25
Mindanao	2025	12	24	21	69	138	138	25
Mindanao	2025	12	24	22	68	138	138	25
Mindanao	2025	12	24	23	66	138	138	25
Mindanao	2025	12	24	24	63	138	138	25
Mindanao	2025	12	25	1	60	138	138	25
Mindanao	2025	12	25	2	56	138	138	25
Mindanao	2025	12	25	3	54	138	138	25
Mindanao	2025	12	25	4	52	138	138	25
Mindanao	2025	12	25	5	52	138	138	25
Mindanao	2025	12	25	6	51	138	138	25
Mindanao	2025	12	25	7	52	138	138	25
Mindanao	2025	12	25	8	52	138	138	25
Mindanao	2025	12	25	9	53	138	138	25
Mindanao	2025	12	25	10	56	138	138	25
Mindanao	2025	12	25	11	57	138	138	25
Mindanao	2025	12	25	12	58	138	138	25
Mindanao	2025	12	25	13	58	138	138	25
Mindanao	2025	12	25	14	55	138	138	25
Mindanao	2025	12	25	15	57	138	138	25
Mindanao	2025	12	25	16	57	138	138	25
Mindanao	2025	12	25	17	59	138	138	25
Mindanao	2025	12	25	18	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	25	19	67	138	138	25
Mindanao	2025	12	25	20	65	138	138	25
Mindanao	2025	12	25	21	62	138	138	25
Mindanao	2025	12	25	22	58	138	138	25
Mindanao	2025	12	25	23	55	138	138	25
Mindanao	2025	12	25	24	52	138	138	25
Mindanao	2025	12	26	1	70	138	138	25
Mindanao	2025	12	26	2	66	138	138	25
Mindanao	2025	12	26	3	63	138	138	25
Mindanao	2025	12	26	4	59	138	138	25
Mindanao	2025	12	26	5	61	138	138	25
Mindanao	2025	12	26	6	63	138	138	25
Mindanao	2025	12	26	7	64	138	138	25
Mindanao	2025	12	26	8	71	138	138	25
Mindanao	2025	12	26	9	80	138	138	25
Mindanao	2025	12	26	10	86	138	138	25
Mindanao	2025	12	26	11	90	138	138	25
Mindanao	2025	12	26	12	90	138	138	25
Mindanao	2025	12	26	13	89	138	138	25
Mindanao	2025	12	26	14	96	138	138	25
Mindanao	2025	12	26	15	94	138	138	25
Mindanao	2025	12	26	16	91	138	138	25
Mindanao	2025	12	26	17	88	138	138	25
Mindanao	2025	12	26	18	97	138	138	25
Mindanao	2025	12	26	19	92	138	138	25
Mindanao	2025	12	26	20	89	138	138	25
Mindanao	2025	12	26	21	85	138	138	25
Mindanao	2025	12	26	22	81	138	138	25
Mindanao	2025	12	26	23	76	138	138	25
Mindanao	2025	12	26	24	70	138	138	25
Mindanao	2025	12	27	1	69	138	138	25
Mindanao	2025	12	27	2	65	138	138	25
Mindanao	2025	12	27	3	63	138	138	25
Mindanao	2025	12	27	4	62	138	138	25
Mindanao	2025	12	27	5	62	138	138	25
Mindanao	2025	12	27	6	65	138	138	25
Mindanao	2025	12	27	7	64	138	138	25
Mindanao	2025	12	27	8	67	138	138	25
Mindanao	2025	12	27	9	77	138	138	25
Mindanao	2025	12	27	10	84	138	138	25
Mindanao	2025	12	27	11	87	138	138	25
Mindanao	2025	12	27	12	86	138	138	25
Mindanao	2025	12	27	13	88	138	138	25
Mindanao	2025	12	27	14	92	138	138	25
Mindanao	2025	12	27	15	92	138	138	25
Mindanao	2025	12	27	16	88	138	138	25
Mindanao	2025	12	27	17	86	138	138	25
Mindanao	2025	12	27	18	99	138	138	25
Mindanao	2025	12	27	19	95	138	138	25
Mindanao	2025	12	27	20	91	138	138	25
Mindanao	2025	12	27	21	87	138	138	25
Mindanao	2025	12	27	22	82	138	138	25
Mindanao	2025	12	27	23	77	138	138	25
Mindanao	2025	12	27	24	71	138	138	25
Mindanao	2025	12	28	1	68	138	138	25
Mindanao	2025	12	28	2	64	138	138	25
Mindanao	2025	12	28	3	63	138	138	25
Mindanao	2025	12	28	4	61	138	138	25
Mindanao	2025	12	28	5	61	138	138	25
Mindanao	2025	12	28	6	63	138	138	25
Mindanao	2025	12	28	7	60	138	138	25
Mindanao	2025	12	28	8	61	138	138	25
Mindanao	2025	12	28	9	65	138	138	25
Mindanao	2025	12	28	10	72	138	138	25
Mindanao	2025	12	28	11	76	138	138	25
Mindanao	2025	12	28	12	76	138	138	25
Mindanao	2025	12	28	13	76	138	138	25
Mindanao	2025	12	28	14	78	138	138	25
Mindanao	2025	12	28	15	76	138	138	25
Mindanao	2025	12	28	16	75	138	138	25
Mindanao	2025	12	28	17	73	138	138	25
Mindanao	2025	12	28	18	87	138	138	25
Mindanao	2025	12	28	19	83	138	138	25
Mindanao	2025	12	28	20	81	138	138	25
Mindanao	2025	12	28	21	79	138	138	25
Mindanao	2025	12	28	22	74	138	138	25
Mindanao	2025	12	28	23	67	138	138	25
Mindanao	2025	12	28	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2025	12	29	1	50	138	138	25
Mindanao	2025	12	29	2	49	138	138	25
Mindanao	2025	12	29	3	47	138	138	25
Mindanao	2025	12	29	4	47	138	138	25
Mindanao	2025	12	29	5	48	138	138	25
Mindanao	2025	12	29	6	50	138	138	25
Mindanao	2025	12	29	7	50	138	138	25
Mindanao	2025	12	29	8	54	138	138	25
Mindanao	2025	12	29	9	60	138	138	25
Mindanao	2025	12	29	10	66	138	138	25
Mindanao	2025	12	29	11	68	138	138	25
Mindanao	2025	12	29	12	67	138	138	25
Mindanao	2025	12	29	13	66	138	138	25
Mindanao	2025	12	29	14	68	138	138	25
Mindanao	2025	12	29	15	68	138	138	25
Mindanao	2025	12	29	16	70	138	138	25
Mindanao	2025	12	29	17	72	138	138	25
Mindanao	2025	12	29	18	81	138	138	25
Mindanao	2025	12	29	19	76	138	138	25
Mindanao	2025	12	29	20	73	138	138	25
Mindanao	2025	12	29	21	69	138	138	25
Mindanao	2025	12	29	22	64	138	138	25
Mindanao	2025	12	29	23	60	138	138	25
Mindanao	2025	12	29	24	56	138	138	25
Mindanao	2025	12	30	1	63	138	138	25
Mindanao	2025	12	30	2	60	138	138	25
Mindanao	2025	12	30	3	58	138	138	25
Mindanao	2025	12	30	4	56	138	138	25
Mindanao	2025	12	30	5	57	138	138	25
Mindanao	2025	12	30	6	59	138	138	25
Mindanao	2025	12	30	7	58	138	138	25
Mindanao	2025	12	30	8	59	138	138	25
Mindanao	2025	12	30	9	66	138	138	25
Mindanao	2025	12	30	10	71	138	138	25
Mindanao	2025	12	30	11	75	138	138	25
Mindanao	2025	12	30	12	77	138	138	25
Mindanao	2025	12	30	13	77	138	138	25
Mindanao	2025	12	30	14	79	138	138	25
Mindanao	2025	12	30	15	79	138	138	25
Mindanao	2025	12	30	16	77	138	138	25
Mindanao	2025	12	30	17	77	138	138	25
Mindanao	2025	12	30	18	88	138	138	25
Mindanao	2025	12	30	19	85	138	138	25
Mindanao	2025	12	30	20	83	138	138	25
Mindanao	2025	12	30	21	80	138	138	25
Mindanao	2025	12	30	22	75	138	138	25
Mindanao	2025	12	30	23	70	138	138	25
Mindanao	2025	12	30	24	64	138	138	25
Mindanao	2025	12	31	1	59	138	138	25
Mindanao	2025	12	31	2	56	138	138	25
Mindanao	2025	12	31	3	55	138	138	25
Mindanao	2025	12	31	4	54	138	138	25
Mindanao	2025	12	31	5	54	138	138	25
Mindanao	2025	12	31	6	55	138	138	25
Mindanao	2025	12	31	7	55	138	138	25
Mindanao	2025	12	31	8	57	138	138	25
Mindanao	2025	12	31	9	63	138	138	25
Mindanao	2025	12	31	10	68	138	138	25
Mindanao	2025	12	31	11	71	138	138	25
Mindanao	2025	12	31	12	73	138	138	25
Mindanao	2025	12	31	13	75	138	138	25
Mindanao	2025	12	31	14	76	138	138	25
Mindanao	2025	12	31	15	75	138	138	25
Mindanao	2025	12	31	16	74	138	138	25
Mindanao	2025	12	31	17	75	138	138	25
Mindanao	2025	12	31	18	83	138	138	25
Mindanao	2025	12	31	19	79	138	138	25
Mindanao	2025	12	31	20	74	138	138	25
Mindanao	2025	12	31	21	72	138	138	25
Mindanao	2025	12	31	22	71	138	138	25
Mindanao	2025	12	31	23	69	138	138	25
Mindanao	2025	12	31	24	69	138	138	25
Mindanao	2026	1	1	1	67	138	138	25
Mindanao	2026	1	1	2	62	138	138	25
Mindanao	2026	1	1	3	59	138	138	25
Mindanao	2026	1	1	4	57	138	138	25
Mindanao	2026	1	1	5	57	138	138	25
Mindanao	2026	1	1	6	57	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	1	7	56	138	138	25
Mindanao	2026	1	1	8	56	138	138	25
Mindanao	2026	1	1	9	55	138	138	25
Mindanao	2026	1	1	10	56	138	138	25
Mindanao	2026	1	1	11	58	138	138	25
Mindanao	2026	1	1	12	59	138	138	25
Mindanao	2026	1	1	13	61	138	138	25
Mindanao	2026	1	1	14	64	138	138	25
Mindanao	2026	1	1	15	64	138	138	25
Mindanao	2026	1	1	16	64	138	138	25
Mindanao	2026	1	1	17	66	138	138	25
Mindanao	2026	1	1	18	79	138	138	25
Mindanao	2026	1	1	19	79	138	138	25
Mindanao	2026	1	1	20	77	138	138	25
Mindanao	2026	1	1	21	73	138	138	25
Mindanao	2026	1	1	22	70	138	138	25
Mindanao	2026	1	1	23	64	138	138	25
Mindanao	2026	1	1	24	61	138	138	25
Mindanao	2026	1	2	1	71	138	138	25
Mindanao	2026	1	2	2	67	138	138	25
Mindanao	2026	1	2	3	64	138	138	25
Mindanao	2026	1	2	4	63	138	138	25
Mindanao	2026	1	2	5	66	138	138	25
Mindanao	2026	1	2	6	71	138	138	25
Mindanao	2026	1	2	7	70	138	138	25
Mindanao	2026	1	2	8	76	138	138	25
Mindanao	2026	1	2	9	85	138	138	25
Mindanao	2026	1	2	10	93	138	138	25
Mindanao	2026	1	2	11	100	138	138	25
Mindanao	2026	1	2	12	96	138	138	25
Mindanao	2026	1	2	13	101	138	138	25
Mindanao	2026	1	2	14	109	138	138	25
Mindanao	2026	1	2	15	105	138	138	25
Mindanao	2026	1	2	16	98	138	138	25
Mindanao	2026	1	2	17	94	138	138	25
Mindanao	2026	1	2	18	99	138	138	25
Mindanao	2026	1	2	19	98	138	138	25
Mindanao	2026	1	2	20	96	138	138	25
Mindanao	2026	1	2	21	93	138	138	25
Mindanao	2026	1	2	22	85	138	138	25
Mindanao	2026	1	2	23	81	138	138	25
Mindanao	2026	1	2	24	74	138	138	25
Mindanao	2026	1	3	1	71	138	138	25
Mindanao	2026	1	3	2	67	138	138	25
Mindanao	2026	1	3	3	64	138	138	25
Mindanao	2026	1	3	4	63	138	138	25
Mindanao	2026	1	3	5	66	138	138	25
Mindanao	2026	1	3	6	69	138	138	25
Mindanao	2026	1	3	7	67	138	138	25
Mindanao	2026	1	3	8	70	138	138	25
Mindanao	2026	1	3	9	79	138	138	25
Mindanao	2026	1	3	10	86	138	138	25
Mindanao	2026	1	3	11	89	138	138	25
Mindanao	2026	1	3	12	90	138	138	25
Mindanao	2026	1	3	13	91	138	138	25
Mindanao	2026	1	3	14	97	138	138	25
Mindanao	2026	1	3	15	94	138	138	25
Mindanao	2026	1	3	16	93	138	138	25
Mindanao	2026	1	3	17	89	138	138	25
Mindanao	2026	1	3	18	98	138	138	25
Mindanao	2026	1	3	19	97	138	138	25
Mindanao	2026	1	3	20	94	138	138	25
Mindanao	2026	1	3	21	92	138	138	25
Mindanao	2026	1	3	22	84	138	138	25
Mindanao	2026	1	3	23	80	138	138	25
Mindanao	2026	1	3	24	73	138	138	25
Mindanao	2026	1	4	1	59	138	138	25
Mindanao	2026	1	4	2	56	138	138	25
Mindanao	2026	1	4	3	55	138	138	25
Mindanao	2026	1	4	4	54	138	138	25
Mindanao	2026	1	4	5	56	138	138	25
Mindanao	2026	1	4	6	57	138	138	25
Mindanao	2026	1	4	7	59	138	138	25
Mindanao	2026	1	4	8	59	138	138	25
Mindanao	2026	1	4	9	61	138	138	25
Mindanao	2026	1	4	10	65	138	138	25
Mindanao	2026	1	4	11	66	138	138	25
Mindanao	2026	1	4	12	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	4	13	66	138	138	25
Mindanao	2026	1	4	14	67	138	138	25
Mindanao	2026	1	4	15	66	138	138	25
Mindanao	2026	1	4	16	67	138	138	25
Mindanao	2026	1	4	17	67	138	138	25
Mindanao	2026	1	4	18	80	138	138	25
Mindanao	2026	1	4	19	81	138	138	25
Mindanao	2026	1	4	20	77	138	138	25
Mindanao	2026	1	4	21	76	138	138	25
Mindanao	2026	1	4	22	71	138	138	25
Mindanao	2026	1	4	23	66	138	138	25
Mindanao	2026	1	4	24	62	138	138	25
Mindanao	2026	1	5	1	60	138	138	25
Mindanao	2026	1	5	2	58	138	138	25
Mindanao	2026	1	5	3	55	138	138	25
Mindanao	2026	1	5	4	56	138	138	25
Mindanao	2026	1	5	5	58	138	138	25
Mindanao	2026	1	5	6	62	138	138	25
Mindanao	2026	1	5	7	63	138	138	25
Mindanao	2026	1	5	8	72	138	138	25
Mindanao	2026	1	5	9	81	138	138	25
Mindanao	2026	1	5	10	89	138	138	25
Mindanao	2026	1	5	11	95	138	138	25
Mindanao	2026	1	5	12	93	138	138	25
Mindanao	2026	1	5	13	95	138	138	25
Mindanao	2026	1	5	14	99	138	138	25
Mindanao	2026	1	5	15	100	138	138	25
Mindanao	2026	1	5	16	96	138	138	25
Mindanao	2026	1	5	17	92	138	138	25
Mindanao	2026	1	5	18	98	138	138	25
Mindanao	2026	1	5	19	94	138	138	25
Mindanao	2026	1	5	20	90	138	138	25
Mindanao	2026	1	5	21	86	138	138	25
Mindanao	2026	1	5	22	81	138	138	25
Mindanao	2026	1	5	23	76	138	138	25
Mindanao	2026	1	5	24	73	138	138	25
Mindanao	2026	1	6	1	70	138	138	25
Mindanao	2026	1	6	2	67	138	138	25
Mindanao	2026	1	6	3	65	138	138	25
Mindanao	2026	1	6	4	63	138	138	25
Mindanao	2026	1	6	5	66	138	138	25
Mindanao	2026	1	6	6	71	138	138	25
Mindanao	2026	1	6	7	68	138	138	25
Mindanao	2026	1	6	8	72	138	138	25
Mindanao	2026	1	6	9	83	138	138	25
Mindanao	2026	1	6	10	86	138	138	25
Mindanao	2026	1	6	11	99	138	138	25
Mindanao	2026	1	6	12	95	138	138	25
Mindanao	2026	1	6	13	97	138	138	25
Mindanao	2026	1	6	14	103	138	138	25
Mindanao	2026	1	6	15	104	138	138	25
Mindanao	2026	1	6	16	100	138	138	25
Mindanao	2026	1	6	17	93	138	138	25
Mindanao	2026	1	6	18	101	138	138	25
Mindanao	2026	1	6	19	98	138	138	25
Mindanao	2026	1	6	20	93	138	138	25
Mindanao	2026	1	6	21	91	138	138	25
Mindanao	2026	1	6	22	84	138	138	25
Mindanao	2026	1	6	23	77	138	138	25
Mindanao	2026	1	6	24	72	138	138	25
Mindanao	2026	1	7	1	68	138	138	25
Mindanao	2026	1	7	2	66	138	138	25
Mindanao	2026	1	7	3	64	138	138	25
Mindanao	2026	1	7	4	62	138	138	25
Mindanao	2026	1	7	5	64	138	138	25
Mindanao	2026	1	7	6	71	138	138	25
Mindanao	2026	1	7	7	68	138	138	25
Mindanao	2026	1	7	8	76	138	138	25
Mindanao	2026	1	7	9	86	138	138	25
Mindanao	2026	1	7	10	94	138	138	25
Mindanao	2026	1	7	11	98	138	138	25
Mindanao	2026	1	7	12	98	138	138	25
Mindanao	2026	1	7	13	100	138	138	25
Mindanao	2026	1	7	14	105	138	138	25
Mindanao	2026	1	7	15	102	138	138	25
Mindanao	2026	1	7	16	99	138	138	25
Mindanao	2026	1	7	17	92	138	138	25
Mindanao	2026	1	7	18	99	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	7	19	97	138	138	25
Mindanao	2026	1	7	20	93	138	138	25
Mindanao	2026	1	7	21	89	138	138	25
Mindanao	2026	1	7	22	82	138	138	25
Mindanao	2026	1	7	23	78	138	138	25
Mindanao	2026	1	7	24	71	138	138	25
Mindanao	2026	1	8	1	69	138	138	25
Mindanao	2026	1	8	2	66	138	138	25
Mindanao	2026	1	8	3	64	138	138	25
Mindanao	2026	1	8	4	63	138	138	25
Mindanao	2026	1	8	5	65	138	138	25
Mindanao	2026	1	8	6	70	138	138	25
Mindanao	2026	1	8	7	70	138	138	25
Mindanao	2026	1	8	8	75	138	138	25
Mindanao	2026	1	8	9	88	138	138	25
Mindanao	2026	1	8	10	95	138	138	25
Mindanao	2026	1	8	11	100	138	138	25
Mindanao	2026	1	8	12	97	138	138	25
Mindanao	2026	1	8	13	101	138	138	25
Mindanao	2026	1	8	14	106	138	138	25
Mindanao	2026	1	8	15	105	138	138	25
Mindanao	2026	1	8	16	103	138	138	25
Mindanao	2026	1	8	17	94	138	138	25
Mindanao	2026	1	8	18	102	138	138	25
Mindanao	2026	1	8	19	98	138	138	25
Mindanao	2026	1	8	20	94	138	138	25
Mindanao	2026	1	8	21	91	138	138	25
Mindanao	2026	1	8	22	85	138	138	25
Mindanao	2026	1	8	23	80	138	138	25
Mindanao	2026	1	8	24	75	138	138	25
Mindanao	2026	1	9	1	71	138	138	25
Mindanao	2026	1	9	2	67	138	138	25
Mindanao	2026	1	9	3	64	138	138	25
Mindanao	2026	1	9	4	63	138	138	25
Mindanao	2026	1	9	5	66	138	138	25
Mindanao	2026	1	9	6	71	138	138	25
Mindanao	2026	1	9	7	70	138	138	25
Mindanao	2026	1	9	8	76	138	138	25
Mindanao	2026	1	9	9	85	138	138	25
Mindanao	2026	1	9	10	93	138	138	25
Mindanao	2026	1	9	11	100	138	138	25
Mindanao	2026	1	9	12	96	138	138	25
Mindanao	2026	1	9	13	101	138	138	25
Mindanao	2026	1	9	14	109	138	138	25
Mindanao	2026	1	9	15	105	138	138	25
Mindanao	2026	1	9	16	98	138	138	25
Mindanao	2026	1	9	17	94	138	138	25
Mindanao	2026	1	9	18	99	138	138	25
Mindanao	2026	1	9	19	98	138	138	25
Mindanao	2026	1	9	20	96	138	138	25
Mindanao	2026	1	9	21	93	138	138	25
Mindanao	2026	1	9	22	85	138	138	25
Mindanao	2026	1	9	23	81	138	138	25
Mindanao	2026	1	9	24	74	138	138	25
Mindanao	2026	1	10	1	71	138	138	25
Mindanao	2026	1	10	2	67	138	138	25
Mindanao	2026	1	10	3	64	138	138	25
Mindanao	2026	1	10	4	63	138	138	25
Mindanao	2026	1	10	5	66	138	138	25
Mindanao	2026	1	10	6	69	138	138	25
Mindanao	2026	1	10	7	67	138	138	25
Mindanao	2026	1	10	8	70	138	138	25
Mindanao	2026	1	10	9	79	138	138	25
Mindanao	2026	1	10	10	86	138	138	25
Mindanao	2026	1	10	11	89	138	138	25
Mindanao	2026	1	10	12	90	138	138	25
Mindanao	2026	1	10	13	91	138	138	25
Mindanao	2026	1	10	14	97	138	138	25
Mindanao	2026	1	10	15	94	138	138	25
Mindanao	2026	1	10	16	93	138	138	25
Mindanao	2026	1	10	17	89	138	138	25
Mindanao	2026	1	10	18	98	138	138	25
Mindanao	2026	1	10	19	97	138	138	25
Mindanao	2026	1	10	20	94	138	138	25
Mindanao	2026	1	10	21	92	138	138	25
Mindanao	2026	1	10	22	84	138	138	25
Mindanao	2026	1	10	23	80	138	138	25
Mindanao	2026	1	10	24	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	11	1	69	138	138	25
Mindanao	2026	1	11	2	65	138	138	25
Mindanao	2026	1	11	3	64	138	138	25
Mindanao	2026	1	11	4	62	138	138	25
Mindanao	2026	1	11	5	63	138	138	25
Mindanao	2026	1	11	6	64	138	138	25
Mindanao	2026	1	11	7	63	138	138	25
Mindanao	2026	1	11	8	63	138	138	25
Mindanao	2026	1	11	9	68	138	138	25
Mindanao	2026	1	11	10	75	138	138	25
Mindanao	2026	1	11	11	79	138	138	25
Mindanao	2026	1	11	12	80	138	138	25
Mindanao	2026	1	11	13	82	138	138	25
Mindanao	2026	1	11	14	85	138	138	25
Mindanao	2026	1	11	15	85	138	138	25
Mindanao	2026	1	11	16	83	138	138	25
Mindanao	2026	1	11	17	82	138	138	25
Mindanao	2026	1	11	18	93	138	138	25
Mindanao	2026	1	11	19	93	138	138	25
Mindanao	2026	1	11	20	91	138	138	25
Mindanao	2026	1	11	21	89	138	138	25
Mindanao	2026	1	11	22	84	138	138	25
Mindanao	2026	1	11	23	77	138	138	25
Mindanao	2026	1	11	24	73	138	138	25
Mindanao	2026	1	12	1	70	138	138	25
Mindanao	2026	1	12	2	65	138	138	25
Mindanao	2026	1	12	3	63	138	138	25
Mindanao	2026	1	12	4	63	138	138	25
Mindanao	2026	1	12	5	65	138	138	25
Mindanao	2026	1	12	6	70	138	138	25
Mindanao	2026	1	12	7	69	138	138	25
Mindanao	2026	1	12	8	76	138	138	25
Mindanao	2026	1	12	9	88	138	138	25
Mindanao	2026	1	12	10	97	138	138	25
Mindanao	2026	1	12	11	102	138	138	25
Mindanao	2026	1	12	12	102	138	138	25
Mindanao	2026	1	12	13	105	138	138	25
Mindanao	2026	1	12	14	110	138	138	25
Mindanao	2026	1	12	15	110	138	138	25
Mindanao	2026	1	12	16	108	138	138	25
Mindanao	2026	1	12	17	98	138	138	25
Mindanao	2026	1	12	18	104	138	138	25
Mindanao	2026	1	12	19	102	138	138	25
Mindanao	2026	1	12	20	99	138	138	25
Mindanao	2026	1	12	21	96	138	138	25
Mindanao	2026	1	12	22	89	138	138	25
Mindanao	2026	1	12	23	82	138	138	25
Mindanao	2026	1	12	24	77	138	138	25
Mindanao	2026	1	13	1	73	138	138	25
Mindanao	2026	1	13	2	70	138	138	25
Mindanao	2026	1	13	3	66	138	138	25
Mindanao	2026	1	13	4	66	138	138	25
Mindanao	2026	1	13	5	68	138	138	25
Mindanao	2026	1	13	6	73	138	138	25
Mindanao	2026	1	13	7	72	138	138	25
Mindanao	2026	1	13	8	78	138	138	25
Mindanao	2026	1	13	9	91	138	138	25
Mindanao	2026	1	13	10	103	138	138	25
Mindanao	2026	1	13	11	107	138	138	25
Mindanao	2026	1	13	12	107	138	138	25
Mindanao	2026	1	13	13	108	138	138	25
Mindanao	2026	1	13	14	116	138	138	25
Mindanao	2026	1	13	15	111	138	138	25
Mindanao	2026	1	13	16	110	138	138	25
Mindanao	2026	1	13	17	102	138	138	25
Mindanao	2026	1	13	18	106	138	138	25
Mindanao	2026	1	13	19	103	138	138	25
Mindanao	2026	1	13	20	101	138	138	25
Mindanao	2026	1	13	21	97	138	138	25
Mindanao	2026	1	13	22	92	138	138	25
Mindanao	2026	1	13	23	85	138	138	25
Mindanao	2026	1	13	24	80	138	138	25
Mindanao	2026	1	14	1	76	138	138	25
Mindanao	2026	1	14	2	73	138	138	25
Mindanao	2026	1	14	3	70	138	138	25
Mindanao	2026	1	14	4	69	138	138	25
Mindanao	2026	1	14	5	71	138	138	25
Mindanao	2026	1	14	6	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	14	7	75	138	138	25
Mindanao	2026	1	14	8	80	138	138	25
Mindanao	2026	1	14	9	90	138	138	25
Mindanao	2026	1	14	10	98	138	138	25
Mindanao	2026	1	14	11	103	138	138	25
Mindanao	2026	1	14	12	103	138	138	25
Mindanao	2026	1	14	13	108	138	138	25
Mindanao	2026	1	14	14	111	138	138	25
Mindanao	2026	1	14	15	112	138	138	25
Mindanao	2026	1	14	16	109	138	138	25
Mindanao	2026	1	14	17	100	138	138	25
Mindanao	2026	1	14	18	105	138	138	25
Mindanao	2026	1	14	19	103	138	138	25
Mindanao	2026	1	14	20	99	138	138	25
Mindanao	2026	1	14	21	94	138	138	25
Mindanao	2026	1	14	22	89	138	138	25
Mindanao	2026	1	14	23	83	138	138	25
Mindanao	2026	1	14	24	78	138	138	25
Mindanao	2026	1	15	1	74	138	138	25
Mindanao	2026	1	15	2	70	138	138	25
Mindanao	2026	1	15	3	67	138	138	25
Mindanao	2026	1	15	4	66	138	138	25
Mindanao	2026	1	15	5	69	138	138	25
Mindanao	2026	1	15	6	74	138	138	25
Mindanao	2026	1	15	7	74	138	138	25
Mindanao	2026	1	15	8	78	138	138	25
Mindanao	2026	1	15	9	88	138	138	25
Mindanao	2026	1	15	10	94	138	138	25
Mindanao	2026	1	15	11	99	138	138	25
Mindanao	2026	1	15	12	97	138	138	25
Mindanao	2026	1	15	13	97	138	138	25
Mindanao	2026	1	15	14	102	138	138	25
Mindanao	2026	1	15	15	101	138	138	25
Mindanao	2026	1	15	16	98	138	138	25
Mindanao	2026	1	15	17	93	138	138	25
Mindanao	2026	1	15	18	98	138	138	25
Mindanao	2026	1	15	19	95	138	138	25
Mindanao	2026	1	15	20	91	138	138	25
Mindanao	2026	1	15	21	87	138	138	25
Mindanao	2026	1	15	22	80	138	138	25
Mindanao	2026	1	15	23	75	138	138	25
Mindanao	2026	1	15	24	70	138	138	25
Mindanao	2026	1	16	1	66	138	138	25
Mindanao	2026	1	16	2	62	138	138	25
Mindanao	2026	1	16	3	60	138	138	25
Mindanao	2026	1	16	4	60	138	138	25
Mindanao	2026	1	16	5	62	138	138	25
Mindanao	2026	1	16	6	66	138	138	25
Mindanao	2026	1	16	7	67	138	138	25
Mindanao	2026	1	16	8	72	138	138	25
Mindanao	2026	1	16	9	82	138	138	25
Mindanao	2026	1	16	10	87	138	138	25
Mindanao	2026	1	16	11	91	138	138	25
Mindanao	2026	1	16	12	90	138	138	25
Mindanao	2026	1	16	13	89	138	138	25
Mindanao	2026	1	16	14	92	138	138	25
Mindanao	2026	1	16	15	92	138	138	25
Mindanao	2026	1	16	16	91	138	138	25
Mindanao	2026	1	16	17	88	138	138	25
Mindanao	2026	1	16	18	94	138	138	25
Mindanao	2026	1	16	19	92	138	138	25
Mindanao	2026	1	16	20	88	138	138	25
Mindanao	2026	1	16	21	83	138	138	25
Mindanao	2026	1	16	22	75	138	138	25
Mindanao	2026	1	16	23	71	138	138	25
Mindanao	2026	1	16	24	66	138	138	25
Mindanao	2026	1	17	1	63	138	138	25
Mindanao	2026	1	17	2	62	138	138	25
Mindanao	2026	1	17	3	60	138	138	25
Mindanao	2026	1	17	4	59	138	138	25
Mindanao	2026	1	17	5	61	138	138	25
Mindanao	2026	1	17	6	65	138	138	25
Mindanao	2026	1	17	7	66	138	138	25
Mindanao	2026	1	17	8	68	138	138	25
Mindanao	2026	1	17	9	75	138	138	25
Mindanao	2026	1	17	10	79	138	138	25
Mindanao	2026	1	17	11	83	138	138	25
Mindanao	2026	1	17	12	81	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	17	13	82	138	138	25
Mindanao	2026	1	17	14	82	138	138	25
Mindanao	2026	1	17	15	84	138	138	25
Mindanao	2026	1	17	16	84	138	138	25
Mindanao	2026	1	17	17	83	138	138	25
Mindanao	2026	1	17	18	91	138	138	25
Mindanao	2026	1	17	19	89	138	138	25
Mindanao	2026	1	17	20	85	138	138	25
Mindanao	2026	1	17	21	81	138	138	25
Mindanao	2026	1	17	22	75	138	138	25
Mindanao	2026	1	17	23	71	138	138	25
Mindanao	2026	1	17	24	67	138	138	25
Mindanao	2026	1	18	1	63	138	138	25
Mindanao	2026	1	18	2	61	138	138	25
Mindanao	2026	1	18	3	59	138	138	25
Mindanao	2026	1	18	4	60	138	138	25
Mindanao	2026	1	18	5	61	138	138	25
Mindanao	2026	1	18	6	63	138	138	25
Mindanao	2026	1	18	7	64	138	138	25
Mindanao	2026	1	18	8	64	138	138	25
Mindanao	2026	1	18	9	66	138	138	25
Mindanao	2026	1	18	10	69	138	138	25
Mindanao	2026	1	18	11	72	138	138	25
Mindanao	2026	1	18	12	69	138	138	25
Mindanao	2026	1	18	13	66	138	138	25
Mindanao	2026	1	18	14	69	138	138	25
Mindanao	2026	1	18	15	69	138	138	25
Mindanao	2026	1	18	16	69	138	138	25
Mindanao	2026	1	18	17	75	138	138	25
Mindanao	2026	1	18	18	82	138	138	25
Mindanao	2026	1	18	19	79	138	138	25
Mindanao	2026	1	18	20	76	138	138	25
Mindanao	2026	1	18	21	72	138	138	25
Mindanao	2026	1	18	22	65	138	138	25
Mindanao	2026	1	18	23	64	138	138	25
Mindanao	2026	1	18	24	60	138	138	25
Mindanao	2026	1	19	1	58	138	138	25
Mindanao	2026	1	19	2	57	138	138	25
Mindanao	2026	1	19	3	56	138	138	25
Mindanao	2026	1	19	4	56	138	138	25
Mindanao	2026	1	19	5	59	138	138	25
Mindanao	2026	1	19	6	65	138	138	25
Mindanao	2026	1	19	7	68	138	138	25
Mindanao	2026	1	19	8	73	138	138	25
Mindanao	2026	1	19	9	82	138	138	25
Mindanao	2026	1	19	10	87	138	138	25
Mindanao	2026	1	19	11	91	138	138	25
Mindanao	2026	1	19	12	89	138	138	25
Mindanao	2026	1	19	13	89	138	138	25
Mindanao	2026	1	19	14	91	138	138	25
Mindanao	2026	1	19	15	91	138	138	25
Mindanao	2026	1	19	16	89	138	138	25
Mindanao	2026	1	19	17	89	138	138	25
Mindanao	2026	1	19	18	94	138	138	25
Mindanao	2026	1	19	19	89	138	138	25
Mindanao	2026	1	19	20	85	138	138	25
Mindanao	2026	1	19	21	80	138	138	25
Mindanao	2026	1	19	22	73	138	138	25
Mindanao	2026	1	19	23	69	138	138	25
Mindanao	2026	1	19	24	65	138	138	25
Mindanao	2026	1	20	1	63	138	138	25
Mindanao	2026	1	20	2	60	138	138	25
Mindanao	2026	1	20	3	60	138	138	25
Mindanao	2026	1	20	4	59	138	138	25
Mindanao	2026	1	20	5	61	138	138	25
Mindanao	2026	1	20	6	68	138	138	25
Mindanao	2026	1	20	7	70	138	138	25
Mindanao	2026	1	20	8	73	138	138	25
Mindanao	2026	1	20	9	80	138	138	25
Mindanao	2026	1	20	10	86	138	138	25
Mindanao	2026	1	20	11	89	138	138	25
Mindanao	2026	1	20	12	89	138	138	25
Mindanao	2026	1	20	13	91	138	138	25
Mindanao	2026	1	20	14	98	138	138	25
Mindanao	2026	1	20	15	97	138	138	25
Mindanao	2026	1	20	16	95	138	138	25
Mindanao	2026	1	20	17	91	138	138	25
Mindanao	2026	1	20	18	95	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	20	19	91	138	138	25
Mindanao	2026	1	20	20	88	138	138	25
Mindanao	2026	1	20	21	84	138	138	25
Mindanao	2026	1	20	22	79	138	138	25
Mindanao	2026	1	20	23	75	138	138	25
Mindanao	2026	1	20	24	68	138	138	25
Mindanao	2026	1	21	1	67	138	138	25
Mindanao	2026	1	21	2	65	138	138	25
Mindanao	2026	1	21	3	63	138	138	25
Mindanao	2026	1	21	4	62	138	138	25
Mindanao	2026	1	21	5	66	138	138	25
Mindanao	2026	1	21	6	70	138	138	25
Mindanao	2026	1	21	7	70	138	138	25
Mindanao	2026	1	21	8	73	138	138	25
Mindanao	2026	1	21	9	83	138	138	25
Mindanao	2026	1	21	10	87	138	138	25
Mindanao	2026	1	21	11	93	138	138	25
Mindanao	2026	1	21	12	92	138	138	25
Mindanao	2026	1	21	13	92	138	138	25
Mindanao	2026	1	21	14	98	138	138	25
Mindanao	2026	1	21	15	97	138	138	25
Mindanao	2026	1	21	16	96	138	138	25
Mindanao	2026	1	21	17	88	138	138	25
Mindanao	2026	1	21	18	94	138	138	25
Mindanao	2026	1	21	19	93	138	138	25
Mindanao	2026	1	21	20	89	138	138	25
Mindanao	2026	1	21	21	86	138	138	25
Mindanao	2026	1	21	22	79	138	138	25
Mindanao	2026	1	21	23	75	138	138	25
Mindanao	2026	1	21	24	69	138	138	25
Mindanao	2026	1	22	1	67	138	138	25
Mindanao	2026	1	22	2	65	138	138	25
Mindanao	2026	1	22	3	62	138	138	25
Mindanao	2026	1	22	4	62	138	138	25
Mindanao	2026	1	22	5	64	138	138	25
Mindanao	2026	1	22	6	68	138	138	25
Mindanao	2026	1	22	7	69	138	138	25
Mindanao	2026	1	22	8	73	138	138	25
Mindanao	2026	1	22	9	82	138	138	25
Mindanao	2026	1	22	10	91	138	138	25
Mindanao	2026	1	22	11	97	138	138	25
Mindanao	2026	1	22	12	97	138	138	25
Mindanao	2026	1	22	13	100	138	138	25
Mindanao	2026	1	22	14	105	138	138	25
Mindanao	2026	1	22	15	104	138	138	25
Mindanao	2026	1	22	16	98	138	138	25
Mindanao	2026	1	22	17	93	138	138	25
Mindanao	2026	1	22	18	99	138	138	25
Mindanao	2026	1	22	19	97	138	138	25
Mindanao	2026	1	22	20	92	138	138	25
Mindanao	2026	1	22	21	89	138	138	25
Mindanao	2026	1	22	22	82	138	138	25
Mindanao	2026	1	22	23	74	138	138	25
Mindanao	2026	1	22	24	69	138	138	25
Mindanao	2026	1	23	1	65	138	138	25
Mindanao	2026	1	23	2	62	138	138	25
Mindanao	2026	1	23	3	60	138	138	25
Mindanao	2026	1	23	4	60	138	138	25
Mindanao	2026	1	23	5	63	138	138	25
Mindanao	2026	1	23	6	67	138	138	25
Mindanao	2026	1	23	7	67	138	138	25
Mindanao	2026	1	23	8	70	138	138	25
Mindanao	2026	1	23	9	80	138	138	25
Mindanao	2026	1	23	10	86	138	138	25
Mindanao	2026	1	23	11	91	138	138	25
Mindanao	2026	1	23	12	91	138	138	25
Mindanao	2026	1	23	13	92	138	138	25
Mindanao	2026	1	23	14	98	138	138	25
Mindanao	2026	1	23	15	98	138	138	25
Mindanao	2026	1	23	16	95	138	138	25
Mindanao	2026	1	23	17	88	138	138	25
Mindanao	2026	1	23	18	93	138	138	25
Mindanao	2026	1	23	19	92	138	138	25
Mindanao	2026	1	23	20	87	138	138	25
Mindanao	2026	1	23	21	88	138	138	25
Mindanao	2026	1	23	22	81	138	138	25
Mindanao	2026	1	23	23	76	138	138	25
Mindanao	2026	1	23	24	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	24	1	69	138	138	25
Mindanao	2026	1	24	2	65	138	138	25
Mindanao	2026	1	24	3	63	138	138	25
Mindanao	2026	1	24	4	62	138	138	25
Mindanao	2026	1	24	5	65	138	138	25
Mindanao	2026	1	24	6	68	138	138	25
Mindanao	2026	1	24	7	65	138	138	25
Mindanao	2026	1	24	8	68	138	138	25
Mindanao	2026	1	24	9	75	138	138	25
Mindanao	2026	1	24	10	81	138	138	25
Mindanao	2026	1	24	11	83	138	138	25
Mindanao	2026	1	24	12	83	138	138	25
Mindanao	2026	1	24	13	84	138	138	25
Mindanao	2026	1	24	14	87	138	138	25
Mindanao	2026	1	24	15	87	138	138	25
Mindanao	2026	1	24	16	85	138	138	25
Mindanao	2026	1	24	17	83	138	138	25
Mindanao	2026	1	24	18	89	138	138	25
Mindanao	2026	1	24	19	90	138	138	25
Mindanao	2026	1	24	20	87	138	138	25
Mindanao	2026	1	24	21	86	138	138	25
Mindanao	2026	1	24	22	80	138	138	25
Mindanao	2026	1	24	23	74	138	138	25
Mindanao	2026	1	24	24	70	138	138	25
Mindanao	2026	1	25	1	67	138	138	25
Mindanao	2026	1	25	2	64	138	138	25
Mindanao	2026	1	25	3	61	138	138	25
Mindanao	2026	1	25	4	60	138	138	25
Mindanao	2026	1	25	5	61	138	138	25
Mindanao	2026	1	25	6	64	138	138	25
Mindanao	2026	1	25	7	63	138	138	25
Mindanao	2026	1	25	8	63	138	138	25
Mindanao	2026	1	25	9	65	138	138	25
Mindanao	2026	1	25	10	69	138	138	25
Mindanao	2026	1	25	11	74	138	138	25
Mindanao	2026	1	25	12	75	138	138	25
Mindanao	2026	1	25	13	77	138	138	25
Mindanao	2026	1	25	14	78	138	138	25
Mindanao	2026	1	25	15	78	138	138	25
Mindanao	2026	1	25	16	76	138	138	25
Mindanao	2026	1	25	17	79	138	138	25
Mindanao	2026	1	25	18	86	138	138	25
Mindanao	2026	1	25	19	88	138	138	25
Mindanao	2026	1	25	20	85	138	138	25
Mindanao	2026	1	25	21	83	138	138	25
Mindanao	2026	1	25	22	77	138	138	25
Mindanao	2026	1	25	23	72	138	138	25
Mindanao	2026	1	25	24	69	138	138	25
Mindanao	2026	1	26	1	64	138	138	25
Mindanao	2026	1	26	2	63	138	138	25
Mindanao	2026	1	26	3	62	138	138	25
Mindanao	2026	1	26	4	60	138	138	25
Mindanao	2026	1	26	5	64	138	138	25
Mindanao	2026	1	26	6	67	138	138	25
Mindanao	2026	1	26	7	70	138	138	25
Mindanao	2026	1	26	8	74	138	138	25
Mindanao	2026	1	26	9	85	138	138	25
Mindanao	2026	1	26	10	89	138	138	25
Mindanao	2026	1	26	11	96	138	138	25
Mindanao	2026	1	26	12	94	138	138	25
Mindanao	2026	1	26	13	93	138	138	25
Mindanao	2026	1	26	14	99	138	138	25
Mindanao	2026	1	26	15	98	138	138	25
Mindanao	2026	1	26	16	97	138	138	25
Mindanao	2026	1	26	17	91	138	138	25
Mindanao	2026	1	26	18	98	138	138	25
Mindanao	2026	1	26	19	97	138	138	25
Mindanao	2026	1	26	20	89	138	138	25
Mindanao	2026	1	26	21	85	138	138	25
Mindanao	2026	1	26	22	79	138	138	25
Mindanao	2026	1	26	23	74	138	138	25
Mindanao	2026	1	26	24	69	138	138	25
Mindanao	2026	1	27	1	65	138	138	25
Mindanao	2026	1	27	2	63	138	138	25
Mindanao	2026	1	27	3	61	138	138	25
Mindanao	2026	1	27	4	60	138	138	25
Mindanao	2026	1	27	5	62	138	138	25
Mindanao	2026	1	27	6	66	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	27	7	69	138	138	25
Mindanao	2026	1	27	8	72	138	138	25
Mindanao	2026	1	27	9	83	138	138	25
Mindanao	2026	1	27	10	87	138	138	25
Mindanao	2026	1	27	11	93	138	138	25
Mindanao	2026	1	27	12	89	138	138	25
Mindanao	2026	1	27	13	93	138	138	25
Mindanao	2026	1	27	14	99	138	138	25
Mindanao	2026	1	27	15	93	138	138	25
Mindanao	2026	1	27	16	92	138	138	25
Mindanao	2026	1	27	17	86	138	138	25
Mindanao	2026	1	27	18	91	138	138	25
Mindanao	2026	1	27	19	90	138	138	25
Mindanao	2026	1	27	20	88	138	138	25
Mindanao	2026	1	27	21	84	138	138	25
Mindanao	2026	1	27	22	77	138	138	25
Mindanao	2026	1	27	23	73	138	138	25
Mindanao	2026	1	27	24	68	138	138	25
Mindanao	2026	1	28	1	65	138	138	25
Mindanao	2026	1	28	2	63	138	138	25
Mindanao	2026	1	28	3	61	138	138	25
Mindanao	2026	1	28	4	61	138	138	25
Mindanao	2026	1	28	5	63	138	138	25
Mindanao	2026	1	28	6	67	138	138	25
Mindanao	2026	1	28	7	70	138	138	25
Mindanao	2026	1	28	8	74	138	138	25
Mindanao	2026	1	28	9	85	138	138	25
Mindanao	2026	1	28	10	91	138	138	25
Mindanao	2026	1	28	11	94	138	138	25
Mindanao	2026	1	28	12	98	138	138	25
Mindanao	2026	1	28	13	99	138	138	25
Mindanao	2026	1	28	14	104	138	138	25
Mindanao	2026	1	28	15	104	138	138	25
Mindanao	2026	1	28	16	101	138	138	25
Mindanao	2026	1	28	17	93	138	138	25
Mindanao	2026	1	28	18	98	138	138	25
Mindanao	2026	1	28	19	98	138	138	25
Mindanao	2026	1	28	20	97	138	138	25
Mindanao	2026	1	28	21	92	138	138	25
Mindanao	2026	1	28	22	85	138	138	25
Mindanao	2026	1	28	23	80	138	138	25
Mindanao	2026	1	28	24	75	138	138	25
Mindanao	2026	1	29	1	72	138	138	25
Mindanao	2026	1	29	2	68	138	138	25
Mindanao	2026	1	29	3	67	138	138	25
Mindanao	2026	1	29	4	65	138	138	25
Mindanao	2026	1	29	5	68	138	138	25
Mindanao	2026	1	29	6	72	138	138	25
Mindanao	2026	1	29	7	72	138	138	25
Mindanao	2026	1	29	8	77	138	138	25
Mindanao	2026	1	29	9	89	138	138	25
Mindanao	2026	1	29	10	97	138	138	25
Mindanao	2026	1	29	11	102	138	138	25
Mindanao	2026	1	29	12	101	138	138	25
Mindanao	2026	1	29	13	99	138	138	25
Mindanao	2026	1	29	14	100	138	138	25
Mindanao	2026	1	29	15	99	138	138	25
Mindanao	2026	1	29	16	94	138	138	25
Mindanao	2026	1	29	17	91	138	138	25
Mindanao	2026	1	29	18	94	138	138	25
Mindanao	2026	1	29	19	93	138	138	25
Mindanao	2026	1	29	20	90	138	138	25
Mindanao	2026	1	29	21	86	138	138	25
Mindanao	2026	1	29	22	78	138	138	25
Mindanao	2026	1	29	23	74	138	138	25
Mindanao	2026	1	29	24	70	138	138	25
Mindanao	2026	1	30	1	66	138	138	25
Mindanao	2026	1	30	2	63	138	138	25
Mindanao	2026	1	30	3	62	138	138	25
Mindanao	2026	1	30	4	62	138	138	25
Mindanao	2026	1	30	5	64	138	138	25
Mindanao	2026	1	30	6	70	138	138	25
Mindanao	2026	1	30	7	69	138	138	25
Mindanao	2026	1	30	8	74	138	138	25
Mindanao	2026	1	30	9	85	138	138	25
Mindanao	2026	1	30	10	93	138	138	25
Mindanao	2026	1	30	11	98	138	138	25
Mindanao	2026	1	30	12	96	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	1	30	13	98	138	138	25
Mindanao	2026	1	30	14	106	138	138	25
Mindanao	2026	1	30	15	104	138	138	25
Mindanao	2026	1	30	16	103	138	138	25
Mindanao	2026	1	30	17	93	138	138	25
Mindanao	2026	1	30	18	96	138	138	25
Mindanao	2026	1	30	19	94	138	138	25
Mindanao	2026	1	30	20	91	138	138	25
Mindanao	2026	1	30	21	89	138	138	25
Mindanao	2026	1	30	22	82	138	138	25
Mindanao	2026	1	30	23	77	138	138	25
Mindanao	2026	1	30	24	71	138	138	25
Mindanao	2026	1	31	1	68	138	138	25
Mindanao	2026	1	31	2	68	138	138	25
Mindanao	2026	1	31	3	65	138	138	25
Mindanao	2026	1	31	4	64	138	138	25
Mindanao	2026	1	31	5	67	138	138	25
Mindanao	2026	1	31	6	69	138	138	25
Mindanao	2026	1	31	7	70	138	138	25
Mindanao	2026	1	31	8	71	138	138	25
Mindanao	2026	1	31	9	75	138	138	25
Mindanao	2026	1	31	10	82	138	138	25
Mindanao	2026	1	31	11	87	138	138	25
Mindanao	2026	1	31	12	87	138	138	25
Mindanao	2026	1	31	13	90	138	138	25
Mindanao	2026	1	31	14	94	138	138	25
Mindanao	2026	1	31	15	95	138	138	25
Mindanao	2026	1	31	16	89	138	138	25
Mindanao	2026	1	31	17	84	138	138	25
Mindanao	2026	1	31	18	92	138	138	25
Mindanao	2026	1	31	19	96	138	138	25
Mindanao	2026	1	31	20	92	138	138	25
Mindanao	2026	1	31	21	91	138	138	25
Mindanao	2026	1	31	22	85	138	138	25
Mindanao	2026	1	31	23	80	138	138	25
Mindanao	2026	1	31	24	75	138	138	25
Mindanao	2026	2	1	1	70	138	138	25
Mindanao	2026	2	1	2	67	138	138	25
Mindanao	2026	2	1	3	65	138	138	25
Mindanao	2026	2	1	4	64	138	138	25
Mindanao	2026	2	1	5	64	138	138	25
Mindanao	2026	2	1	6	64	138	138	25
Mindanao	2026	2	1	7	63	138	138	25
Mindanao	2026	2	1	8	64	138	138	25
Mindanao	2026	2	1	9	68	138	138	25
Mindanao	2026	2	1	10	71	138	138	25
Mindanao	2026	2	1	11	75	138	138	25
Mindanao	2026	2	1	12	79	138	138	25
Mindanao	2026	2	1	13	81	138	138	25
Mindanao	2026	2	1	14	83	138	138	25
Mindanao	2026	2	1	15	83	138	138	25
Mindanao	2026	2	1	16	81	138	138	25
Mindanao	2026	2	1	17	80	138	138	25
Mindanao	2026	2	1	18	89	138	138	25
Mindanao	2026	2	1	19	93	138	138	25
Mindanao	2026	2	1	20	89	138	138	25
Mindanao	2026	2	1	21	88	138	138	25
Mindanao	2026	2	1	22	84	138	138	25
Mindanao	2026	2	1	23	79	138	138	25
Mindanao	2026	2	1	24	73	138	138	25
Mindanao	2026	2	2	1	69	138	138	25
Mindanao	2026	2	2	2	66	138	138	25
Mindanao	2026	2	2	3	64	138	138	25
Mindanao	2026	2	2	4	63	138	138	25
Mindanao	2026	2	2	5	65	138	138	25
Mindanao	2026	2	2	6	67	138	138	25
Mindanao	2026	2	2	7	68	138	138	25
Mindanao	2026	2	2	8	74	138	138	25
Mindanao	2026	2	2	9	88	138	138	25
Mindanao	2026	2	2	10	97	138	138	25
Mindanao	2026	2	2	11	102	138	138	25
Mindanao	2026	2	2	12	103	138	138	25
Mindanao	2026	2	2	13	102	138	138	25
Mindanao	2026	2	2	14	109	138	138	25
Mindanao	2026	2	2	15	109	138	138	25
Mindanao	2026	2	2	16	105	138	138	25
Mindanao	2026	2	2	17	95	138	138	25
Mindanao	2026	2	2	18	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	2	19	97	138	138	25
Mindanao	2026	2	2	20	93	138	138	25
Mindanao	2026	2	2	21	89	138	138	25
Mindanao	2026	2	2	22	84	138	138	25
Mindanao	2026	2	2	23	79	138	138	25
Mindanao	2026	2	2	24	74	138	138	25
Mindanao	2026	2	3	1	70	138	138	25
Mindanao	2026	2	3	2	66	138	138	25
Mindanao	2026	2	3	3	64	138	138	25
Mindanao	2026	2	3	4	62	138	138	25
Mindanao	2026	2	3	5	65	138	138	25
Mindanao	2026	2	3	6	66	138	138	25
Mindanao	2026	2	3	7	67	138	138	25
Mindanao	2026	2	3	8	69	138	138	25
Mindanao	2026	2	3	9	78	138	138	25
Mindanao	2026	2	3	10	83	138	138	25
Mindanao	2026	2	3	11	89	138	138	25
Mindanao	2026	2	3	12	88	138	138	25
Mindanao	2026	2	3	13	88	138	138	25
Mindanao	2026	2	3	14	91	138	138	25
Mindanao	2026	2	3	15	89	138	138	25
Mindanao	2026	2	3	16	86	138	138	25
Mindanao	2026	2	3	17	85	138	138	25
Mindanao	2026	2	3	18	90	138	138	25
Mindanao	2026	2	3	19	91	138	138	25
Mindanao	2026	2	3	20	87	138	138	25
Mindanao	2026	2	3	21	84	138	138	25
Mindanao	2026	2	3	22	78	138	138	25
Mindanao	2026	2	3	23	74	138	138	25
Mindanao	2026	2	3	24	69	138	138	25
Mindanao	2026	2	4	1	64	138	138	25
Mindanao	2026	2	4	2	62	138	138	25
Mindanao	2026	2	4	3	60	138	138	25
Mindanao	2026	2	4	4	60	138	138	25
Mindanao	2026	2	4	5	62	138	138	25
Mindanao	2026	2	4	6	66	138	138	25
Mindanao	2026	2	4	7	68	138	138	25
Mindanao	2026	2	4	8	76	138	138	25
Mindanao	2026	2	4	9	87	138	138	25
Mindanao	2026	2	4	10	93	138	138	25
Mindanao	2026	2	4	11	97	138	138	25
Mindanao	2026	2	4	12	93	138	138	25
Mindanao	2026	2	4	13	98	138	138	25
Mindanao	2026	2	4	14	99	138	138	25
Mindanao	2026	2	4	15	101	138	138	25
Mindanao	2026	2	4	16	98	138	138	25
Mindanao	2026	2	4	17	93	138	138	25
Mindanao	2026	2	4	18	97	138	138	25
Mindanao	2026	2	4	19	96	138	138	25
Mindanao	2026	2	4	20	94	138	138	25
Mindanao	2026	2	4	21	88	138	138	25
Mindanao	2026	2	4	22	83	138	138	25
Mindanao	2026	2	4	23	78	138	138	25
Mindanao	2026	2	4	24	73	138	138	25
Mindanao	2026	2	5	1	69	138	138	25
Mindanao	2026	2	5	2	66	138	138	25
Mindanao	2026	2	5	3	65	138	138	25
Mindanao	2026	2	5	4	63	138	138	25
Mindanao	2026	2	5	5	67	138	138	25
Mindanao	2026	2	5	6	71	138	138	25
Mindanao	2026	2	5	7	73	138	138	25
Mindanao	2026	2	5	8	77	138	138	25
Mindanao	2026	2	5	9	87	138	138	25
Mindanao	2026	2	5	10	93	138	138	25
Mindanao	2026	2	5	11	97	138	138	25
Mindanao	2026	2	5	12	93	138	138	25
Mindanao	2026	2	5	13	96	138	138	25
Mindanao	2026	2	5	14	100	138	138	25
Mindanao	2026	2	5	15	98	138	138	25
Mindanao	2026	2	5	16	99	138	138	25
Mindanao	2026	2	5	17	92	138	138	25
Mindanao	2026	2	5	18	94	138	138	25
Mindanao	2026	2	5	19	93	138	138	25
Mindanao	2026	2	5	20	91	138	138	25
Mindanao	2026	2	5	21	87	138	138	25
Mindanao	2026	2	5	22	80	138	138	25
Mindanao	2026	2	5	23	75	138	138	25
Mindanao	2026	2	5	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	6	1	67	138	138	25
Mindanao	2026	2	6	2	65	138	138	25
Mindanao	2026	2	6	3	63	138	138	25
Mindanao	2026	2	6	4	62	138	138	25
Mindanao	2026	2	6	5	64	138	138	25
Mindanao	2026	2	6	6	69	138	138	25
Mindanao	2026	2	6	7	71	138	138	25
Mindanao	2026	2	6	8	75	138	138	25
Mindanao	2026	2	6	9	82	138	138	25
Mindanao	2026	2	6	10	87	138	138	25
Mindanao	2026	2	6	11	91	138	138	25
Mindanao	2026	2	6	12	87	138	138	25
Mindanao	2026	2	6	13	88	138	138	25
Mindanao	2026	2	6	14	91	138	138	25
Mindanao	2026	2	6	15	91	138	138	25
Mindanao	2026	2	6	16	89	138	138	25
Mindanao	2026	2	6	17	89	138	138	25
Mindanao	2026	2	6	18	92	138	138	25
Mindanao	2026	2	6	19	91	138	138	25
Mindanao	2026	2	6	20	87	138	138	25
Mindanao	2026	2	6	21	82	138	138	25
Mindanao	2026	2	6	22	78	138	138	25
Mindanao	2026	2	6	23	73	138	138	25
Mindanao	2026	2	6	24	65	138	138	25
Mindanao	2026	2	7	1	62	138	138	25
Mindanao	2026	2	7	2	62	138	138	25
Mindanao	2026	2	7	3	61	138	138	25
Mindanao	2026	2	7	4	60	138	138	25
Mindanao	2026	2	7	5	62	138	138	25
Mindanao	2026	2	7	6	64	138	138	25
Mindanao	2026	2	7	7	65	138	138	25
Mindanao	2026	2	7	8	69	138	138	25
Mindanao	2026	2	7	9	75	138	138	25
Mindanao	2026	2	7	10	80	138	138	25
Mindanao	2026	2	7	11	83	138	138	25
Mindanao	2026	2	7	12	82	138	138	25
Mindanao	2026	2	7	13	85	138	138	25
Mindanao	2026	2	7	14	90	138	138	25
Mindanao	2026	2	7	15	89	138	138	25
Mindanao	2026	2	7	16	88	138	138	25
Mindanao	2026	2	7	17	86	138	138	25
Mindanao	2026	2	7	18	94	138	138	25
Mindanao	2026	2	7	19	95	138	138	25
Mindanao	2026	2	7	20	90	138	138	25
Mindanao	2026	2	7	21	87	138	138	25
Mindanao	2026	2	7	22	82	138	138	25
Mindanao	2026	2	7	23	77	138	138	25
Mindanao	2026	2	7	24	73	138	138	25
Mindanao	2026	2	8	1	69	138	138	25
Mindanao	2026	2	8	2	65	138	138	25
Mindanao	2026	2	8	3	63	138	138	25
Mindanao	2026	2	8	4	62	138	138	25
Mindanao	2026	2	8	5	63	138	138	25
Mindanao	2026	2	8	6	66	138	138	25
Mindanao	2026	2	8	7	65	138	138	25
Mindanao	2026	2	8	8	63	138	138	25
Mindanao	2026	2	8	9	65	138	138	25
Mindanao	2026	2	8	10	72	138	138	25
Mindanao	2026	2	8	11	75	138	138	25
Mindanao	2026	2	8	12	75	138	138	25
Mindanao	2026	2	8	13	77	138	138	25
Mindanao	2026	2	8	14	80	138	138	25
Mindanao	2026	2	8	15	76	138	138	25
Mindanao	2026	2	8	16	78	138	138	25
Mindanao	2026	2	8	17	79	138	138	25
Mindanao	2026	2	8	18	88	138	138	25
Mindanao	2026	2	8	19	91	138	138	25
Mindanao	2026	2	8	20	87	138	138	25
Mindanao	2026	2	8	21	87	138	138	25
Mindanao	2026	2	8	22	81	138	138	25
Mindanao	2026	2	8	23	76	138	138	25
Mindanao	2026	2	8	24	68	138	138	25
Mindanao	2026	2	9	1	66	138	138	25
Mindanao	2026	2	9	2	63	138	138	25
Mindanao	2026	2	9	3	60	138	138	25
Mindanao	2026	2	9	4	59	138	138	25
Mindanao	2026	2	9	5	62	138	138	25
Mindanao	2026	2	9	6	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	9	7	67	138	138	25
Mindanao	2026	2	9	8	74	138	138	25
Mindanao	2026	2	9	9	86	138	138	25
Mindanao	2026	2	9	10	94	138	138	25
Mindanao	2026	2	9	11	99	138	138	25
Mindanao	2026	2	9	12	99	138	138	25
Mindanao	2026	2	9	13	100	138	138	25
Mindanao	2026	2	9	14	105	138	138	25
Mindanao	2026	2	9	15	104	138	138	25
Mindanao	2026	2	9	16	99	138	138	25
Mindanao	2026	2	9	17	95	138	138	25
Mindanao	2026	2	9	18	99	138	138	25
Mindanao	2026	2	9	19	99	138	138	25
Mindanao	2026	2	9	20	96	138	138	25
Mindanao	2026	2	9	21	93	138	138	25
Mindanao	2026	2	9	22	87	138	138	25
Mindanao	2026	2	9	23	82	138	138	25
Mindanao	2026	2	9	24	76	138	138	25
Mindanao	2026	2	10	1	71	138	138	25
Mindanao	2026	2	10	2	69	138	138	25
Mindanao	2026	2	10	3	66	138	138	25
Mindanao	2026	2	10	4	66	138	138	25
Mindanao	2026	2	10	5	65	138	138	25
Mindanao	2026	2	10	6	71	138	138	25
Mindanao	2026	2	10	7	72	138	138	25
Mindanao	2026	2	10	8	77	138	138	25
Mindanao	2026	2	10	9	88	138	138	25
Mindanao	2026	2	10	10	94	138	138	25
Mindanao	2026	2	10	11	99	138	138	25
Mindanao	2026	2	10	12	96	138	138	25
Mindanao	2026	2	10	13	98	138	138	25
Mindanao	2026	2	10	14	101	138	138	25
Mindanao	2026	2	10	15	102	138	138	25
Mindanao	2026	2	10	16	100	138	138	25
Mindanao	2026	2	10	17	95	138	138	25
Mindanao	2026	2	10	18	98	138	138	25
Mindanao	2026	2	10	19	99	138	138	25
Mindanao	2026	2	10	20	94	138	138	25
Mindanao	2026	2	10	21	91	138	138	25
Mindanao	2026	2	10	22	85	138	138	25
Mindanao	2026	2	10	23	79	138	138	25
Mindanao	2026	2	10	24	75	138	138	25
Mindanao	2026	2	11	1	69	138	138	25
Mindanao	2026	2	11	2	68	138	138	25
Mindanao	2026	2	11	3	65	138	138	25
Mindanao	2026	2	11	4	65	138	138	25
Mindanao	2026	2	11	5	66	138	138	25
Mindanao	2026	2	11	6	72	138	138	25
Mindanao	2026	2	11	7	72	138	138	25
Mindanao	2026	2	11	8	77	138	138	25
Mindanao	2026	2	11	9	86	138	138	25
Mindanao	2026	2	11	10	92	138	138	25
Mindanao	2026	2	11	11	100	138	138	25
Mindanao	2026	2	11	12	99	138	138	25
Mindanao	2026	2	11	13	97	138	138	25
Mindanao	2026	2	11	14	104	138	138	25
Mindanao	2026	2	11	15	102	138	138	25
Mindanao	2026	2	11	16	97	138	138	25
Mindanao	2026	2	11	17	94	138	138	25
Mindanao	2026	2	11	18	98	138	138	25
Mindanao	2026	2	11	19	97	138	138	25
Mindanao	2026	2	11	20	91	138	138	25
Mindanao	2026	2	11	21	87	138	138	25
Mindanao	2026	2	11	22	81	138	138	25
Mindanao	2026	2	11	23	77	138	138	25
Mindanao	2026	2	11	24	71	138	138	25
Mindanao	2026	2	12	1	69	138	138	25
Mindanao	2026	2	12	2	66	138	138	25
Mindanao	2026	2	12	3	64	138	138	25
Mindanao	2026	2	12	4	64	138	138	25
Mindanao	2026	2	12	5	65	138	138	25
Mindanao	2026	2	12	6	69	138	138	25
Mindanao	2026	2	12	7	71	138	138	25
Mindanao	2026	2	12	8	76	138	138	25
Mindanao	2026	2	12	9	87	138	138	25
Mindanao	2026	2	12	10	93	138	138	25
Mindanao	2026	2	12	11	98	138	138	25
Mindanao	2026	2	12	12	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	12	13	96	138	138	25
Mindanao	2026	2	12	14	103	138	138	25
Mindanao	2026	2	12	15	102	138	138	25
Mindanao	2026	2	12	16	98	138	138	25
Mindanao	2026	2	12	17	94	138	138	25
Mindanao	2026	2	12	18	97	138	138	25
Mindanao	2026	2	12	19	97	138	138	25
Mindanao	2026	2	12	20	94	138	138	25
Mindanao	2026	2	12	21	90	138	138	25
Mindanao	2026	2	12	22	84	138	138	25
Mindanao	2026	2	12	23	79	138	138	25
Mindanao	2026	2	12	24	74	138	138	25
Mindanao	2026	2	13	1	70	138	138	25
Mindanao	2026	2	13	2	68	138	138	25
Mindanao	2026	2	13	3	66	138	138	25
Mindanao	2026	2	13	4	65	138	138	25
Mindanao	2026	2	13	5	67	138	138	25
Mindanao	2026	2	13	6	72	138	138	25
Mindanao	2026	2	13	7	73	138	138	25
Mindanao	2026	2	13	8	79	138	138	25
Mindanao	2026	2	13	9	89	138	138	25
Mindanao	2026	2	13	10	97	138	138	25
Mindanao	2026	2	13	11	103	138	138	25
Mindanao	2026	2	13	12	100	138	138	25
Mindanao	2026	2	13	13	101	138	138	25
Mindanao	2026	2	13	14	104	138	138	25
Mindanao	2026	2	13	15	106	138	138	25
Mindanao	2026	2	13	16	103	138	138	25
Mindanao	2026	2	13	17	97	138	138	25
Mindanao	2026	2	13	18	99	138	138	25
Mindanao	2026	2	13	19	98	138	138	25
Mindanao	2026	2	13	20	95	138	138	25
Mindanao	2026	2	13	21	92	138	138	25
Mindanao	2026	2	13	22	86	138	138	25
Mindanao	2026	2	13	23	79	138	138	25
Mindanao	2026	2	13	24	76	138	138	25
Mindanao	2026	2	14	1	71	138	138	25
Mindanao	2026	2	14	2	69	138	138	25
Mindanao	2026	2	14	3	67	138	138	25
Mindanao	2026	2	14	4	67	138	138	25
Mindanao	2026	2	14	5	67	138	138	25
Mindanao	2026	2	14	6	71	138	138	25
Mindanao	2026	2	14	7	70	138	138	25
Mindanao	2026	2	14	8	71	138	138	25
Mindanao	2026	2	14	9	78	138	138	25
Mindanao	2026	2	14	10	83	138	138	25
Mindanao	2026	2	14	11	87	138	138	25
Mindanao	2026	2	14	12	86	138	138	25
Mindanao	2026	2	14	13	88	138	138	25
Mindanao	2026	2	14	14	90	138	138	25
Mindanao	2026	2	14	15	90	138	138	25
Mindanao	2026	2	14	16	88	138	138	25
Mindanao	2026	2	14	17	87	138	138	25
Mindanao	2026	2	14	18	93	138	138	25
Mindanao	2026	2	14	19	94	138	138	25
Mindanao	2026	2	14	20	92	138	138	25
Mindanao	2026	2	14	21	88	138	138	25
Mindanao	2026	2	14	22	83	138	138	25
Mindanao	2026	2	14	23	76	138	138	25
Mindanao	2026	2	14	24	70	138	138	25
Mindanao	2026	2	15	1	67	138	138	25
Mindanao	2026	2	15	2	65	138	138	25
Mindanao	2026	2	15	3	61	138	138	25
Mindanao	2026	2	15	4	61	138	138	25
Mindanao	2026	2	15	5	62	138	138	25
Mindanao	2026	2	15	6	65	138	138	25
Mindanao	2026	2	15	7	65	138	138	25
Mindanao	2026	2	15	8	62	138	138	25
Mindanao	2026	2	15	9	64	138	138	25
Mindanao	2026	2	15	10	66	138	138	25
Mindanao	2026	2	15	11	71	138	138	25
Mindanao	2026	2	15	12	71	138	138	25
Mindanao	2026	2	15	13	73	138	138	25
Mindanao	2026	2	15	14	74	138	138	25
Mindanao	2026	2	15	15	75	138	138	25
Mindanao	2026	2	15	16	76	138	138	25
Mindanao	2026	2	15	17	75	138	138	25
Mindanao	2026	2	15	18	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	15	19	88	138	138	25
Mindanao	2026	2	15	20	86	138	138	25
Mindanao	2026	2	15	21	82	138	138	25
Mindanao	2026	2	15	22	79	138	138	25
Mindanao	2026	2	15	23	73	138	138	25
Mindanao	2026	2	15	24	67	138	138	25
Mindanao	2026	2	16	1	65	138	138	25
Mindanao	2026	2	16	2	64	138	138	25
Mindanao	2026	2	16	3	62	138	138	25
Mindanao	2026	2	16	4	60	138	138	25
Mindanao	2026	2	16	5	62	138	138	25
Mindanao	2026	2	16	6	67	138	138	25
Mindanao	2026	2	16	7	67	138	138	25
Mindanao	2026	2	16	8	74	138	138	25
Mindanao	2026	2	16	9	86	138	138	25
Mindanao	2026	2	16	10	94	138	138	25
Mindanao	2026	2	16	11	102	138	138	25
Mindanao	2026	2	16	12	100	138	138	25
Mindanao	2026	2	16	13	104	138	138	25
Mindanao	2026	2	16	14	109	138	138	25
Mindanao	2026	2	16	15	107	138	138	25
Mindanao	2026	2	16	16	104	138	138	25
Mindanao	2026	2	16	17	97	138	138	25
Mindanao	2026	2	16	18	98	138	138	25
Mindanao	2026	2	16	19	98	138	138	25
Mindanao	2026	2	16	20	94	138	138	25
Mindanao	2026	2	16	21	92	138	138	25
Mindanao	2026	2	16	22	88	138	138	25
Mindanao	2026	2	16	23	81	138	138	25
Mindanao	2026	2	16	24	77	138	138	25
Mindanao	2026	2	17	1	73	138	138	25
Mindanao	2026	2	17	2	68	138	138	25
Mindanao	2026	2	17	3	66	138	138	25
Mindanao	2026	2	17	4	67	138	138	25
Mindanao	2026	2	17	5	68	138	138	25
Mindanao	2026	2	17	6	73	138	138	25
Mindanao	2026	2	17	7	73	138	138	25
Mindanao	2026	2	17	8	78	138	138	25
Mindanao	2026	2	17	9	90	138	138	25
Mindanao	2026	2	17	10	98	138	138	25
Mindanao	2026	2	17	11	102	138	138	25
Mindanao	2026	2	17	12	100	138	138	25
Mindanao	2026	2	17	13	100	138	138	25
Mindanao	2026	2	17	14	106	138	138	25
Mindanao	2026	2	17	15	104	138	138	25
Mindanao	2026	2	17	16	101	138	138	25
Mindanao	2026	2	17	17	94	138	138	25
Mindanao	2026	2	17	18	96	138	138	25
Mindanao	2026	2	17	19	97	138	138	25
Mindanao	2026	2	17	20	92	138	138	25
Mindanao	2026	2	17	21	89	138	138	25
Mindanao	2026	2	17	22	83	138	138	25
Mindanao	2026	2	17	23	79	138	138	25
Mindanao	2026	2	17	24	74	138	138	25
Mindanao	2026	2	18	1	70	138	138	25
Mindanao	2026	2	18	2	68	138	138	25
Mindanao	2026	2	18	3	65	138	138	25
Mindanao	2026	2	18	4	65	138	138	25
Mindanao	2026	2	18	5	67	138	138	25
Mindanao	2026	2	18	6	73	138	138	25
Mindanao	2026	2	18	7	74	138	138	25
Mindanao	2026	2	18	8	77	138	138	25
Mindanao	2026	2	18	9	89	138	138	25
Mindanao	2026	2	18	10	98	138	138	25
Mindanao	2026	2	18	11	104	138	138	25
Mindanao	2026	2	18	12	103	138	138	25
Mindanao	2026	2	18	13	104	138	138	25
Mindanao	2026	2	18	14	111	138	138	25
Mindanao	2026	2	18	15	110	138	138	25
Mindanao	2026	2	18	16	110	138	138	25
Mindanao	2026	2	18	17	101	138	138	25
Mindanao	2026	2	18	18	100	138	138	25
Mindanao	2026	2	18	19	103	138	138	25
Mindanao	2026	2	18	20	97	138	138	25
Mindanao	2026	2	18	21	95	138	138	25
Mindanao	2026	2	18	22	89	138	138	25
Mindanao	2026	2	18	23	83	138	138	25
Mindanao	2026	2	18	24	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	19	1	72	138	138	25
Mindanao	2026	2	19	2	70	138	138	25
Mindanao	2026	2	19	3	68	138	138	25
Mindanao	2026	2	19	4	66	138	138	25
Mindanao	2026	2	19	5	69	138	138	25
Mindanao	2026	2	19	6	72	138	138	25
Mindanao	2026	2	19	7	72	138	138	25
Mindanao	2026	2	19	8	78	138	138	25
Mindanao	2026	2	19	9	89	138	138	25
Mindanao	2026	2	19	10	96	138	138	25
Mindanao	2026	2	19	11	103	138	138	25
Mindanao	2026	2	19	12	99	138	138	25
Mindanao	2026	2	19	13	102	138	138	25
Mindanao	2026	2	19	14	107	138	138	25
Mindanao	2026	2	19	15	103	138	138	25
Mindanao	2026	2	19	16	103	138	138	25
Mindanao	2026	2	19	17	95	138	138	25
Mindanao	2026	2	19	18	96	138	138	25
Mindanao	2026	2	19	19	99	138	138	25
Mindanao	2026	2	19	20	96	138	138	25
Mindanao	2026	2	19	21	93	138	138	25
Mindanao	2026	2	19	22	86	138	138	25
Mindanao	2026	2	19	23	81	138	138	25
Mindanao	2026	2	19	24	75	138	138	25
Mindanao	2026	2	20	1	70	138	138	25
Mindanao	2026	2	20	2	69	138	138	25
Mindanao	2026	2	20	3	64	138	138	25
Mindanao	2026	2	20	4	64	138	138	25
Mindanao	2026	2	20	5	66	138	138	25
Mindanao	2026	2	20	6	73	138	138	25
Mindanao	2026	2	20	7	73	138	138	25
Mindanao	2026	2	20	8	78	138	138	25
Mindanao	2026	2	20	9	90	138	138	25
Mindanao	2026	2	20	10	97	138	138	25
Mindanao	2026	2	20	11	100	138	138	25
Mindanao	2026	2	20	12	96	138	138	25
Mindanao	2026	2	20	13	98	138	138	25
Mindanao	2026	2	20	14	103	138	138	25
Mindanao	2026	2	20	15	101	138	138	25
Mindanao	2026	2	20	16	98	138	138	25
Mindanao	2026	2	20	17	93	138	138	25
Mindanao	2026	2	20	18	97	138	138	25
Mindanao	2026	2	20	19	98	138	138	25
Mindanao	2026	2	20	20	94	138	138	25
Mindanao	2026	2	20	21	91	138	138	25
Mindanao	2026	2	20	22	86	138	138	25
Mindanao	2026	2	20	23	80	138	138	25
Mindanao	2026	2	20	24	76	138	138	25
Mindanao	2026	2	21	1	72	138	138	25
Mindanao	2026	2	21	2	68	138	138	25
Mindanao	2026	2	21	3	67	138	138	25
Mindanao	2026	2	21	4	66	138	138	25
Mindanao	2026	2	21	5	67	138	138	25
Mindanao	2026	2	21	6	71	138	138	25
Mindanao	2026	2	21	7	65	138	138	25
Mindanao	2026	2	21	8	69	138	138	25
Mindanao	2026	2	21	9	76	138	138	25
Mindanao	2026	2	21	10	79	138	138	25
Mindanao	2026	2	21	11	83	138	138	25
Mindanao	2026	2	21	12	81	138	138	25
Mindanao	2026	2	21	13	80	138	138	25
Mindanao	2026	2	21	14	81	138	138	25
Mindanao	2026	2	21	15	81	138	138	25
Mindanao	2026	2	21	16	81	138	138	25
Mindanao	2026	2	21	17	81	138	138	25
Mindanao	2026	2	21	18	85	138	138	25
Mindanao	2026	2	21	19	91	138	138	25
Mindanao	2026	2	21	20	85	138	138	25
Mindanao	2026	2	21	21	82	138	138	25
Mindanao	2026	2	21	22	77	138	138	25
Mindanao	2026	2	21	23	72	138	138	25
Mindanao	2026	2	21	24	68	138	138	25
Mindanao	2026	2	22	1	63	138	138	25
Mindanao	2026	2	22	2	62	138	138	25
Mindanao	2026	2	22	3	61	138	138	25
Mindanao	2026	2	22	4	60	138	138	25
Mindanao	2026	2	22	5	61	138	138	25
Mindanao	2026	2	22	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	22	7	64	138	138	25
Mindanao	2026	2	22	8	63	138	138	25
Mindanao	2026	2	22	9	61	138	138	25
Mindanao	2026	2	22	10	66	138	138	25
Mindanao	2026	2	22	11	71	138	138	25
Mindanao	2026	2	22	12	69	138	138	25
Mindanao	2026	2	22	13	69	138	138	25
Mindanao	2026	2	22	14	70	138	138	25
Mindanao	2026	2	22	15	69	138	138	25
Mindanao	2026	2	22	16	69	138	138	25
Mindanao	2026	2	22	17	74	138	138	25
Mindanao	2026	2	22	18	84	138	138	25
Mindanao	2026	2	22	19	81	138	138	25
Mindanao	2026	2	22	20	79	138	138	25
Mindanao	2026	2	22	21	74	138	138	25
Mindanao	2026	2	22	22	69	138	138	25
Mindanao	2026	2	22	23	63	138	138	25
Mindanao	2026	2	22	24	60	138	138	25
Mindanao	2026	2	23	1	58	138	138	25
Mindanao	2026	2	23	2	57	138	138	25
Mindanao	2026	2	23	3	56	138	138	25
Mindanao	2026	2	23	4	56	138	138	25
Mindanao	2026	2	23	5	57	138	138	25
Mindanao	2026	2	23	6	64	138	138	25
Mindanao	2026	2	23	7	64	138	138	25
Mindanao	2026	2	23	8	71	138	138	25
Mindanao	2026	2	23	9	81	138	138	25
Mindanao	2026	2	23	10	88	138	138	25
Mindanao	2026	2	23	11	94	138	138	25
Mindanao	2026	2	23	12	93	138	138	25
Mindanao	2026	2	23	13	93	138	138	25
Mindanao	2026	2	23	14	98	138	138	25
Mindanao	2026	2	23	15	96	138	138	25
Mindanao	2026	2	23	16	95	138	138	25
Mindanao	2026	2	23	17	90	138	138	25
Mindanao	2026	2	23	18	94	138	138	25
Mindanao	2026	2	23	19	94	138	138	25
Mindanao	2026	2	23	20	89	138	138	25
Mindanao	2026	2	23	21	85	138	138	25
Mindanao	2026	2	23	22	78	138	138	25
Mindanao	2026	2	23	23	73	138	138	25
Mindanao	2026	2	23	24	68	138	138	25
Mindanao	2026	2	24	1	64	138	138	25
Mindanao	2026	2	24	2	62	138	138	25
Mindanao	2026	2	24	3	60	138	138	25
Mindanao	2026	2	24	4	60	138	138	25
Mindanao	2026	2	24	5	63	138	138	25
Mindanao	2026	2	24	6	69	138	138	25
Mindanao	2026	2	24	7	68	138	138	25
Mindanao	2026	2	24	8	74	138	138	25
Mindanao	2026	2	24	9	85	138	138	25
Mindanao	2026	2	24	10	91	138	138	25
Mindanao	2026	2	24	11	94	138	138	25
Mindanao	2026	2	24	12	94	138	138	25
Mindanao	2026	2	24	13	93	138	138	25
Mindanao	2026	2	24	14	100	138	138	25
Mindanao	2026	2	24	15	100	138	138	25
Mindanao	2026	2	24	16	99	138	138	25
Mindanao	2026	2	24	17	93	138	138	25
Mindanao	2026	2	24	18	97	138	138	25
Mindanao	2026	2	24	19	96	138	138	25
Mindanao	2026	2	24	20	93	138	138	25
Mindanao	2026	2	24	21	88	138	138	25
Mindanao	2026	2	24	22	82	138	138	25
Mindanao	2026	2	24	23	74	138	138	25
Mindanao	2026	2	24	24	70	138	138	25
Mindanao	2026	2	25	1	64	138	138	25
Mindanao	2026	2	25	2	62	138	138	25
Mindanao	2026	2	25	3	60	138	138	25
Mindanao	2026	2	25	4	60	138	138	25
Mindanao	2026	2	25	5	62	138	138	25
Mindanao	2026	2	25	6	65	138	138	25
Mindanao	2026	2	25	7	65	138	138	25
Mindanao	2026	2	25	8	66	138	138	25
Mindanao	2026	2	25	9	71	138	138	25
Mindanao	2026	2	25	10	77	138	138	25
Mindanao	2026	2	25	11	78	138	138	25
Mindanao	2026	2	25	12	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	25	13	76	138	138	25
Mindanao	2026	2	25	14	79	138	138	25
Mindanao	2026	2	25	15	79	138	138	25
Mindanao	2026	2	25	16	78	138	138	25
Mindanao	2026	2	25	17	80	138	138	25
Mindanao	2026	2	25	18	87	138	138	25
Mindanao	2026	2	25	19	88	138	138	25
Mindanao	2026	2	25	20	85	138	138	25
Mindanao	2026	2	25	21	80	138	138	25
Mindanao	2026	2	25	22	74	138	138	25
Mindanao	2026	2	25	23	70	138	138	25
Mindanao	2026	2	25	24	66	138	138	25
Mindanao	2026	2	26	1	67	138	138	25
Mindanao	2026	2	26	2	65	138	138	25
Mindanao	2026	2	26	3	63	138	138	25
Mindanao	2026	2	26	4	61	138	138	25
Mindanao	2026	2	26	5	65	138	138	25
Mindanao	2026	2	26	6	70	138	138	25
Mindanao	2026	2	26	7	70	138	138	25
Mindanao	2026	2	26	8	75	138	138	25
Mindanao	2026	2	26	9	86	138	138	25
Mindanao	2026	2	26	10	93	138	138	25
Mindanao	2026	2	26	11	100	138	138	25
Mindanao	2026	2	26	12	96	138	138	25
Mindanao	2026	2	26	13	97	138	138	25
Mindanao	2026	2	26	14	105	138	138	25
Mindanao	2026	2	26	15	102	138	138	25
Mindanao	2026	2	26	16	100	138	138	25
Mindanao	2026	2	26	17	93	138	138	25
Mindanao	2026	2	26	18	96	138	138	25
Mindanao	2026	2	26	19	89	138	138	25
Mindanao	2026	2	26	20	84	138	138	25
Mindanao	2026	2	26	21	83	138	138	25
Mindanao	2026	2	26	22	79	138	138	25
Mindanao	2026	2	26	23	75	138	138	25
Mindanao	2026	2	26	24	68	138	138	25
Mindanao	2026	2	27	1	72	138	138	25
Mindanao	2026	2	27	2	68	138	138	25
Mindanao	2026	2	27	3	66	138	138	25
Mindanao	2026	2	27	4	65	138	138	25
Mindanao	2026	2	27	5	67	138	138	25
Mindanao	2026	2	27	6	73	138	138	25
Mindanao	2026	2	27	7	71	138	138	25
Mindanao	2026	2	27	8	78	138	138	25
Mindanao	2026	2	27	9	89	138	138	25
Mindanao	2026	2	27	10	98	138	138	25
Mindanao	2026	2	27	11	103	138	138	25
Mindanao	2026	2	27	12	103	138	138	25
Mindanao	2026	2	27	13	104	138	138	25
Mindanao	2026	2	27	14	111	138	138	25
Mindanao	2026	2	27	15	111	138	138	25
Mindanao	2026	2	27	16	107	138	138	25
Mindanao	2026	2	27	17	98	138	138	25
Mindanao	2026	2	27	18	101	138	138	25
Mindanao	2026	2	27	19	104	138	138	25
Mindanao	2026	2	27	20	99	138	138	25
Mindanao	2026	2	27	21	94	138	138	25
Mindanao	2026	2	27	22	89	138	138	25
Mindanao	2026	2	27	23	83	138	138	25
Mindanao	2026	2	27	24	78	138	138	25
Mindanao	2026	2	28	1	63	138	138	25
Mindanao	2026	2	28	2	61	138	138	25
Mindanao	2026	2	28	3	59	138	138	25
Mindanao	2026	2	28	4	59	138	138	25
Mindanao	2026	2	28	5	62	138	138	25
Mindanao	2026	2	28	6	66	138	138	25
Mindanao	2026	2	28	7	66	138	138	25
Mindanao	2026	2	28	8	67	138	138	25
Mindanao	2026	2	28	9	74	138	138	25
Mindanao	2026	2	28	10	80	138	138	25
Mindanao	2026	2	28	11	84	138	138	25
Mindanao	2026	2	28	12	83	138	138	25
Mindanao	2026	2	28	13	83	138	138	25
Mindanao	2026	2	28	14	88	138	138	25
Mindanao	2026	2	28	15	86	138	138	25
Mindanao	2026	2	28	16	85	138	138	25
Mindanao	2026	2	28	17	84	138	138	25
Mindanao	2026	2	28	18	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	2	28	19	90	138	138	25
Mindanao	2026	2	28	20	87	138	138	25
Mindanao	2026	2	28	21	82	138	138	25
Mindanao	2026	2	28	22	79	138	138	25
Mindanao	2026	2	28	23	74	138	138	25
Mindanao	2026	2	28	24	69	138	138	25
Mindanao	2026	3	1	1	65	138	138	25
Mindanao	2026	3	1	2	63	138	138	25
Mindanao	2026	3	1	3	61	138	138	25
Mindanao	2026	3	1	4	62	138	138	25
Mindanao	2026	3	1	5	63	138	138	25
Mindanao	2026	3	1	6	64	138	138	25
Mindanao	2026	3	1	7	65	138	138	25
Mindanao	2026	3	1	8	64	138	138	25
Mindanao	2026	3	1	9	60	138	138	25
Mindanao	2026	3	1	10	63	138	138	25
Mindanao	2026	3	1	11	66	138	138	25
Mindanao	2026	3	1	12	66	138	138	25
Mindanao	2026	3	1	13	68	138	138	25
Mindanao	2026	3	1	14	67	138	138	25
Mindanao	2026	3	1	15	66	138	138	25
Mindanao	2026	3	1	16	68	138	138	25
Mindanao	2026	3	1	17	70	138	138	25
Mindanao	2026	3	1	18	81	138	138	25
Mindanao	2026	3	1	19	83	138	138	25
Mindanao	2026	3	1	20	80	138	138	25
Mindanao	2026	3	1	21	77	138	138	25
Mindanao	2026	3	1	22	72	138	138	25
Mindanao	2026	3	1	23	67	138	138	25
Mindanao	2026	3	1	24	61	138	138	25
Mindanao	2026	3	2	1	58	138	138	25
Mindanao	2026	3	2	2	58	138	138	25
Mindanao	2026	3	2	3	56	138	138	25
Mindanao	2026	3	2	4	56	138	138	25
Mindanao	2026	3	2	5	59	138	138	25
Mindanao	2026	3	2	6	64	138	138	25
Mindanao	2026	3	2	7	66	138	138	25
Mindanao	2026	3	2	8	70	138	138	25
Mindanao	2026	3	2	9	80	138	138	25
Mindanao	2026	3	2	10	88	138	138	25
Mindanao	2026	3	2	11	92	138	138	25
Mindanao	2026	3	2	12	94	138	138	25
Mindanao	2026	3	2	13	95	138	138	25
Mindanao	2026	3	2	14	98	138	138	25
Mindanao	2026	3	2	15	100	138	138	25
Mindanao	2026	3	2	16	96	138	138	25
Mindanao	2026	3	2	17	93	138	138	25
Mindanao	2026	3	2	18	98	138	138	25
Mindanao	2026	3	2	19	96	138	138	25
Mindanao	2026	3	2	20	91	138	138	25
Mindanao	2026	3	2	21	87	138	138	25
Mindanao	2026	3	2	22	80	138	138	25
Mindanao	2026	3	2	23	75	138	138	25
Mindanao	2026	3	2	24	69	138	138	25
Mindanao	2026	3	3	1	64	138	138	25
Mindanao	2026	3	3	2	63	138	138	25
Mindanao	2026	3	3	3	62	138	138	25
Mindanao	2026	3	3	4	61	138	138	25
Mindanao	2026	3	3	5	65	138	138	25
Mindanao	2026	3	3	6	71	138	138	25
Mindanao	2026	3	3	7	69	138	138	25
Mindanao	2026	3	3	8	73	138	138	25
Mindanao	2026	3	3	9	82	138	138	25
Mindanao	2026	3	3	10	88	138	138	25
Mindanao	2026	3	3	11	93	138	138	25
Mindanao	2026	3	3	12	90	138	138	25
Mindanao	2026	3	3	13	92	138	138	25
Mindanao	2026	3	3	14	97	138	138	25
Mindanao	2026	3	3	15	97	138	138	25
Mindanao	2026	3	3	16	97	138	138	25
Mindanao	2026	3	3	17	91	138	138	25
Mindanao	2026	3	3	18	93	138	138	25
Mindanao	2026	3	3	19	98	138	138	25
Mindanao	2026	3	3	20	93	138	138	25
Mindanao	2026	3	3	21	89	138	138	25
Mindanao	2026	3	3	22	82	138	138	25
Mindanao	2026	3	3	23	76	138	138	25
Mindanao	2026	3	3	24	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	4	1	68	138	138	25
Mindanao	2026	3	4	2	65	138	138	25
Mindanao	2026	3	4	3	63	138	138	25
Mindanao	2026	3	4	4	63	138	138	25
Mindanao	2026	3	4	5	65	138	138	25
Mindanao	2026	3	4	6	72	138	138	25
Mindanao	2026	3	4	7	71	138	138	25
Mindanao	2026	3	4	8	76	138	138	25
Mindanao	2026	3	4	9	88	138	138	25
Mindanao	2026	3	4	10	96	138	138	25
Mindanao	2026	3	4	11	101	138	138	25
Mindanao	2026	3	4	12	98	138	138	25
Mindanao	2026	3	4	13	102	138	138	25
Mindanao	2026	3	4	14	107	138	138	25
Mindanao	2026	3	4	15	109	138	138	25
Mindanao	2026	3	4	16	106	138	138	25
Mindanao	2026	3	4	17	96	138	138	25
Mindanao	2026	3	4	18	97	138	138	25
Mindanao	2026	3	4	19	100	138	138	25
Mindanao	2026	3	4	20	97	138	138	25
Mindanao	2026	3	4	21	92	138	138	25
Mindanao	2026	3	4	22	86	138	138	25
Mindanao	2026	3	4	23	82	138	138	25
Mindanao	2026	3	4	24	77	138	138	25
Mindanao	2026	3	5	1	73	138	138	25
Mindanao	2026	3	5	2	70	138	138	25
Mindanao	2026	3	5	3	67	138	138	25
Mindanao	2026	3	5	4	66	138	138	25
Mindanao	2026	3	5	5	69	138	138	25
Mindanao	2026	3	5	6	74	138	138	25
Mindanao	2026	3	5	7	72	138	138	25
Mindanao	2026	3	5	8	79	138	138	25
Mindanao	2026	3	5	9	91	138	138	25
Mindanao	2026	3	5	10	98	138	138	25
Mindanao	2026	3	5	11	103	138	138	25
Mindanao	2026	3	5	12	103	138	138	25
Mindanao	2026	3	5	13	104	138	138	25
Mindanao	2026	3	5	14	111	138	138	25
Mindanao	2026	3	5	15	108	138	138	25
Mindanao	2026	3	5	16	106	138	138	25
Mindanao	2026	3	5	17	97	138	138	25
Mindanao	2026	3	5	18	101	138	138	25
Mindanao	2026	3	5	19	100	138	138	25
Mindanao	2026	3	5	20	98	138	138	25
Mindanao	2026	3	5	21	93	138	138	25
Mindanao	2026	3	5	22	86	138	138	25
Mindanao	2026	3	5	23	82	138	138	25
Mindanao	2026	3	5	24	76	138	138	25
Mindanao	2026	3	6	1	72	138	138	25
Mindanao	2026	3	6	2	68	138	138	25
Mindanao	2026	3	6	3	66	138	138	25
Mindanao	2026	3	6	4	65	138	138	25
Mindanao	2026	3	6	5	67	138	138	25
Mindanao	2026	3	6	6	73	138	138	25
Mindanao	2026	3	6	7	71	138	138	25
Mindanao	2026	3	6	8	78	138	138	25
Mindanao	2026	3	6	9	89	138	138	25
Mindanao	2026	3	6	10	98	138	138	25
Mindanao	2026	3	6	11	103	138	138	25
Mindanao	2026	3	6	12	103	138	138	25
Mindanao	2026	3	6	13	104	138	138	25
Mindanao	2026	3	6	14	111	138	138	25
Mindanao	2026	3	6	15	111	138	138	25
Mindanao	2026	3	6	16	107	138	138	25
Mindanao	2026	3	6	17	98	138	138	25
Mindanao	2026	3	6	18	101	138	138	25
Mindanao	2026	3	6	19	104	138	138	25
Mindanao	2026	3	6	20	99	138	138	25
Mindanao	2026	3	6	21	94	138	138	25
Mindanao	2026	3	6	22	89	138	138	25
Mindanao	2026	3	6	23	83	138	138	25
Mindanao	2026	3	6	24	78	138	138	25
Mindanao	2026	3	7	1	74	138	138	25
Mindanao	2026	3	7	2	70	138	138	25
Mindanao	2026	3	7	3	66	138	138	25
Mindanao	2026	3	7	4	66	138	138	25
Mindanao	2026	3	7	5	67	138	138	25
Mindanao	2026	3	7	6	69	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	7	7	66	138	138	25
Mindanao	2026	3	7	8	69	138	138	25
Mindanao	2026	3	7	9	79	138	138	25
Mindanao	2026	3	7	10	85	138	138	25
Mindanao	2026	3	7	11	89	138	138	25
Mindanao	2026	3	7	12	88	138	138	25
Mindanao	2026	3	7	13	89	138	138	25
Mindanao	2026	3	7	14	93	138	138	25
Mindanao	2026	3	7	15	90	138	138	25
Mindanao	2026	3	7	16	88	138	138	25
Mindanao	2026	3	7	17	87	138	138	25
Mindanao	2026	3	7	18	92	138	138	25
Mindanao	2026	3	7	19	92	138	138	25
Mindanao	2026	3	7	20	89	138	138	25
Mindanao	2026	3	7	21	85	138	138	25
Mindanao	2026	3	7	22	80	138	138	25
Mindanao	2026	3	7	23	73	138	138	25
Mindanao	2026	3	7	24	69	138	138	25
Mindanao	2026	3	8	1	66	138	138	25
Mindanao	2026	3	8	2	63	138	138	25
Mindanao	2026	3	8	3	61	138	138	25
Mindanao	2026	3	8	4	60	138	138	25
Mindanao	2026	3	8	5	62	138	138	25
Mindanao	2026	3	8	6	65	138	138	25
Mindanao	2026	3	8	7	64	138	138	25
Mindanao	2026	3	8	8	61	138	138	25
Mindanao	2026	3	8	9	63	138	138	25
Mindanao	2026	3	8	10	67	138	138	25
Mindanao	2026	3	8	11	70	138	138	25
Mindanao	2026	3	8	12	71	138	138	25
Mindanao	2026	3	8	13	71	138	138	25
Mindanao	2026	3	8	14	71	138	138	25
Mindanao	2026	3	8	15	70	138	138	25
Mindanao	2026	3	8	16	69	138	138	25
Mindanao	2026	3	8	17	73	138	138	25
Mindanao	2026	3	8	18	85	138	138	25
Mindanao	2026	3	8	19	86	138	138	25
Mindanao	2026	3	8	20	82	138	138	25
Mindanao	2026	3	8	21	79	138	138	25
Mindanao	2026	3	8	22	73	138	138	25
Mindanao	2026	3	8	23	68	138	138	25
Mindanao	2026	3	8	24	64	138	138	25
Mindanao	2026	3	9	1	60	138	138	25
Mindanao	2026	3	9	2	58	138	138	25
Mindanao	2026	3	9	3	58	138	138	25
Mindanao	2026	3	9	4	58	138	138	25
Mindanao	2026	3	9	5	60	138	138	25
Mindanao	2026	3	9	6	66	138	138	25
Mindanao	2026	3	9	7	66	138	138	25
Mindanao	2026	3	9	8	73	138	138	25
Mindanao	2026	3	9	9	82	138	138	25
Mindanao	2026	3	9	10	90	138	138	25
Mindanao	2026	3	9	11	96	138	138	25
Mindanao	2026	3	9	12	97	138	138	25
Mindanao	2026	3	9	13	98	138	138	25
Mindanao	2026	3	9	14	103	138	138	25
Mindanao	2026	3	9	15	100	138	138	25
Mindanao	2026	3	9	16	97	138	138	25
Mindanao	2026	3	9	17	95	138	138	25
Mindanao	2026	3	9	18	98	138	138	25
Mindanao	2026	3	9	19	94	138	138	25
Mindanao	2026	3	9	20	89	138	138	25
Mindanao	2026	3	9	21	85	138	138	25
Mindanao	2026	3	9	22	79	138	138	25
Mindanao	2026	3	9	23	73	138	138	25
Mindanao	2026	3	9	24	68	138	138	25
Mindanao	2026	3	10	1	66	138	138	25
Mindanao	2026	3	10	2	63	138	138	25
Mindanao	2026	3	10	3	61	138	138	25
Mindanao	2026	3	10	4	61	138	138	25
Mindanao	2026	3	10	5	63	138	138	25
Mindanao	2026	3	10	6	68	138	138	25
Mindanao	2026	3	10	7	67	138	138	25
Mindanao	2026	3	10	8	74	138	138	25
Mindanao	2026	3	10	9	84	138	138	25
Mindanao	2026	3	10	10	92	138	138	25
Mindanao	2026	3	10	11	97	138	138	25
Mindanao	2026	3	10	12	94	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	10	13	95	138	138	25
Mindanao	2026	3	10	14	101	138	138	25
Mindanao	2026	3	10	15	101	138	138	25
Mindanao	2026	3	10	16	99	138	138	25
Mindanao	2026	3	10	17	93	138	138	25
Mindanao	2026	3	10	18	97	138	138	25
Mindanao	2026	3	10	19	96	138	138	25
Mindanao	2026	3	10	20	91	138	138	25
Mindanao	2026	3	10	21	85	138	138	25
Mindanao	2026	3	10	22	80	138	138	25
Mindanao	2026	3	10	23	75	138	138	25
Mindanao	2026	3	10	24	70	138	138	25
Mindanao	2026	3	11	1	66	138	138	25
Mindanao	2026	3	11	2	63	138	138	25
Mindanao	2026	3	11	3	61	138	138	25
Mindanao	2026	3	11	4	61	138	138	25
Mindanao	2026	3	11	5	64	138	138	25
Mindanao	2026	3	11	6	71	138	138	25
Mindanao	2026	3	11	7	70	138	138	25
Mindanao	2026	3	11	8	77	138	138	25
Mindanao	2026	3	11	9	88	138	138	25
Mindanao	2026	3	11	10	92	138	138	25
Mindanao	2026	3	11	11	99	138	138	25
Mindanao	2026	3	11	12	96	138	138	25
Mindanao	2026	3	11	13	95	138	138	25
Mindanao	2026	3	11	14	101	138	138	25
Mindanao	2026	3	11	15	98	138	138	25
Mindanao	2026	3	11	16	98	138	138	25
Mindanao	2026	3	11	17	94	138	138	25
Mindanao	2026	3	11	18	95	138	138	25
Mindanao	2026	3	11	19	95	138	138	25
Mindanao	2026	3	11	20	90	138	138	25
Mindanao	2026	3	11	21	86	138	138	25
Mindanao	2026	3	11	22	79	138	138	25
Mindanao	2026	3	11	23	74	138	138	25
Mindanao	2026	3	11	24	69	138	138	25
Mindanao	2026	3	12	1	66	138	138	25
Mindanao	2026	3	12	2	63	138	138	25
Mindanao	2026	3	12	3	62	138	138	25
Mindanao	2026	3	12	4	61	138	138	25
Mindanao	2026	3	12	5	64	138	138	25
Mindanao	2026	3	12	6	70	138	138	25
Mindanao	2026	3	12	7	69	138	138	25
Mindanao	2026	3	12	8	75	138	138	25
Mindanao	2026	3	12	9	86	138	138	25
Mindanao	2026	3	12	10	94	138	138	25
Mindanao	2026	3	12	11	101	138	138	25
Mindanao	2026	3	12	12	100	138	138	25
Mindanao	2026	3	12	13	99	138	138	25
Mindanao	2026	3	12	14	107	138	138	25
Mindanao	2026	3	12	15	108	138	138	25
Mindanao	2026	3	12	16	106	138	138	25
Mindanao	2026	3	12	17	98	138	138	25
Mindanao	2026	3	12	18	100	138	138	25
Mindanao	2026	3	12	19	100	138	138	25
Mindanao	2026	3	12	20	95	138	138	25
Mindanao	2026	3	12	21	93	138	138	25
Mindanao	2026	3	12	22	87	138	138	25
Mindanao	2026	3	12	23	81	138	138	25
Mindanao	2026	3	12	24	77	138	138	25
Mindanao	2026	3	13	1	71	138	138	25
Mindanao	2026	3	13	2	69	138	138	25
Mindanao	2026	3	13	3	66	138	138	25
Mindanao	2026	3	13	4	66	138	138	25
Mindanao	2026	3	13	5	69	138	138	25
Mindanao	2026	3	13	6	73	138	138	25
Mindanao	2026	3	13	7	71	138	138	25
Mindanao	2026	3	13	8	78	138	138	25
Mindanao	2026	3	13	9	92	138	138	25
Mindanao	2026	3	13	10	99	138	138	25
Mindanao	2026	3	13	11	105	138	138	25
Mindanao	2026	3	13	12	104	138	138	25
Mindanao	2026	3	13	13	105	138	138	25
Mindanao	2026	3	13	14	112	138	138	25
Mindanao	2026	3	13	15	110	138	138	25
Mindanao	2026	3	13	16	107	138	138	25
Mindanao	2026	3	13	17	98	138	138	25
Mindanao	2026	3	13	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	13	19	101	138	138	25
Mindanao	2026	3	13	20	99	138	138	25
Mindanao	2026	3	13	21	94	138	138	25
Mindanao	2026	3	13	22	89	138	138	25
Mindanao	2026	3	13	23	83	138	138	25
Mindanao	2026	3	13	24	77	138	138	25
Mindanao	2026	3	14	1	72	138	138	25
Mindanao	2026	3	14	2	69	138	138	25
Mindanao	2026	3	14	3	66	138	138	25
Mindanao	2026	3	14	4	65	138	138	25
Mindanao	2026	3	14	5	68	138	138	25
Mindanao	2026	3	14	6	71	138	138	25
Mindanao	2026	3	14	7	67	138	138	25
Mindanao	2026	3	14	8	71	138	138	25
Mindanao	2026	3	14	9	79	138	138	25
Mindanao	2026	3	14	10	86	138	138	25
Mindanao	2026	3	14	11	90	138	138	25
Mindanao	2026	3	14	12	90	138	138	25
Mindanao	2026	3	14	13	93	138	138	25
Mindanao	2026	3	14	14	95	138	138	25
Mindanao	2026	3	14	15	93	138	138	25
Mindanao	2026	3	14	16	89	138	138	25
Mindanao	2026	3	14	17	87	138	138	25
Mindanao	2026	3	14	18	92	138	138	25
Mindanao	2026	3	14	19	93	138	138	25
Mindanao	2026	3	14	20	95	138	138	25
Mindanao	2026	3	14	21	91	138	138	25
Mindanao	2026	3	14	22	84	138	138	25
Mindanao	2026	3	14	23	79	138	138	25
Mindanao	2026	3	14	24	74	138	138	25
Mindanao	2026	3	15	1	69	138	138	25
Mindanao	2026	3	15	2	66	138	138	25
Mindanao	2026	3	15	3	64	138	138	25
Mindanao	2026	3	15	4	63	138	138	25
Mindanao	2026	3	15	5	64	138	138	25
Mindanao	2026	3	15	6	67	138	138	25
Mindanao	2026	3	15	7	65	138	138	25
Mindanao	2026	3	15	8	65	138	138	25
Mindanao	2026	3	15	9	67	138	138	25
Mindanao	2026	3	15	10	73	138	138	25
Mindanao	2026	3	15	11	79	138	138	25
Mindanao	2026	3	15	12	80	138	138	25
Mindanao	2026	3	15	13	84	138	138	25
Mindanao	2026	3	15	14	86	138	138	25
Mindanao	2026	3	15	15	81	138	138	25
Mindanao	2026	3	15	16	81	138	138	25
Mindanao	2026	3	15	17	82	138	138	25
Mindanao	2026	3	15	18	89	138	138	25
Mindanao	2026	3	15	19	89	138	138	25
Mindanao	2026	3	15	20	88	138	138	25
Mindanao	2026	3	15	21	87	138	138	25
Mindanao	2026	3	15	22	82	138	138	25
Mindanao	2026	3	15	23	77	138	138	25
Mindanao	2026	3	15	24	71	138	138	25
Mindanao	2026	3	16	1	68	138	138	25
Mindanao	2026	3	16	2	65	138	138	25
Mindanao	2026	3	16	3	62	138	138	25
Mindanao	2026	3	16	4	62	138	138	25
Mindanao	2026	3	16	5	64	138	138	25
Mindanao	2026	3	16	6	71	138	138	25
Mindanao	2026	3	16	7	68	138	138	25
Mindanao	2026	3	16	8	77	138	138	25
Mindanao	2026	3	16	9	90	138	138	25
Mindanao	2026	3	16	10	99	138	138	25
Mindanao	2026	3	16	11	106	138	138	25
Mindanao	2026	3	16	12	106	138	138	25
Mindanao	2026	3	16	13	108	138	138	25
Mindanao	2026	3	16	14	113	138	138	25
Mindanao	2026	3	16	15	111	138	138	25
Mindanao	2026	3	16	16	108	138	138	25
Mindanao	2026	3	16	17	98	138	138	25
Mindanao	2026	3	16	18	100	138	138	25
Mindanao	2026	3	16	19	98	138	138	25
Mindanao	2026	3	16	20	95	138	138	25
Mindanao	2026	3	16	21	91	138	138	25
Mindanao	2026	3	16	22	85	138	138	25
Mindanao	2026	3	16	23	80	138	138	25
Mindanao	2026	3	16	24	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	17	1	70	138	138	25
Mindanao	2026	3	17	2	67	138	138	25
Mindanao	2026	3	17	3	65	138	138	25
Mindanao	2026	3	17	4	64	138	138	25
Mindanao	2026	3	17	5	66	138	138	25
Mindanao	2026	3	17	6	71	138	138	25
Mindanao	2026	3	17	7	70	138	138	25
Mindanao	2026	3	17	8	79	138	138	25
Mindanao	2026	3	17	9	90	138	138	25
Mindanao	2026	3	17	10	99	138	138	25
Mindanao	2026	3	17	11	105	138	138	25
Mindanao	2026	3	17	12	104	138	138	25
Mindanao	2026	3	17	13	102	138	138	25
Mindanao	2026	3	17	14	110	138	138	25
Mindanao	2026	3	17	15	111	138	138	25
Mindanao	2026	3	17	16	107	138	138	25
Mindanao	2026	3	17	17	101	138	138	25
Mindanao	2026	3	17	18	104	138	138	25
Mindanao	2026	3	17	19	104	138	138	25
Mindanao	2026	3	17	20	100	138	138	25
Mindanao	2026	3	17	21	95	138	138	25
Mindanao	2026	3	17	22	89	138	138	25
Mindanao	2026	3	17	23	83	138	138	25
Mindanao	2026	3	17	24	78	138	138	25
Mindanao	2026	3	18	1	74	138	138	25
Mindanao	2026	3	18	2	70	138	138	25
Mindanao	2026	3	18	3	67	138	138	25
Mindanao	2026	3	18	4	66	138	138	25
Mindanao	2026	3	18	5	70	138	138	25
Mindanao	2026	3	18	6	74	138	138	25
Mindanao	2026	3	18	7	72	138	138	25
Mindanao	2026	3	18	8	80	138	138	25
Mindanao	2026	3	18	9	94	138	138	25
Mindanao	2026	3	18	10	101	138	138	25
Mindanao	2026	3	18	11	106	138	138	25
Mindanao	2026	3	18	12	105	138	138	25
Mindanao	2026	3	18	13	108	138	138	25
Mindanao	2026	3	18	14	112	138	138	25
Mindanao	2026	3	18	15	105	138	138	25
Mindanao	2026	3	18	16	108	138	138	25
Mindanao	2026	3	18	17	100	138	138	25
Mindanao	2026	3	18	18	102	138	138	25
Mindanao	2026	3	18	19	103	138	138	25
Mindanao	2026	3	18	20	98	138	138	25
Mindanao	2026	3	18	21	94	138	138	25
Mindanao	2026	3	18	22	88	138	138	25
Mindanao	2026	3	18	23	82	138	138	25
Mindanao	2026	3	18	24	77	138	138	25
Mindanao	2026	3	19	1	74	138	138	25
Mindanao	2026	3	19	2	71	138	138	25
Mindanao	2026	3	19	3	68	138	138	25
Mindanao	2026	3	19	4	68	138	138	25
Mindanao	2026	3	19	5	70	138	138	25
Mindanao	2026	3	19	6	74	138	138	25
Mindanao	2026	3	19	7	72	138	138	25
Mindanao	2026	3	19	8	80	138	138	25
Mindanao	2026	3	19	9	92	138	138	25
Mindanao	2026	3	19	10	98	138	138	25
Mindanao	2026	3	19	11	101	138	138	25
Mindanao	2026	3	19	12	99	138	138	25
Mindanao	2026	3	19	13	98	138	138	25
Mindanao	2026	3	19	14	103	138	138	25
Mindanao	2026	3	19	15	103	138	138	25
Mindanao	2026	3	19	16	100	138	138	25
Mindanao	2026	3	19	17	97	138	138	25
Mindanao	2026	3	19	18	101	138	138	25
Mindanao	2026	3	19	19	100	138	138	25
Mindanao	2026	3	19	20	96	138	138	25
Mindanao	2026	3	19	21	90	138	138	25
Mindanao	2026	3	19	22	85	138	138	25
Mindanao	2026	3	19	23	79	138	138	25
Mindanao	2026	3	19	24	73	138	138	25
Mindanao	2026	3	20	1	69	138	138	25
Mindanao	2026	3	20	2	67	138	138	25
Mindanao	2026	3	20	3	64	138	138	25
Mindanao	2026	3	20	4	63	138	138	25
Mindanao	2026	3	20	5	67	138	138	25
Mindanao	2026	3	20	6	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	20	7	70	138	138	25
Mindanao	2026	3	20	8	76	138	138	25
Mindanao	2026	3	20	9	89	138	138	25
Mindanao	2026	3	20	10	96	138	138	25
Mindanao	2026	3	20	11	103	138	138	25
Mindanao	2026	3	20	12	101	138	138	25
Mindanao	2026	3	20	13	103	138	138	25
Mindanao	2026	3	20	14	110	138	138	25
Mindanao	2026	3	20	15	107	138	138	25
Mindanao	2026	3	20	16	105	138	138	25
Mindanao	2026	3	20	17	98	138	138	25
Mindanao	2026	3	20	18	100	138	138	25
Mindanao	2026	3	20	19	104	138	138	25
Mindanao	2026	3	20	20	100	138	138	25
Mindanao	2026	3	20	21	95	138	138	25
Mindanao	2026	3	20	22	88	138	138	25
Mindanao	2026	3	20	23	84	138	138	25
Mindanao	2026	3	20	24	78	138	138	25
Mindanao	2026	3	21	1	73	138	138	25
Mindanao	2026	3	21	2	69	138	138	25
Mindanao	2026	3	21	3	66	138	138	25
Mindanao	2026	3	21	4	66	138	138	25
Mindanao	2026	3	21	5	67	138	138	25
Mindanao	2026	3	21	6	68	138	138	25
Mindanao	2026	3	21	7	68	138	138	25
Mindanao	2026	3	21	8	73	138	138	25
Mindanao	2026	3	21	9	81	138	138	25
Mindanao	2026	3	21	10	87	138	138	25
Mindanao	2026	3	21	11	92	138	138	25
Mindanao	2026	3	21	12	92	138	138	25
Mindanao	2026	3	21	13	93	138	138	25
Mindanao	2026	3	21	14	98	138	138	25
Mindanao	2026	3	21	15	95	138	138	25
Mindanao	2026	3	21	16	92	138	138	25
Mindanao	2026	3	21	17	89	138	138	25
Mindanao	2026	3	21	18	93	138	138	25
Mindanao	2026	3	21	19	98	138	138	25
Mindanao	2026	3	21	20	95	138	138	25
Mindanao	2026	3	21	21	91	138	138	25
Mindanao	2026	3	21	22	84	138	138	25
Mindanao	2026	3	21	23	79	138	138	25
Mindanao	2026	3	21	24	73	138	138	25
Mindanao	2026	3	22	1	69	138	138	25
Mindanao	2026	3	22	2	67	138	138	25
Mindanao	2026	3	22	3	64	138	138	25
Mindanao	2026	3	22	4	64	138	138	25
Mindanao	2026	3	22	5	66	138	138	25
Mindanao	2026	3	22	6	67	138	138	25
Mindanao	2026	3	22	7	66	138	138	25
Mindanao	2026	3	22	8	65	138	138	25
Mindanao	2026	3	22	9	68	138	138	25
Mindanao	2026	3	22	10	73	138	138	25
Mindanao	2026	3	22	11	77	138	138	25
Mindanao	2026	3	22	12	78	138	138	25
Mindanao	2026	3	22	13	75	138	138	25
Mindanao	2026	3	22	14	77	138	138	25
Mindanao	2026	3	22	15	77	138	138	25
Mindanao	2026	3	22	16	78	138	138	25
Mindanao	2026	3	22	17	79	138	138	25
Mindanao	2026	3	22	18	88	138	138	25
Mindanao	2026	3	22	19	90	138	138	25
Mindanao	2026	3	22	20	86	138	138	25
Mindanao	2026	3	22	21	81	138	138	25
Mindanao	2026	3	22	22	76	138	138	25
Mindanao	2026	3	22	23	71	138	138	25
Mindanao	2026	3	22	24	66	138	138	25
Mindanao	2026	3	23	1	64	138	138	25
Mindanao	2026	3	23	2	63	138	138	25
Mindanao	2026	3	23	3	61	138	138	25
Mindanao	2026	3	23	4	61	138	138	25
Mindanao	2026	3	23	5	63	138	138	25
Mindanao	2026	3	23	6	68	138	138	25
Mindanao	2026	3	23	7	68	138	138	25
Mindanao	2026	3	23	8	74	138	138	25
Mindanao	2026	3	23	9	88	138	138	25
Mindanao	2026	3	23	10	95	138	138	25
Mindanao	2026	3	23	11	101	138	138	25
Mindanao	2026	3	23	12	100	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	23	13	98	138	138	25
Mindanao	2026	3	23	14	103	138	138	25
Mindanao	2026	3	23	15	100	138	138	25
Mindanao	2026	3	23	16	96	138	138	25
Mindanao	2026	3	23	17	93	138	138	25
Mindanao	2026	3	23	18	98	138	138	25
Mindanao	2026	3	23	19	99	138	138	25
Mindanao	2026	3	23	20	92	138	138	25
Mindanao	2026	3	23	21	88	138	138	25
Mindanao	2026	3	23	22	81	138	138	25
Mindanao	2026	3	23	23	76	138	138	25
Mindanao	2026	3	23	24	71	138	138	25
Mindanao	2026	3	24	1	67	138	138	25
Mindanao	2026	3	24	2	64	138	138	25
Mindanao	2026	3	24	3	63	138	138	25
Mindanao	2026	3	24	4	63	138	138	25
Mindanao	2026	3	24	5	66	138	138	25
Mindanao	2026	3	24	6	73	138	138	25
Mindanao	2026	3	24	7	70	138	138	25
Mindanao	2026	3	24	8	77	138	138	25
Mindanao	2026	3	24	9	89	138	138	25
Mindanao	2026	3	24	10	99	138	138	25
Mindanao	2026	3	24	11	106	138	138	25
Mindanao	2026	3	24	12	105	138	138	25
Mindanao	2026	3	24	13	106	138	138	25
Mindanao	2026	3	24	14	112	138	138	25
Mindanao	2026	3	24	15	113	138	138	25
Mindanao	2026	3	24	16	110	138	138	25
Mindanao	2026	3	24	17	99	138	138	25
Mindanao	2026	3	24	18	104	138	138	25
Mindanao	2026	3	24	19	106	138	138	25
Mindanao	2026	3	24	20	102	138	138	25
Mindanao	2026	3	24	21	98	138	138	25
Mindanao	2026	3	24	22	89	138	138	25
Mindanao	2026	3	24	23	84	138	138	25
Mindanao	2026	3	24	24	78	138	138	25
Mindanao	2026	3	25	1	74	138	138	25
Mindanao	2026	3	25	2	72	138	138	25
Mindanao	2026	3	25	3	68	138	138	25
Mindanao	2026	3	25	4	66	138	138	25
Mindanao	2026	3	25	5	70	138	138	25
Mindanao	2026	3	25	6	75	138	138	25
Mindanao	2026	3	25	7	72	138	138	25
Mindanao	2026	3	25	8	81	138	138	25
Mindanao	2026	3	25	9	93	138	138	25
Mindanao	2026	3	25	10	102	138	138	25
Mindanao	2026	3	25	11	105	138	138	25
Mindanao	2026	3	25	12	101	138	138	25
Mindanao	2026	3	25	13	106	138	138	25
Mindanao	2026	3	25	14	111	138	138	25
Mindanao	2026	3	25	15	113	138	138	25
Mindanao	2026	3	25	16	108	138	138	25
Mindanao	2026	3	25	17	101	138	138	25
Mindanao	2026	3	25	18	105	138	138	25
Mindanao	2026	3	25	19	107	138	138	25
Mindanao	2026	3	25	20	101	138	138	25
Mindanao	2026	3	25	21	98	138	138	25
Mindanao	2026	3	25	22	91	138	138	25
Mindanao	2026	3	25	23	86	138	138	25
Mindanao	2026	3	25	24	77	138	138	25
Mindanao	2026	3	26	1	73	138	138	25
Mindanao	2026	3	26	2	69	138	138	25
Mindanao	2026	3	26	3	67	138	138	25
Mindanao	2026	3	26	4	67	138	138	25
Mindanao	2026	3	26	5	70	138	138	25
Mindanao	2026	3	26	6	76	138	138	25
Mindanao	2026	3	26	7	73	138	138	25
Mindanao	2026	3	26	8	82	138	138	25
Mindanao	2026	3	26	9	94	138	138	25
Mindanao	2026	3	26	10	102	138	138	25
Mindanao	2026	3	26	11	105	138	138	25
Mindanao	2026	3	26	12	104	138	138	25
Mindanao	2026	3	26	13	106	138	138	25
Mindanao	2026	3	26	14	108	138	138	25
Mindanao	2026	3	26	15	106	138	138	25
Mindanao	2026	3	26	16	106	138	138	25
Mindanao	2026	3	26	17	98	138	138	25
Mindanao	2026	3	26	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	26	19	104	138	138	25
Mindanao	2026	3	26	20	99	138	138	25
Mindanao	2026	3	26	21	95	138	138	25
Mindanao	2026	3	26	22	88	138	138	25
Mindanao	2026	3	26	23	82	138	138	25
Mindanao	2026	3	26	24	77	138	138	25
Mindanao	2026	3	27	1	73	138	138	25
Mindanao	2026	3	27	2	70	138	138	25
Mindanao	2026	3	27	3	67	138	138	25
Mindanao	2026	3	27	4	66	138	138	25
Mindanao	2026	3	27	5	71	138	138	25
Mindanao	2026	3	27	6	74	138	138	25
Mindanao	2026	3	27	7	74	138	138	25
Mindanao	2026	3	27	8	81	138	138	25
Mindanao	2026	3	27	9	92	138	138	25
Mindanao	2026	3	27	10	98	138	138	25
Mindanao	2026	3	27	11	106	138	138	25
Mindanao	2026	3	27	12	104	138	138	25
Mindanao	2026	3	27	13	107	138	138	25
Mindanao	2026	3	27	14	110	138	138	25
Mindanao	2026	3	27	15	112	138	138	25
Mindanao	2026	3	27	16	109	138	138	25
Mindanao	2026	3	27	17	102	138	138	25
Mindanao	2026	3	27	18	105	138	138	25
Mindanao	2026	3	27	19	106	138	138	25
Mindanao	2026	3	27	20	102	138	138	25
Mindanao	2026	3	27	21	98	138	138	25
Mindanao	2026	3	27	22	91	138	138	25
Mindanao	2026	3	27	23	85	138	138	25
Mindanao	2026	3	27	24	80	138	138	25
Mindanao	2026	3	28	1	77	138	138	25
Mindanao	2026	3	28	2	73	138	138	25
Mindanao	2026	3	28	3	70	138	138	25
Mindanao	2026	3	28	4	70	138	138	25
Mindanao	2026	3	28	5	72	138	138	25
Mindanao	2026	3	28	6	76	138	138	25
Mindanao	2026	3	28	7	74	138	138	25
Mindanao	2026	3	28	8	76	138	138	25
Mindanao	2026	3	28	9	78	138	138	25
Mindanao	2026	3	28	10	83	138	138	25
Mindanao	2026	3	28	11	85	138	138	25
Mindanao	2026	3	28	12	84	138	138	25
Mindanao	2026	3	28	13	84	138	138	25
Mindanao	2026	3	28	14	89	138	138	25
Mindanao	2026	3	28	15	88	138	138	25
Mindanao	2026	3	28	16	88	138	138	25
Mindanao	2026	3	28	17	87	138	138	25
Mindanao	2026	3	28	18	96	138	138	25
Mindanao	2026	3	28	19	96	138	138	25
Mindanao	2026	3	28	20	90	138	138	25
Mindanao	2026	3	28	21	86	138	138	25
Mindanao	2026	3	28	22	80	138	138	25
Mindanao	2026	3	28	23	74	138	138	25
Mindanao	2026	3	28	24	69	138	138	25
Mindanao	2026	3	29	1	66	138	138	25
Mindanao	2026	3	29	2	62	138	138	25
Mindanao	2026	3	29	3	61	138	138	25
Mindanao	2026	3	29	4	61	138	138	25
Mindanao	2026	3	29	5	62	138	138	25
Mindanao	2026	3	29	6	64	138	138	25
Mindanao	2026	3	29	7	64	138	138	25
Mindanao	2026	3	29	8	64	138	138	25
Mindanao	2026	3	29	9	65	138	138	25
Mindanao	2026	3	29	10	68	138	138	25
Mindanao	2026	3	29	11	72	138	138	25
Mindanao	2026	3	29	12	73	138	138	25
Mindanao	2026	3	29	13	73	138	138	25
Mindanao	2026	3	29	14	72	138	138	25
Mindanao	2026	3	29	15	73	138	138	25
Mindanao	2026	3	29	16	73	138	138	25
Mindanao	2026	3	29	17	76	138	138	25
Mindanao	2026	3	29	18	84	138	138	25
Mindanao	2026	3	29	19	87	138	138	25
Mindanao	2026	3	29	20	83	138	138	25
Mindanao	2026	3	29	21	80	138	138	25
Mindanao	2026	3	29	22	74	138	138	25
Mindanao	2026	3	29	23	70	138	138	25
Mindanao	2026	3	29	24	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	3	30	1	61	138	138	25
Mindanao	2026	3	30	2	58	138	138	25
Mindanao	2026	3	30	3	58	138	138	25
Mindanao	2026	3	30	4	58	138	138	25
Mindanao	2026	3	30	5	62	138	138	25
Mindanao	2026	3	30	6	68	138	138	25
Mindanao	2026	3	30	7	68	138	138	25
Mindanao	2026	3	30	8	76	138	138	25
Mindanao	2026	3	30	9	88	138	138	25
Mindanao	2026	3	30	10	93	138	138	25
Mindanao	2026	3	30	11	101	138	138	25
Mindanao	2026	3	30	12	98	138	138	25
Mindanao	2026	3	30	13	99	138	138	25
Mindanao	2026	3	30	14	104	138	138	25
Mindanao	2026	3	30	15	103	138	138	25
Mindanao	2026	3	30	16	101	138	138	25
Mindanao	2026	3	30	17	97	138	138	25
Mindanao	2026	3	30	18	101	138	138	25
Mindanao	2026	3	30	19	100	138	138	25
Mindanao	2026	3	30	20	95	138	138	25
Mindanao	2026	3	30	21	91	138	138	25
Mindanao	2026	3	30	22	85	138	138	25
Mindanao	2026	3	30	23	80	138	138	25
Mindanao	2026	3	30	24	76	138	138	25
Mindanao	2026	3	31	1	69	138	138	25
Mindanao	2026	3	31	2	67	138	138	25
Mindanao	2026	3	31	3	65	138	138	25
Mindanao	2026	3	31	4	65	138	138	25
Mindanao	2026	3	31	5	70	138	138	25
Mindanao	2026	3	31	6	76	138	138	25
Mindanao	2026	3	31	7	73	138	138	25
Mindanao	2026	3	31	8	83	138	138	25
Mindanao	2026	3	31	9	94	138	138	25
Mindanao	2026	3	31	10	104	138	138	25
Mindanao	2026	3	31	11	108	138	138	25
Mindanao	2026	3	31	12	105	138	138	25
Mindanao	2026	3	31	13	110	138	138	25
Mindanao	2026	3	31	14	114	138	138	25
Mindanao	2026	3	31	15	111	138	138	25
Mindanao	2026	3	31	16	107	138	138	25
Mindanao	2026	3	31	17	99	138	138	25
Mindanao	2026	3	31	18	103	138	138	25
Mindanao	2026	3	31	19	105	138	138	25
Mindanao	2026	3	31	20	99	138	138	25
Mindanao	2026	3	31	21	93	138	138	25
Mindanao	2026	3	31	22	87	138	138	25
Mindanao	2026	3	31	23	82	138	138	25
Mindanao	2026	3	31	24	77	138	138	25
Mindanao	2026	4	1	1	72	138	138	25
Mindanao	2026	4	1	2	70	138	138	25
Mindanao	2026	4	1	3	67	138	138	25
Mindanao	2026	4	1	4	66	138	138	25
Mindanao	2026	4	1	5	71	138	138	25
Mindanao	2026	4	1	6	77	138	138	25
Mindanao	2026	4	1	7	72	138	138	25
Mindanao	2026	4	1	8	80	138	138	25
Mindanao	2026	4	1	9	92	138	138	25
Mindanao	2026	4	1	10	100	138	138	25
Mindanao	2026	4	1	11	110	138	138	25
Mindanao	2026	4	1	12	107	138	138	25
Mindanao	2026	4	1	13	109	138	138	25
Mindanao	2026	4	1	14	116	138	138	25
Mindanao	2026	4	1	15	112	138	138	25
Mindanao	2026	4	1	16	110	138	138	25
Mindanao	2026	4	1	17	97	138	138	25
Mindanao	2026	4	1	18	101	138	138	25
Mindanao	2026	4	1	19	103	138	138	25
Mindanao	2026	4	1	20	100	138	138	25
Mindanao	2026	4	1	21	97	138	138	25
Mindanao	2026	4	1	22	89	138	138	25
Mindanao	2026	4	1	23	85	138	138	25
Mindanao	2026	4	1	24	79	138	138	25
Mindanao	2026	4	2	1	67	138	138	25
Mindanao	2026	4	2	2	65	138	138	25
Mindanao	2026	4	2	3	63	138	138	25
Mindanao	2026	4	2	4	62	138	138	25
Mindanao	2026	4	2	5	62	138	138	25
Mindanao	2026	4	2	6	61	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	2	7	62	138	138	25
Mindanao	2026	4	2	8	64	138	138	25
Mindanao	2026	4	2	9	67	138	138	25
Mindanao	2026	4	2	10	73	138	138	25
Mindanao	2026	4	2	11	77	138	138	25
Mindanao	2026	4	2	12	78	138	138	25
Mindanao	2026	4	2	13	80	138	138	25
Mindanao	2026	4	2	14	80	138	138	25
Mindanao	2026	4	2	15	81	138	138	25
Mindanao	2026	4	2	16	80	138	138	25
Mindanao	2026	4	2	17	78	138	138	25
Mindanao	2026	4	2	18	86	138	138	25
Mindanao	2026	4	2	19	88	138	138	25
Mindanao	2026	4	2	20	86	138	138	25
Mindanao	2026	4	2	21	83	138	138	25
Mindanao	2026	4	2	22	79	138	138	25
Mindanao	2026	4	2	23	74	138	138	25
Mindanao	2026	4	2	24	67	138	138	25
Mindanao	2026	4	3	1	61	138	138	25
Mindanao	2026	4	3	2	60	138	138	25
Mindanao	2026	4	3	3	59	138	138	25
Mindanao	2026	4	3	4	58	138	138	25
Mindanao	2026	4	3	5	57	138	138	25
Mindanao	2026	4	3	6	57	138	138	25
Mindanao	2026	4	3	7	56	138	138	25
Mindanao	2026	4	3	8	56	138	138	25
Mindanao	2026	4	3	9	57	138	138	25
Mindanao	2026	4	3	10	58	138	138	25
Mindanao	2026	4	3	11	61	138	138	25
Mindanao	2026	4	3	12	63	138	138	25
Mindanao	2026	4	3	13	65	138	138	25
Mindanao	2026	4	3	14	66	138	138	25
Mindanao	2026	4	3	15	66	138	138	25
Mindanao	2026	4	3	16	66	138	138	25
Mindanao	2026	4	3	17	65	138	138	25
Mindanao	2026	4	3	18	76	138	138	25
Mindanao	2026	4	3	19	81	138	138	25
Mindanao	2026	4	3	20	80	138	138	25
Mindanao	2026	4	3	21	80	138	138	25
Mindanao	2026	4	3	22	75	138	138	25
Mindanao	2026	4	3	23	72	138	138	25
Mindanao	2026	4	3	24	65	138	138	25
Mindanao	2026	4	4	1	75	138	138	25
Mindanao	2026	4	4	2	72	138	138	25
Mindanao	2026	4	4	3	70	138	138	25
Mindanao	2026	4	4	4	69	138	138	25
Mindanao	2026	4	4	5	71	138	138	25
Mindanao	2026	4	4	6	73	138	138	25
Mindanao	2026	4	4	7	71	138	138	25
Mindanao	2026	4	4	8	75	138	138	25
Mindanao	2026	4	4	9	81	138	138	25
Mindanao	2026	4	4	10	88	138	138	25
Mindanao	2026	4	4	11	92	138	138	25
Mindanao	2026	4	4	12	87	138	138	25
Mindanao	2026	4	4	13	90	138	138	25
Mindanao	2026	4	4	14	92	138	138	25
Mindanao	2026	4	4	15	90	138	138	25
Mindanao	2026	4	4	16	89	138	138	25
Mindanao	2026	4	4	17	90	138	138	25
Mindanao	2026	4	4	18	98	138	138	25
Mindanao	2026	4	4	19	94	138	138	25
Mindanao	2026	4	4	20	90	138	138	25
Mindanao	2026	4	4	21	87	138	138	25
Mindanao	2026	4	4	22	79	138	138	25
Mindanao	2026	4	4	23	75	138	138	25
Mindanao	2026	4	4	24	71	138	138	25
Mindanao	2026	4	5	1	68	138	138	25
Mindanao	2026	4	5	2	66	138	138	25
Mindanao	2026	4	5	3	65	138	138	25
Mindanao	2026	4	5	4	63	138	138	25
Mindanao	2026	4	5	5	64	138	138	25
Mindanao	2026	4	5	6	65	138	138	25
Mindanao	2026	4	5	7	64	138	138	25
Mindanao	2026	4	5	8	64	138	138	25
Mindanao	2026	4	5	9	66	138	138	25
Mindanao	2026	4	5	10	71	138	138	25
Mindanao	2026	4	5	11	75	138	138	25
Mindanao	2026	4	5	12	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	5	13	79	138	138	25
Mindanao	2026	4	5	14	83	138	138	25
Mindanao	2026	4	5	15	83	138	138	25
Mindanao	2026	4	5	16	83	138	138	25
Mindanao	2026	4	5	17	85	138	138	25
Mindanao	2026	4	5	18	93	138	138	25
Mindanao	2026	4	5	19	94	138	138	25
Mindanao	2026	4	5	20	91	138	138	25
Mindanao	2026	4	5	21	88	138	138	25
Mindanao	2026	4	5	22	83	138	138	25
Mindanao	2026	4	5	23	76	138	138	25
Mindanao	2026	4	5	24	72	138	138	25
Mindanao	2026	4	6	1	69	138	138	25
Mindanao	2026	4	6	2	66	138	138	25
Mindanao	2026	4	6	3	67	138	138	25
Mindanao	2026	4	6	4	65	138	138	25
Mindanao	2026	4	6	5	67	138	138	25
Mindanao	2026	4	6	6	72	138	138	25
Mindanao	2026	4	6	7	69	138	138	25
Mindanao	2026	4	6	8	80	138	138	25
Mindanao	2026	4	6	9	91	138	138	25
Mindanao	2026	4	6	10	101	138	138	25
Mindanao	2026	4	6	11	106	138	138	25
Mindanao	2026	4	6	12	106	138	138	25
Mindanao	2026	4	6	13	103	138	138	25
Mindanao	2026	4	6	14	114	138	138	25
Mindanao	2026	4	6	15	112	138	138	25
Mindanao	2026	4	6	16	110	138	138	25
Mindanao	2026	4	6	17	102	138	138	25
Mindanao	2026	4	6	18	105	138	138	25
Mindanao	2026	4	6	19	103	138	138	25
Mindanao	2026	4	6	20	100	138	138	25
Mindanao	2026	4	6	21	97	138	138	25
Mindanao	2026	4	6	22	90	138	138	25
Mindanao	2026	4	6	23	83	138	138	25
Mindanao	2026	4	6	24	77	138	138	25
Mindanao	2026	4	7	1	75	138	138	25
Mindanao	2026	4	7	2	73	138	138	25
Mindanao	2026	4	7	3	72	138	138	25
Mindanao	2026	4	7	4	68	138	138	25
Mindanao	2026	4	7	5	73	138	138	25
Mindanao	2026	4	7	6	77	138	138	25
Mindanao	2026	4	7	7	75	138	138	25
Mindanao	2026	4	7	8	82	138	138	25
Mindanao	2026	4	7	9	92	138	138	25
Mindanao	2026	4	7	10	96	138	138	25
Mindanao	2026	4	7	11	100	138	138	25
Mindanao	2026	4	7	12	94	138	138	25
Mindanao	2026	4	7	13	94	138	138	25
Mindanao	2026	4	7	14	98	138	138	25
Mindanao	2026	4	7	15	99	138	138	25
Mindanao	2026	4	7	16	100	138	138	25
Mindanao	2026	4	7	17	99	138	138	25
Mindanao	2026	4	7	18	101	138	138	25
Mindanao	2026	4	7	19	95	138	138	25
Mindanao	2026	4	7	20	91	138	138	25
Mindanao	2026	4	7	21	85	138	138	25
Mindanao	2026	4	7	22	77	138	138	25
Mindanao	2026	4	7	23	73	138	138	25
Mindanao	2026	4	7	24	67	138	138	25
Mindanao	2026	4	8	1	65	138	138	25
Mindanao	2026	4	8	2	63	138	138	25
Mindanao	2026	4	8	3	63	138	138	25
Mindanao	2026	4	8	4	61	138	138	25
Mindanao	2026	4	8	5	63	138	138	25
Mindanao	2026	4	8	6	70	138	138	25
Mindanao	2026	4	8	7	69	138	138	25
Mindanao	2026	4	8	8	75	138	138	25
Mindanao	2026	4	8	9	84	138	138	25
Mindanao	2026	4	8	10	90	138	138	25
Mindanao	2026	4	8	11	95	138	138	25
Mindanao	2026	4	8	12	92	138	138	25
Mindanao	2026	4	8	13	93	138	138	25
Mindanao	2026	4	8	14	95	138	138	25
Mindanao	2026	4	8	15	97	138	138	25
Mindanao	2026	4	8	16	97	138	138	25
Mindanao	2026	4	8	17	93	138	138	25
Mindanao	2026	4	8	18	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	8	19	97	138	138	25
Mindanao	2026	4	8	20	90	138	138	25
Mindanao	2026	4	8	21	87	138	138	25
Mindanao	2026	4	8	22	79	138	138	25
Mindanao	2026	4	8	23	75	138	138	25
Mindanao	2026	4	8	24	70	138	138	25
Mindanao	2026	4	9	1	71	138	138	25
Mindanao	2026	4	9	2	68	138	138	25
Mindanao	2026	4	9	3	66	138	138	25
Mindanao	2026	4	9	4	65	138	138	25
Mindanao	2026	4	9	5	67	138	138	25
Mindanao	2026	4	9	6	69	138	138	25
Mindanao	2026	4	9	7	68	138	138	25
Mindanao	2026	4	9	8	68	138	138	25
Mindanao	2026	4	9	9	69	138	138	25
Mindanao	2026	4	9	10	75	138	138	25
Mindanao	2026	4	9	11	78	138	138	25
Mindanao	2026	4	9	12	78	138	138	25
Mindanao	2026	4	9	13	76	138	138	25
Mindanao	2026	4	9	14	79	138	138	25
Mindanao	2026	4	9	15	81	138	138	25
Mindanao	2026	4	9	16	82	138	138	25
Mindanao	2026	4	9	17	81	138	138	25
Mindanao	2026	4	9	18	95	138	138	25
Mindanao	2026	4	9	19	91	138	138	25
Mindanao	2026	4	9	20	88	138	138	25
Mindanao	2026	4	9	21	83	138	138	25
Mindanao	2026	4	9	22	79	138	138	25
Mindanao	2026	4	9	23	73	138	138	25
Mindanao	2026	4	9	24	69	138	138	25
Mindanao	2026	4	10	1	70	138	138	25
Mindanao	2026	4	10	2	67	138	138	25
Mindanao	2026	4	10	3	66	138	138	25
Mindanao	2026	4	10	4	66	138	138	25
Mindanao	2026	4	10	5	68	138	138	25
Mindanao	2026	4	10	6	72	138	138	25
Mindanao	2026	4	10	7	71	138	138	25
Mindanao	2026	4	10	8	79	138	138	25
Mindanao	2026	4	10	9	90	138	138	25
Mindanao	2026	4	10	10	97	138	138	25
Mindanao	2026	4	10	11	102	138	138	25
Mindanao	2026	4	10	12	99	138	138	25
Mindanao	2026	4	10	13	98	138	138	25
Mindanao	2026	4	10	14	104	138	138	25
Mindanao	2026	4	10	15	103	138	138	25
Mindanao	2026	4	10	16	101	138	138	25
Mindanao	2026	4	10	17	98	138	138	25
Mindanao	2026	4	10	18	103	138	138	25
Mindanao	2026	4	10	19	100	138	138	25
Mindanao	2026	4	10	20	96	138	138	25
Mindanao	2026	4	10	21	92	138	138	25
Mindanao	2026	4	10	22	84	138	138	25
Mindanao	2026	4	10	23	79	138	138	25
Mindanao	2026	4	10	24	73	138	138	25
Mindanao	2026	4	11	1	60	138	138	25
Mindanao	2026	4	11	2	59	138	138	25
Mindanao	2026	4	11	3	57	138	138	25
Mindanao	2026	4	11	4	56	138	138	25
Mindanao	2026	4	11	5	57	138	138	25
Mindanao	2026	4	11	6	57	138	138	25
Mindanao	2026	4	11	7	58	138	138	25
Mindanao	2026	4	11	8	62	138	138	25
Mindanao	2026	4	11	9	68	138	138	25
Mindanao	2026	4	11	10	74	138	138	25
Mindanao	2026	4	11	11	80	138	138	25
Mindanao	2026	4	11	12	82	138	138	25
Mindanao	2026	4	11	13	84	138	138	25
Mindanao	2026	4	11	14	86	138	138	25
Mindanao	2026	4	11	15	84	138	138	25
Mindanao	2026	4	11	16	84	138	138	25
Mindanao	2026	4	11	17	83	138	138	25
Mindanao	2026	4	11	18	91	138	138	25
Mindanao	2026	4	11	19	92	138	138	25
Mindanao	2026	4	11	20	89	138	138	25
Mindanao	2026	4	11	21	88	138	138	25
Mindanao	2026	4	11	22	84	138	138	25
Mindanao	2026	4	11	23	78	138	138	25
Mindanao	2026	4	11	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	12	1	66	138	138	25
Mindanao	2026	4	12	2	65	138	138	25
Mindanao	2026	4	12	3	64	138	138	25
Mindanao	2026	4	12	4	62	138	138	25
Mindanao	2026	4	12	5	61	138	138	25
Mindanao	2026	4	12	6	63	138	138	25
Mindanao	2026	4	12	7	65	138	138	25
Mindanao	2026	4	12	8	66	138	138	25
Mindanao	2026	4	12	9	69	138	138	25
Mindanao	2026	4	12	10	71	138	138	25
Mindanao	2026	4	12	11	78	138	138	25
Mindanao	2026	4	12	12	77	138	138	25
Mindanao	2026	4	12	13	75	138	138	25
Mindanao	2026	4	12	14	76	138	138	25
Mindanao	2026	4	12	15	77	138	138	25
Mindanao	2026	4	12	16	77	138	138	25
Mindanao	2026	4	12	17	81	138	138	25
Mindanao	2026	4	12	18	91	138	138	25
Mindanao	2026	4	12	19	92	138	138	25
Mindanao	2026	4	12	20	89	138	138	25
Mindanao	2026	4	12	21	86	138	138	25
Mindanao	2026	4	12	22	78	138	138	25
Mindanao	2026	4	12	23	74	138	138	25
Mindanao	2026	4	12	24	68	138	138	25
Mindanao	2026	4	13	1	62	138	138	25
Mindanao	2026	4	13	2	62	138	138	25
Mindanao	2026	4	13	3	63	138	138	25
Mindanao	2026	4	13	4	61	138	138	25
Mindanao	2026	4	13	5	64	138	138	25
Mindanao	2026	4	13	6	70	138	138	25
Mindanao	2026	4	13	7	66	138	138	25
Mindanao	2026	4	13	8	78	138	138	25
Mindanao	2026	4	13	9	90	138	138	25
Mindanao	2026	4	13	10	96	138	138	25
Mindanao	2026	4	13	11	95	138	138	25
Mindanao	2026	4	13	12	95	138	138	25
Mindanao	2026	4	13	13	95	138	138	25
Mindanao	2026	4	13	14	100	138	138	25
Mindanao	2026	4	13	15	102	138	138	25
Mindanao	2026	4	13	16	101	138	138	25
Mindanao	2026	4	13	17	98	138	138	25
Mindanao	2026	4	13	18	104	138	138	25
Mindanao	2026	4	13	19	98	138	138	25
Mindanao	2026	4	13	20	95	138	138	25
Mindanao	2026	4	13	21	92	138	138	25
Mindanao	2026	4	13	22	84	138	138	25
Mindanao	2026	4	13	23	77	138	138	25
Mindanao	2026	4	13	24	70	138	138	25
Mindanao	2026	4	14	1	67	138	138	25
Mindanao	2026	4	14	2	66	138	138	25
Mindanao	2026	4	14	3	64	138	138	25
Mindanao	2026	4	14	4	64	138	138	25
Mindanao	2026	4	14	5	67	138	138	25
Mindanao	2026	4	14	6	71	138	138	25
Mindanao	2026	4	14	7	70	138	138	25
Mindanao	2026	4	14	8	78	138	138	25
Mindanao	2026	4	14	9	85	138	138	25
Mindanao	2026	4	14	10	95	138	138	25
Mindanao	2026	4	14	11	99	138	138	25
Mindanao	2026	4	14	12	94	138	138	25
Mindanao	2026	4	14	13	91	138	138	25
Mindanao	2026	4	14	14	95	138	138	25
Mindanao	2026	4	14	15	95	138	138	25
Mindanao	2026	4	14	16	95	138	138	25
Mindanao	2026	4	14	17	96	138	138	25
Mindanao	2026	4	14	18	100	138	138	25
Mindanao	2026	4	14	19	99	138	138	25
Mindanao	2026	4	14	20	96	138	138	25
Mindanao	2026	4	14	21	91	138	138	25
Mindanao	2026	4	14	22	85	138	138	25
Mindanao	2026	4	14	23	81	138	138	25
Mindanao	2026	4	14	24	74	138	138	25
Mindanao	2026	4	15	1	70	138	138	25
Mindanao	2026	4	15	2	69	138	138	25
Mindanao	2026	4	15	3	68	138	138	25
Mindanao	2026	4	15	4	65	138	138	25
Mindanao	2026	4	15	5	69	138	138	25
Mindanao	2026	4	15	6	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	15	7	72	138	138	25
Mindanao	2026	4	15	8	79	138	138	25
Mindanao	2026	4	15	9	87	138	138	25
Mindanao	2026	4	15	10	96	138	138	25
Mindanao	2026	4	15	11	100	138	138	25
Mindanao	2026	4	15	12	97	138	138	25
Mindanao	2026	4	15	13	98	138	138	25
Mindanao	2026	4	15	14	99	138	138	25
Mindanao	2026	4	15	15	99	138	138	25
Mindanao	2026	4	15	16	95	138	138	25
Mindanao	2026	4	15	17	90	138	138	25
Mindanao	2026	4	15	18	101	138	138	25
Mindanao	2026	4	15	19	100	138	138	25
Mindanao	2026	4	15	20	96	138	138	25
Mindanao	2026	4	15	21	92	138	138	25
Mindanao	2026	4	15	22	87	138	138	25
Mindanao	2026	4	15	23	81	138	138	25
Mindanao	2026	4	15	24	69	138	138	25
Mindanao	2026	4	16	1	79	138	138	25
Mindanao	2026	4	16	2	76	138	138	25
Mindanao	2026	4	16	3	73	138	138	25
Mindanao	2026	4	16	4	72	138	138	25
Mindanao	2026	4	16	5	74	138	138	25
Mindanao	2026	4	16	6	76	138	138	25
Mindanao	2026	4	16	7	74	138	138	25
Mindanao	2026	4	16	8	85	138	138	25
Mindanao	2026	4	16	9	97	138	138	25
Mindanao	2026	4	16	10	105	138	138	25
Mindanao	2026	4	16	11	113	138	138	25
Mindanao	2026	4	16	12	112	138	138	25
Mindanao	2026	4	16	13	114	138	138	25
Mindanao	2026	4	16	14	117	138	138	25
Mindanao	2026	4	16	15	113	138	138	25
Mindanao	2026	4	16	16	112	138	138	25
Mindanao	2026	4	16	17	105	138	138	25
Mindanao	2026	4	16	18	108	138	138	25
Mindanao	2026	4	16	19	107	138	138	25
Mindanao	2026	4	16	20	103	138	138	25
Mindanao	2026	4	16	21	100	138	138	25
Mindanao	2026	4	16	22	91	138	138	25
Mindanao	2026	4	16	23	88	138	138	25
Mindanao	2026	4	16	24	83	138	138	25
Mindanao	2026	4	17	1	79	138	138	25
Mindanao	2026	4	17	2	75	138	138	25
Mindanao	2026	4	17	3	74	138	138	25
Mindanao	2026	4	17	4	72	138	138	25
Mindanao	2026	4	17	5	75	138	138	25
Mindanao	2026	4	17	6	77	138	138	25
Mindanao	2026	4	17	7	73	138	138	25
Mindanao	2026	4	17	8	84	138	138	25
Mindanao	2026	4	17	9	97	138	138	25
Mindanao	2026	4	17	10	107	138	138	25
Mindanao	2026	4	17	11	112	138	138	25
Mindanao	2026	4	17	12	109	138	138	25
Mindanao	2026	4	17	13	111	138	138	25
Mindanao	2026	4	17	14	115	138	138	25
Mindanao	2026	4	17	15	114	138	138	25
Mindanao	2026	4	17	16	112	138	138	25
Mindanao	2026	4	17	17	106	138	138	25
Mindanao	2026	4	17	18	111	138	138	25
Mindanao	2026	4	17	19	108	138	138	25
Mindanao	2026	4	17	20	107	138	138	25
Mindanao	2026	4	17	21	103	138	138	25
Mindanao	2026	4	17	22	97	138	138	25
Mindanao	2026	4	17	23	90	138	138	25
Mindanao	2026	4	17	24	85	138	138	25
Mindanao	2026	4	18	1	60	138	138	25
Mindanao	2026	4	18	2	59	138	138	25
Mindanao	2026	4	18	3	57	138	138	25
Mindanao	2026	4	18	4	56	138	138	25
Mindanao	2026	4	18	5	57	138	138	25
Mindanao	2026	4	18	6	57	138	138	25
Mindanao	2026	4	18	7	58	138	138	25
Mindanao	2026	4	18	8	62	138	138	25
Mindanao	2026	4	18	9	68	138	138	25
Mindanao	2026	4	18	10	74	138	138	25
Mindanao	2026	4	18	11	80	138	138	25
Mindanao	2026	4	18	12	82	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	18	13	84	138	138	25
Mindanao	2026	4	18	14	86	138	138	25
Mindanao	2026	4	18	15	84	138	138	25
Mindanao	2026	4	18	16	84	138	138	25
Mindanao	2026	4	18	17	83	138	138	25
Mindanao	2026	4	18	18	91	138	138	25
Mindanao	2026	4	18	19	92	138	138	25
Mindanao	2026	4	18	20	89	138	138	25
Mindanao	2026	4	18	21	88	138	138	25
Mindanao	2026	4	18	22	84	138	138	25
Mindanao	2026	4	18	23	78	138	138	25
Mindanao	2026	4	18	24	70	138	138	25
Mindanao	2026	4	19	1	63	138	138	25
Mindanao	2026	4	19	2	63	138	138	25
Mindanao	2026	4	19	3	62	138	138	25
Mindanao	2026	4	19	4	60	138	138	25
Mindanao	2026	4	19	5	60	138	138	25
Mindanao	2026	4	19	6	62	138	138	25
Mindanao	2026	4	19	7	62	138	138	25
Mindanao	2026	4	19	8	64	138	138	25
Mindanao	2026	4	19	9	67	138	138	25
Mindanao	2026	4	19	10	74	138	138	25
Mindanao	2026	4	19	11	78	138	138	25
Mindanao	2026	4	19	12	78	138	138	25
Mindanao	2026	4	19	13	80	138	138	25
Mindanao	2026	4	19	14	83	138	138	25
Mindanao	2026	4	19	15	81	138	138	25
Mindanao	2026	4	19	16	82	138	138	25
Mindanao	2026	4	19	17	83	138	138	25
Mindanao	2026	4	19	18	88	138	138	25
Mindanao	2026	4	19	19	91	138	138	25
Mindanao	2026	4	19	20	89	138	138	25
Mindanao	2026	4	19	21	88	138	138	25
Mindanao	2026	4	19	22	83	138	138	25
Mindanao	2026	4	19	23	78	138	138	25
Mindanao	2026	4	19	24	71	138	138	25
Mindanao	2026	4	20	1	66	138	138	25
Mindanao	2026	4	20	2	64	138	138	25
Mindanao	2026	4	20	3	64	138	138	25
Mindanao	2026	4	20	4	63	138	138	25
Mindanao	2026	4	20	5	67	138	138	25
Mindanao	2026	4	20	6	69	138	138	25
Mindanao	2026	4	20	7	68	138	138	25
Mindanao	2026	4	20	8	79	138	138	25
Mindanao	2026	4	20	9	91	138	138	25
Mindanao	2026	4	20	10	102	138	138	25
Mindanao	2026	4	20	11	107	138	138	25
Mindanao	2026	4	20	12	105	138	138	25
Mindanao	2026	4	20	13	107	138	138	25
Mindanao	2026	4	20	14	108	138	138	25
Mindanao	2026	4	20	15	109	138	138	25
Mindanao	2026	4	20	16	110	138	138	25
Mindanao	2026	4	20	17	104	138	138	25
Mindanao	2026	4	20	18	104	138	138	25
Mindanao	2026	4	20	19	107	138	138	25
Mindanao	2026	4	20	20	104	138	138	25
Mindanao	2026	4	20	21	99	138	138	25
Mindanao	2026	4	20	22	90	138	138	25
Mindanao	2026	4	20	23	87	138	138	25
Mindanao	2026	4	20	24	81	138	138	25
Mindanao	2026	4	21	1	76	138	138	25
Mindanao	2026	4	21	2	73	138	138	25
Mindanao	2026	4	21	3	72	138	138	25
Mindanao	2026	4	21	4	70	138	138	25
Mindanao	2026	4	21	5	71	138	138	25
Mindanao	2026	4	21	6	74	138	138	25
Mindanao	2026	4	21	7	72	138	138	25
Mindanao	2026	4	21	8	83	138	138	25
Mindanao	2026	4	21	9	96	138	138	25
Mindanao	2026	4	21	10	103	138	138	25
Mindanao	2026	4	21	11	109	138	138	25
Mindanao	2026	4	21	12	105	138	138	25
Mindanao	2026	4	21	13	106	138	138	25
Mindanao	2026	4	21	14	111	138	138	25
Mindanao	2026	4	21	15	111	138	138	25
Mindanao	2026	4	21	16	108	138	138	25
Mindanao	2026	4	21	17	103	138	138	25
Mindanao	2026	4	21	18	105	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	21	19	104	138	138	25
Mindanao	2026	4	21	20	100	138	138	25
Mindanao	2026	4	21	21	99	138	138	25
Mindanao	2026	4	21	22	92	138	138	25
Mindanao	2026	4	21	23	85	138	138	25
Mindanao	2026	4	21	24	80	138	138	25
Mindanao	2026	4	22	1	75	138	138	25
Mindanao	2026	4	22	2	73	138	138	25
Mindanao	2026	4	22	3	71	138	138	25
Mindanao	2026	4	22	4	70	138	138	25
Mindanao	2026	4	22	5	72	138	138	25
Mindanao	2026	4	22	6	76	138	138	25
Mindanao	2026	4	22	7	75	138	138	25
Mindanao	2026	4	22	8	84	138	138	25
Mindanao	2026	4	22	9	96	138	138	25
Mindanao	2026	4	22	10	104	138	138	25
Mindanao	2026	4	22	11	111	138	138	25
Mindanao	2026	4	22	12	109	138	138	25
Mindanao	2026	4	22	13	111	138	138	25
Mindanao	2026	4	22	14	112	138	138	25
Mindanao	2026	4	22	15	114	138	138	25
Mindanao	2026	4	22	16	113	138	138	25
Mindanao	2026	4	22	17	101	138	138	25
Mindanao	2026	4	22	18	107	138	138	25
Mindanao	2026	4	22	19	108	138	138	25
Mindanao	2026	4	22	20	107	138	138	25
Mindanao	2026	4	22	21	102	138	138	25
Mindanao	2026	4	22	22	95	138	138	25
Mindanao	2026	4	22	23	89	138	138	25
Mindanao	2026	4	22	24	83	138	138	25
Mindanao	2026	4	23	1	79	138	138	25
Mindanao	2026	4	23	2	76	138	138	25
Mindanao	2026	4	23	3	73	138	138	25
Mindanao	2026	4	23	4	72	138	138	25
Mindanao	2026	4	23	5	74	138	138	25
Mindanao	2026	4	23	6	76	138	138	25
Mindanao	2026	4	23	7	74	138	138	25
Mindanao	2026	4	23	8	85	138	138	25
Mindanao	2026	4	23	9	97	138	138	25
Mindanao	2026	4	23	10	105	138	138	25
Mindanao	2026	4	23	11	113	138	138	25
Mindanao	2026	4	23	12	112	138	138	25
Mindanao	2026	4	23	13	114	138	138	25
Mindanao	2026	4	23	14	117	138	138	25
Mindanao	2026	4	23	15	113	138	138	25
Mindanao	2026	4	23	16	112	138	138	25
Mindanao	2026	4	23	17	105	138	138	25
Mindanao	2026	4	23	18	108	138	138	25
Mindanao	2026	4	23	19	107	138	138	25
Mindanao	2026	4	23	20	103	138	138	25
Mindanao	2026	4	23	21	100	138	138	25
Mindanao	2026	4	23	22	91	138	138	25
Mindanao	2026	4	23	23	88	138	138	25
Mindanao	2026	4	23	24	83	138	138	25
Mindanao	2026	4	24	1	79	138	138	25
Mindanao	2026	4	24	2	75	138	138	25
Mindanao	2026	4	24	3	74	138	138	25
Mindanao	2026	4	24	4	72	138	138	25
Mindanao	2026	4	24	5	75	138	138	25
Mindanao	2026	4	24	6	77	138	138	25
Mindanao	2026	4	24	7	73	138	138	25
Mindanao	2026	4	24	8	84	138	138	25
Mindanao	2026	4	24	9	97	138	138	25
Mindanao	2026	4	24	10	107	138	138	25
Mindanao	2026	4	24	11	112	138	138	25
Mindanao	2026	4	24	12	109	138	138	25
Mindanao	2026	4	24	13	111	138	138	25
Mindanao	2026	4	24	14	115	138	138	25
Mindanao	2026	4	24	15	114	138	138	25
Mindanao	2026	4	24	16	112	138	138	25
Mindanao	2026	4	24	17	106	138	138	25
Mindanao	2026	4	24	18	111	138	138	25
Mindanao	2026	4	24	19	108	138	138	25
Mindanao	2026	4	24	20	107	138	138	25
Mindanao	2026	4	24	21	103	138	138	25
Mindanao	2026	4	24	22	97	138	138	25
Mindanao	2026	4	24	23	90	138	138	25
Mindanao	2026	4	24	24	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	25	1	78	138	138	25
Mindanao	2026	4	25	2	75	138	138	25
Mindanao	2026	4	25	3	75	138	138	25
Mindanao	2026	4	25	4	71	138	138	25
Mindanao	2026	4	25	5	72	138	138	25
Mindanao	2026	4	25	6	70	138	138	25
Mindanao	2026	4	25	7	68	138	138	25
Mindanao	2026	4	25	8	73	138	138	25
Mindanao	2026	4	25	9	77	138	138	25
Mindanao	2026	4	25	10	80	138	138	25
Mindanao	2026	4	25	11	83	138	138	25
Mindanao	2026	4	25	12	82	138	138	25
Mindanao	2026	4	25	13	87	138	138	25
Mindanao	2026	4	25	14	91	138	138	25
Mindanao	2026	4	25	15	92	138	138	25
Mindanao	2026	4	25	16	92	138	138	25
Mindanao	2026	4	25	17	89	138	138	25
Mindanao	2026	4	25	18	104	138	138	25
Mindanao	2026	4	25	19	104	138	138	25
Mindanao	2026	4	25	20	103	138	138	25
Mindanao	2026	4	25	21	99	138	138	25
Mindanao	2026	4	25	22	91	138	138	25
Mindanao	2026	4	25	23	86	138	138	25
Mindanao	2026	4	25	24	82	138	138	25
Mindanao	2026	4	26	1	75	138	138	25
Mindanao	2026	4	26	2	73	138	138	25
Mindanao	2026	4	26	3	70	138	138	25
Mindanao	2026	4	26	4	66	138	138	25
Mindanao	2026	4	26	5	69	138	138	25
Mindanao	2026	4	26	6	68	138	138	25
Mindanao	2026	4	26	7	66	138	138	25
Mindanao	2026	4	26	8	68	138	138	25
Mindanao	2026	4	26	9	72	138	138	25
Mindanao	2026	4	26	10	78	138	138	25
Mindanao	2026	4	26	11	81	138	138	25
Mindanao	2026	4	26	12	83	138	138	25
Mindanao	2026	4	26	13	86	138	138	25
Mindanao	2026	4	26	14	88	138	138	25
Mindanao	2026	4	26	15	87	138	138	25
Mindanao	2026	4	26	16	82	138	138	25
Mindanao	2026	4	26	17	84	138	138	25
Mindanao	2026	4	26	18	96	138	138	25
Mindanao	2026	4	26	19	99	138	138	25
Mindanao	2026	4	26	20	98	138	138	25
Mindanao	2026	4	26	21	94	138	138	25
Mindanao	2026	4	26	22	90	138	138	25
Mindanao	2026	4	26	23	85	138	138	25
Mindanao	2026	4	26	24	80	138	138	25
Mindanao	2026	4	27	1	74	138	138	25
Mindanao	2026	4	27	2	71	138	138	25
Mindanao	2026	4	27	3	69	138	138	25
Mindanao	2026	4	27	4	67	138	138	25
Mindanao	2026	4	27	5	71	138	138	25
Mindanao	2026	4	27	6	72	138	138	25
Mindanao	2026	4	27	7	73	138	138	25
Mindanao	2026	4	27	8	84	138	138	25
Mindanao	2026	4	27	9	96	138	138	25
Mindanao	2026	4	27	10	106	138	138	25
Mindanao	2026	4	27	11	113	138	138	25
Mindanao	2026	4	27	12	113	138	138	25
Mindanao	2026	4	27	13	115	138	138	25
Mindanao	2026	4	27	14	117	138	138	25
Mindanao	2026	4	27	15	115	138	138	25
Mindanao	2026	4	27	16	114	138	138	25
Mindanao	2026	4	27	17	110	138	138	25
Mindanao	2026	4	27	18	112	138	138	25
Mindanao	2026	4	27	19	110	138	138	25
Mindanao	2026	4	27	20	108	138	138	25
Mindanao	2026	4	27	21	104	138	138	25
Mindanao	2026	4	27	22	98	138	138	25
Mindanao	2026	4	27	23	92	138	138	25
Mindanao	2026	4	27	24	86	138	138	25
Mindanao	2026	4	28	1	82	138	138	25
Mindanao	2026	4	28	2	77	138	138	25
Mindanao	2026	4	28	3	77	138	138	25
Mindanao	2026	4	28	4	74	138	138	25
Mindanao	2026	4	28	5	76	138	138	25
Mindanao	2026	4	28	6	80	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	4	28	7	76	138	138	25
Mindanao	2026	4	28	8	85	138	138	25
Mindanao	2026	4	28	9	99	138	138	25
Mindanao	2026	4	28	10	107	138	138	25
Mindanao	2026	4	28	11	112	138	138	25
Mindanao	2026	4	28	12	111	138	138	25
Mindanao	2026	4	28	13	112	138	138	25
Mindanao	2026	4	28	14	114	138	138	25
Mindanao	2026	4	28	15	110	138	138	25
Mindanao	2026	4	28	16	109	138	138	25
Mindanao	2026	4	28	17	104	138	138	25
Mindanao	2026	4	28	18	107	138	138	25
Mindanao	2026	4	28	19	105	138	138	25
Mindanao	2026	4	28	20	99	138	138	25
Mindanao	2026	4	28	21	98	138	138	25
Mindanao	2026	4	28	22	91	138	138	25
Mindanao	2026	4	28	23	86	138	138	25
Mindanao	2026	4	28	24	82	138	138	25
Mindanao	2026	4	29	1	77	138	138	25
Mindanao	2026	4	29	2	74	138	138	25
Mindanao	2026	4	29	3	71	138	138	25
Mindanao	2026	4	29	4	70	138	138	25
Mindanao	2026	4	29	5	73	138	138	25
Mindanao	2026	4	29	6	77	138	138	25
Mindanao	2026	4	29	7	75	138	138	25
Mindanao	2026	4	29	8	83	138	138	25
Mindanao	2026	4	29	9	95	138	138	25
Mindanao	2026	4	29	10	104	138	138	25
Mindanao	2026	4	29	11	109	138	138	25
Mindanao	2026	4	29	12	107	138	138	25
Mindanao	2026	4	29	13	108	138	138	25
Mindanao	2026	4	29	14	114	138	138	25
Mindanao	2026	4	29	15	111	138	138	25
Mindanao	2026	4	29	16	110	138	138	25
Mindanao	2026	4	29	17	103	138	138	25
Mindanao	2026	4	29	18	108	138	138	25
Mindanao	2026	4	29	19	105	138	138	25
Mindanao	2026	4	29	20	96	138	138	25
Mindanao	2026	4	29	21	95	138	138	25
Mindanao	2026	4	29	22	90	138	138	25
Mindanao	2026	4	29	23	84	138	138	25
Mindanao	2026	4	29	24	80	138	138	25
Mindanao	2026	4	30	1	76	138	138	25
Mindanao	2026	4	30	2	75	138	138	25
Mindanao	2026	4	30	3	72	138	138	25
Mindanao	2026	4	30	4	68	138	138	25
Mindanao	2026	4	30	5	71	138	138	25
Mindanao	2026	4	30	6	75	138	138	25
Mindanao	2026	4	30	7	72	138	138	25
Mindanao	2026	4	30	8	80	138	138	25
Mindanao	2026	4	30	9	91	138	138	25
Mindanao	2026	4	30	10	96	138	138	25
Mindanao	2026	4	30	11	105	138	138	25
Mindanao	2026	4	30	12	105	138	138	25
Mindanao	2026	4	30	13	106	138	138	25
Mindanao	2026	4	30	14	109	138	138	25
Mindanao	2026	4	30	15	110	138	138	25
Mindanao	2026	4	30	16	105	138	138	25
Mindanao	2026	4	30	17	104	138	138	25
Mindanao	2026	4	30	18	107	138	138	25
Mindanao	2026	4	30	19	105	138	138	25
Mindanao	2026	4	30	20	98	138	138	25
Mindanao	2026	4	30	21	94	138	138	25
Mindanao	2026	4	30	22	91	138	138	25
Mindanao	2026	4	30	23	85	138	138	25
Mindanao	2026	4	30	24	81	138	138	25
Mindanao	2026	5	1	1	72	138	138	25
Mindanao	2026	5	1	2	68	138	138	25
Mindanao	2026	5	1	3	65	138	138	25
Mindanao	2026	5	1	4	62	138	138	25
Mindanao	2026	5	1	5	64	138	138	25
Mindanao	2026	5	1	6	65	138	138	25
Mindanao	2026	5	1	7	64	138	138	25
Mindanao	2026	5	1	8	63	138	138	25
Mindanao	2026	5	1	9	68	138	138	25
Mindanao	2026	5	1	10	72	138	138	25
Mindanao	2026	5	1	11	76	138	138	25
Mindanao	2026	5	1	12	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	1	13	77	138	138	25
Mindanao	2026	5	1	14	78	138	138	25
Mindanao	2026	5	1	15	79	138	138	25
Mindanao	2026	5	1	16	78	138	138	25
Mindanao	2026	5	1	17	81	138	138	25
Mindanao	2026	5	1	18	90	138	138	25
Mindanao	2026	5	1	19	91	138	138	25
Mindanao	2026	5	1	20	89	138	138	25
Mindanao	2026	5	1	21	87	138	138	25
Mindanao	2026	5	1	22	83	138	138	25
Mindanao	2026	5	1	23	77	138	138	25
Mindanao	2026	5	1	24	72	138	138	25
Mindanao	2026	5	2	1	76	138	138	25
Mindanao	2026	5	2	2	74	138	138	25
Mindanao	2026	5	2	3	71	138	138	25
Mindanao	2026	5	2	4	69	138	138	25
Mindanao	2026	5	2	5	72	138	138	25
Mindanao	2026	5	2	6	74	138	138	25
Mindanao	2026	5	2	7	73	138	138	25
Mindanao	2026	5	2	8	78	138	138	25
Mindanao	2026	5	2	9	84	138	138	25
Mindanao	2026	5	2	10	90	138	138	25
Mindanao	2026	5	2	11	94	138	138	25
Mindanao	2026	5	2	12	89	138	138	25
Mindanao	2026	5	2	13	90	138	138	25
Mindanao	2026	5	2	14	93	138	138	25
Mindanao	2026	5	2	15	90	138	138	25
Mindanao	2026	5	2	16	91	138	138	25
Mindanao	2026	5	2	17	92	138	138	25
Mindanao	2026	5	2	18	98	138	138	25
Mindanao	2026	5	2	19	97	138	138	25
Mindanao	2026	5	2	20	93	138	138	25
Mindanao	2026	5	2	21	91	138	138	25
Mindanao	2026	5	2	22	87	138	138	25
Mindanao	2026	5	2	23	82	138	138	25
Mindanao	2026	5	2	24	77	138	138	25
Mindanao	2026	5	3	1	79	138	138	25
Mindanao	2026	5	3	2	75	138	138	25
Mindanao	2026	5	3	3	72	138	138	25
Mindanao	2026	5	3	4	71	138	138	25
Mindanao	2026	5	3	5	71	138	138	25
Mindanao	2026	5	3	6	72	138	138	25
Mindanao	2026	5	3	7	72	138	138	25
Mindanao	2026	5	3	8	71	138	138	25
Mindanao	2026	5	3	9	75	138	138	25
Mindanao	2026	5	3	10	82	138	138	25
Mindanao	2026	5	3	11	85	138	138	25
Mindanao	2026	5	3	12	85	138	138	25
Mindanao	2026	5	3	13	86	138	138	25
Mindanao	2026	5	3	14	85	138	138	25
Mindanao	2026	5	3	15	86	138	138	25
Mindanao	2026	5	3	16	83	138	138	25
Mindanao	2026	5	3	17	84	138	138	25
Mindanao	2026	5	3	18	94	138	138	25
Mindanao	2026	5	3	19	92	138	138	25
Mindanao	2026	5	3	20	90	138	138	25
Mindanao	2026	5	3	21	88	138	138	25
Mindanao	2026	5	3	22	82	138	138	25
Mindanao	2026	5	3	23	79	138	138	25
Mindanao	2026	5	3	24	75	138	138	25
Mindanao	2026	5	4	1	66	138	138	25
Mindanao	2026	5	4	2	64	138	138	25
Mindanao	2026	5	4	3	61	138	138	25
Mindanao	2026	5	4	4	62	138	138	25
Mindanao	2026	5	4	5	65	138	138	25
Mindanao	2026	5	4	6	68	138	138	25
Mindanao	2026	5	4	7	68	138	138	25
Mindanao	2026	5	4	8	76	138	138	25
Mindanao	2026	5	4	9	87	138	138	25
Mindanao	2026	5	4	10	94	138	138	25
Mindanao	2026	5	4	11	98	138	138	25
Mindanao	2026	5	4	12	96	138	138	25
Mindanao	2026	5	4	13	97	138	138	25
Mindanao	2026	5	4	14	100	138	138	25
Mindanao	2026	5	4	15	99	138	138	25
Mindanao	2026	5	4	16	95	138	138	25
Mindanao	2026	5	4	17	95	138	138	25
Mindanao	2026	5	4	18	100	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	4	19	99	138	138	25
Mindanao	2026	5	4	20	96	138	138	25
Mindanao	2026	5	4	21	89	138	138	25
Mindanao	2026	5	4	22	85	138	138	25
Mindanao	2026	5	4	23	81	138	138	25
Mindanao	2026	5	4	24	77	138	138	25
Mindanao	2026	5	5	1	71	138	138	25
Mindanao	2026	5	5	2	68	138	138	25
Mindanao	2026	5	5	3	65	138	138	25
Mindanao	2026	5	5	4	65	138	138	25
Mindanao	2026	5	5	5	67	138	138	25
Mindanao	2026	5	5	6	71	138	138	25
Mindanao	2026	5	5	7	69	138	138	25
Mindanao	2026	5	5	8	72	138	138	25
Mindanao	2026	5	5	9	77	138	138	25
Mindanao	2026	5	5	10	82	138	138	25
Mindanao	2026	5	5	11	87	138	138	25
Mindanao	2026	5	5	12	89	138	138	25
Mindanao	2026	5	5	13	87	138	138	25
Mindanao	2026	5	5	14	88	138	138	25
Mindanao	2026	5	5	15	87	138	138	25
Mindanao	2026	5	5	16	86	138	138	25
Mindanao	2026	5	5	17	88	138	138	25
Mindanao	2026	5	5	18	95	138	138	25
Mindanao	2026	5	5	19	97	138	138	25
Mindanao	2026	5	5	20	94	138	138	25
Mindanao	2026	5	5	21	90	138	138	25
Mindanao	2026	5	5	22	85	138	138	25
Mindanao	2026	5	5	23	78	138	138	25
Mindanao	2026	5	5	24	75	138	138	25
Mindanao	2026	5	6	1	72	138	138	25
Mindanao	2026	5	6	2	68	138	138	25
Mindanao	2026	5	6	3	64	138	138	25
Mindanao	2026	5	6	4	62	138	138	25
Mindanao	2026	5	6	5	67	138	138	25
Mindanao	2026	5	6	6	72	138	138	25
Mindanao	2026	5	6	7	71	138	138	25
Mindanao	2026	5	6	8	81	138	138	25
Mindanao	2026	5	6	9	91	138	138	25
Mindanao	2026	5	6	10	98	138	138	25
Mindanao	2026	5	6	11	106	138	138	25
Mindanao	2026	5	6	12	105	138	138	25
Mindanao	2026	5	6	13	101	138	138	25
Mindanao	2026	5	6	14	106	138	138	25
Mindanao	2026	5	6	15	105	138	138	25
Mindanao	2026	5	6	16	103	138	138	25
Mindanao	2026	5	6	17	98	138	138	25
Mindanao	2026	5	6	18	104	138	138	25
Mindanao	2026	5	6	19	104	138	138	25
Mindanao	2026	5	6	20	99	138	138	25
Mindanao	2026	5	6	21	94	138	138	25
Mindanao	2026	5	6	22	89	138	138	25
Mindanao	2026	5	6	23	83	138	138	25
Mindanao	2026	5	6	24	79	138	138	25
Mindanao	2026	5	7	1	74	138	138	25
Mindanao	2026	5	7	2	70	138	138	25
Mindanao	2026	5	7	3	67	138	138	25
Mindanao	2026	5	7	4	65	138	138	25
Mindanao	2026	5	7	5	70	138	138	25
Mindanao	2026	5	7	6	74	138	138	25
Mindanao	2026	5	7	7	73	138	138	25
Mindanao	2026	5	7	8	81	138	138	25
Mindanao	2026	5	7	9	94	138	138	25
Mindanao	2026	5	7	10	103	138	138	25
Mindanao	2026	5	7	11	108	138	138	25
Mindanao	2026	5	7	12	102	138	138	25
Mindanao	2026	5	7	13	102	138	138	25
Mindanao	2026	5	7	14	107	138	138	25
Mindanao	2026	5	7	15	103	138	138	25
Mindanao	2026	5	7	16	101	138	138	25
Mindanao	2026	5	7	17	96	138	138	25
Mindanao	2026	5	7	18	98	138	138	25
Mindanao	2026	5	7	19	100	138	138	25
Mindanao	2026	5	7	20	95	138	138	25
Mindanao	2026	5	7	21	93	138	138	25
Mindanao	2026	5	7	22	86	138	138	25
Mindanao	2026	5	7	23	80	138	138	25
Mindanao	2026	5	7	24	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	8	1	71	138	138	25
Mindanao	2026	5	8	2	68	138	138	25
Mindanao	2026	5	8	3	65	138	138	25
Mindanao	2026	5	8	4	64	138	138	25
Mindanao	2026	5	8	5	68	138	138	25
Mindanao	2026	5	8	6	72	138	138	25
Mindanao	2026	5	8	7	74	138	138	25
Mindanao	2026	5	8	8	82	138	138	25
Mindanao	2026	5	8	9	93	138	138	25
Mindanao	2026	5	8	10	101	138	138	25
Mindanao	2026	5	8	11	106	138	138	25
Mindanao	2026	5	8	12	106	138	138	25
Mindanao	2026	5	8	13	108	138	138	25
Mindanao	2026	5	8	14	113	138	138	25
Mindanao	2026	5	8	15	113	138	138	25
Mindanao	2026	5	8	16	112	138	138	25
Mindanao	2026	5	8	17	103	138	138	25
Mindanao	2026	5	8	18	107	138	138	25
Mindanao	2026	5	8	19	109	138	138	25
Mindanao	2026	5	8	20	106	138	138	25
Mindanao	2026	5	8	21	102	138	138	25
Mindanao	2026	5	8	22	97	138	138	25
Mindanao	2026	5	8	23	89	138	138	25
Mindanao	2026	5	8	24	84	138	138	25
Mindanao	2026	5	9	1	79	138	138	25
Mindanao	2026	5	9	2	76	138	138	25
Mindanao	2026	5	9	3	71	138	138	25
Mindanao	2026	5	9	4	70	138	138	25
Mindanao	2026	5	9	5	72	138	138	25
Mindanao	2026	5	9	6	75	138	138	25
Mindanao	2026	5	9	7	72	138	138	25
Mindanao	2026	5	9	8	79	138	138	25
Mindanao	2026	5	9	9	87	138	138	25
Mindanao	2026	5	9	10	95	138	138	25
Mindanao	2026	5	9	11	101	138	138	25
Mindanao	2026	5	9	12	101	138	138	25
Mindanao	2026	5	9	13	99	138	138	25
Mindanao	2026	5	9	14	105	138	138	25
Mindanao	2026	5	9	15	103	138	138	25
Mindanao	2026	5	9	16	100	138	138	25
Mindanao	2026	5	9	17	97	138	138	25
Mindanao	2026	5	9	18	103	138	138	25
Mindanao	2026	5	9	19	105	138	138	25
Mindanao	2026	5	9	20	103	138	138	25
Mindanao	2026	5	9	21	101	138	138	25
Mindanao	2026	5	9	22	95	138	138	25
Mindanao	2026	5	9	23	88	138	138	25
Mindanao	2026	5	9	24	82	138	138	25
Mindanao	2026	5	10	1	79	138	138	25
Mindanao	2026	5	10	2	75	138	138	25
Mindanao	2026	5	10	3	72	138	138	25
Mindanao	2026	5	10	4	71	138	138	25
Mindanao	2026	5	10	5	71	138	138	25
Mindanao	2026	5	10	6	72	138	138	25
Mindanao	2026	5	10	7	72	138	138	25
Mindanao	2026	5	10	8	71	138	138	25
Mindanao	2026	5	10	9	75	138	138	25
Mindanao	2026	5	10	10	82	138	138	25
Mindanao	2026	5	10	11	85	138	138	25
Mindanao	2026	5	10	12	85	138	138	25
Mindanao	2026	5	10	13	86	138	138	25
Mindanao	2026	5	10	14	85	138	138	25
Mindanao	2026	5	10	15	86	138	138	25
Mindanao	2026	5	10	16	83	138	138	25
Mindanao	2026	5	10	17	84	138	138	25
Mindanao	2026	5	10	18	94	138	138	25
Mindanao	2026	5	10	19	92	138	138	25
Mindanao	2026	5	10	20	90	138	138	25
Mindanao	2026	5	10	21	88	138	138	25
Mindanao	2026	5	10	22	82	138	138	25
Mindanao	2026	5	10	23	79	138	138	25
Mindanao	2026	5	10	24	75	138	138	25
Mindanao	2026	5	11	1	71	138	138	25
Mindanao	2026	5	11	2	68	138	138	25
Mindanao	2026	5	11	3	67	138	138	25
Mindanao	2026	5	11	4	64	138	138	25
Mindanao	2026	5	11	5	64	138	138	25
Mindanao	2026	5	11	6	64	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	11	7	59	138	138	25
Mindanao	2026	5	11	8	57	138	138	25
Mindanao	2026	5	11	9	58	138	138	25
Mindanao	2026	5	11	10	59	138	138	25
Mindanao	2026	5	11	11	62	138	138	25
Mindanao	2026	5	11	12	65	138	138	25
Mindanao	2026	5	11	13	66	138	138	25
Mindanao	2026	5	11	14	69	138	138	25
Mindanao	2026	5	11	15	69	138	138	25
Mindanao	2026	5	11	16	69	138	138	25
Mindanao	2026	5	11	17	72	138	138	25
Mindanao	2026	5	11	18	84	138	138	25
Mindanao	2026	5	11	19	87	138	138	25
Mindanao	2026	5	11	20	85	138	138	25
Mindanao	2026	5	11	21	84	138	138	25
Mindanao	2026	5	11	22	81	138	138	25
Mindanao	2026	5	11	23	75	138	138	25
Mindanao	2026	5	11	24	71	138	138	25
Mindanao	2026	5	12	1	67	138	138	25
Mindanao	2026	5	12	2	65	138	138	25
Mindanao	2026	5	12	3	63	138	138	25
Mindanao	2026	5	12	4	61	138	138	25
Mindanao	2026	5	12	5	63	138	138	25
Mindanao	2026	5	12	6	67	138	138	25
Mindanao	2026	5	12	7	69	138	138	25
Mindanao	2026	5	12	8	77	138	138	25
Mindanao	2026	5	12	9	87	138	138	25
Mindanao	2026	5	12	10	96	138	138	25
Mindanao	2026	5	12	11	103	138	138	25
Mindanao	2026	5	12	12	102	138	138	25
Mindanao	2026	5	12	13	104	138	138	25
Mindanao	2026	5	12	14	109	138	138	25
Mindanao	2026	5	12	15	108	138	138	25
Mindanao	2026	5	12	16	105	138	138	25
Mindanao	2026	5	12	17	98	138	138	25
Mindanao	2026	5	12	18	103	138	138	25
Mindanao	2026	5	12	19	101	138	138	25
Mindanao	2026	5	12	20	98	138	138	25
Mindanao	2026	5	12	21	93	138	138	25
Mindanao	2026	5	12	22	88	138	138	25
Mindanao	2026	5	12	23	82	138	138	25
Mindanao	2026	5	12	24	76	138	138	25
Mindanao	2026	5	13	1	75	138	138	25
Mindanao	2026	5	13	2	70	138	138	25
Mindanao	2026	5	13	3	68	138	138	25
Mindanao	2026	5	13	4	66	138	138	25
Mindanao	2026	5	13	5	68	138	138	25
Mindanao	2026	5	13	6	72	138	138	25
Mindanao	2026	5	13	7	73	138	138	25
Mindanao	2026	5	13	8	79	138	138	25
Mindanao	2026	5	13	9	93	138	138	25
Mindanao	2026	5	13	10	100	138	138	25
Mindanao	2026	5	13	11	108	138	138	25
Mindanao	2026	5	13	12	108	138	138	25
Mindanao	2026	5	13	13	108	138	138	25
Mindanao	2026	5	13	14	113	138	138	25
Mindanao	2026	5	13	15	111	138	138	25
Mindanao	2026	5	13	16	108	138	138	25
Mindanao	2026	5	13	17	101	138	138	25
Mindanao	2026	5	13	18	106	138	138	25
Mindanao	2026	5	13	19	107	138	138	25
Mindanao	2026	5	13	20	102	138	138	25
Mindanao	2026	5	13	21	99	138	138	25
Mindanao	2026	5	13	22	96	138	138	25
Mindanao	2026	5	13	23	90	138	138	25
Mindanao	2026	5	13	24	84	138	138	25
Mindanao	2026	5	14	1	81	138	138	25
Mindanao	2026	5	14	2	78	138	138	25
Mindanao	2026	5	14	3	76	138	138	25
Mindanao	2026	5	14	4	73	138	138	25
Mindanao	2026	5	14	5	75	138	138	25
Mindanao	2026	5	14	6	78	138	138	25
Mindanao	2026	5	14	7	77	138	138	25
Mindanao	2026	5	14	8	85	138	138	25
Mindanao	2026	5	14	9	98	138	138	25
Mindanao	2026	5	14	10	106	138	138	25
Mindanao	2026	5	14	11	113	138	138	25
Mindanao	2026	5	14	12	111	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	14	13	113	138	138	25
Mindanao	2026	5	14	14	117	138	138	25
Mindanao	2026	5	14	15	117	138	138	25
Mindanao	2026	5	14	16	112	138	138	25
Mindanao	2026	5	14	17	106	138	138	25
Mindanao	2026	5	14	18	112	138	138	25
Mindanao	2026	5	14	19	112	138	138	25
Mindanao	2026	5	14	20	107	138	138	25
Mindanao	2026	5	14	21	104	138	138	25
Mindanao	2026	5	14	22	96	138	138	25
Mindanao	2026	5	14	23	91	138	138	25
Mindanao	2026	5	14	24	85	138	138	25
Mindanao	2026	5	15	1	81	138	138	25
Mindanao	2026	5	15	2	78	138	138	25
Mindanao	2026	5	15	3	73	138	138	25
Mindanao	2026	5	15	4	71	138	138	25
Mindanao	2026	5	15	5	74	138	138	25
Mindanao	2026	5	15	6	76	138	138	25
Mindanao	2026	5	15	7	76	138	138	25
Mindanao	2026	5	15	8	84	138	138	25
Mindanao	2026	5	15	9	94	138	138	25
Mindanao	2026	5	15	10	100	138	138	25
Mindanao	2026	5	15	11	106	138	138	25
Mindanao	2026	5	15	12	106	138	138	25
Mindanao	2026	5	15	13	107	138	138	25
Mindanao	2026	5	15	14	112	138	138	25
Mindanao	2026	5	15	15	110	138	138	25
Mindanao	2026	5	15	16	105	138	138	25
Mindanao	2026	5	15	17	100	138	138	25
Mindanao	2026	5	15	18	106	138	138	25
Mindanao	2026	5	15	19	105	138	138	25
Mindanao	2026	5	15	20	102	138	138	25
Mindanao	2026	5	15	21	97	138	138	25
Mindanao	2026	5	15	22	89	138	138	25
Mindanao	2026	5	15	23	86	138	138	25
Mindanao	2026	5	15	24	82	138	138	25
Mindanao	2026	5	16	1	79	138	138	25
Mindanao	2026	5	16	2	75	138	138	25
Mindanao	2026	5	16	3	72	138	138	25
Mindanao	2026	5	16	4	72	138	138	25
Mindanao	2026	5	16	5	74	138	138	25
Mindanao	2026	5	16	6	75	138	138	25
Mindanao	2026	5	16	7	73	138	138	25
Mindanao	2026	5	16	8	76	138	138	25
Mindanao	2026	5	16	9	83	138	138	25
Mindanao	2026	5	16	10	91	138	138	25
Mindanao	2026	5	16	11	95	138	138	25
Mindanao	2026	5	16	12	93	138	138	25
Mindanao	2026	5	16	13	95	138	138	25
Mindanao	2026	5	16	14	101	138	138	25
Mindanao	2026	5	16	15	96	138	138	25
Mindanao	2026	5	16	16	94	138	138	25
Mindanao	2026	5	16	17	92	138	138	25
Mindanao	2026	5	16	18	102	138	138	25
Mindanao	2026	5	16	19	100	138	138	25
Mindanao	2026	5	16	20	96	138	138	25
Mindanao	2026	5	16	21	91	138	138	25
Mindanao	2026	5	16	22	90	138	138	25
Mindanao	2026	5	16	23	83	138	138	25
Mindanao	2026	5	16	24	82	138	138	25
Mindanao	2026	5	17	1	78	138	138	25
Mindanao	2026	5	17	2	75	138	138	25
Mindanao	2026	5	17	3	68	138	138	25
Mindanao	2026	5	17	4	69	138	138	25
Mindanao	2026	5	17	5	69	138	138	25
Mindanao	2026	5	17	6	70	138	138	25
Mindanao	2026	5	17	7	71	138	138	25
Mindanao	2026	5	17	8	68	138	138	25
Mindanao	2026	5	17	9	73	138	138	25
Mindanao	2026	5	17	10	77	138	138	25
Mindanao	2026	5	17	11	81	138	138	25
Mindanao	2026	5	17	12	81	138	138	25
Mindanao	2026	5	17	13	82	138	138	25
Mindanao	2026	5	17	14	82	138	138	25
Mindanao	2026	5	17	15	82	138	138	25
Mindanao	2026	5	17	16	82	138	138	25
Mindanao	2026	5	17	17	83	138	138	25
Mindanao	2026	5	17	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	17	19	94	138	138	25
Mindanao	2026	5	17	20	90	138	138	25
Mindanao	2026	5	17	21	90	138	138	25
Mindanao	2026	5	17	22	86	138	138	25
Mindanao	2026	5	17	23	80	138	138	25
Mindanao	2026	5	17	24	76	138	138	25
Mindanao	2026	5	18	1	73	138	138	25
Mindanao	2026	5	18	2	71	138	138	25
Mindanao	2026	5	18	3	69	138	138	25
Mindanao	2026	5	18	4	67	138	138	25
Mindanao	2026	5	18	5	72	138	138	25
Mindanao	2026	5	18	6	74	138	138	25
Mindanao	2026	5	18	7	73	138	138	25
Mindanao	2026	5	18	8	82	138	138	25
Mindanao	2026	5	18	9	93	138	138	25
Mindanao	2026	5	18	10	103	138	138	25
Mindanao	2026	5	18	11	108	138	138	25
Mindanao	2026	5	18	12	106	138	138	25
Mindanao	2026	5	18	13	107	138	138	25
Mindanao	2026	5	18	14	113	138	138	25
Mindanao	2026	5	18	15	112	138	138	25
Mindanao	2026	5	18	16	109	138	138	25
Mindanao	2026	5	18	17	101	138	138	25
Mindanao	2026	5	18	18	104	138	138	25
Mindanao	2026	5	18	19	102	138	138	25
Mindanao	2026	5	18	20	102	138	138	25
Mindanao	2026	5	18	21	99	138	138	25
Mindanao	2026	5	18	22	93	138	138	25
Mindanao	2026	5	18	23	88	138	138	25
Mindanao	2026	5	18	24	83	138	138	25
Mindanao	2026	5	19	1	79	138	138	25
Mindanao	2026	5	19	2	73	138	138	25
Mindanao	2026	5	19	3	73	138	138	25
Mindanao	2026	5	19	4	70	138	138	25
Mindanao	2026	5	19	5	72	138	138	25
Mindanao	2026	5	19	6	78	138	138	25
Mindanao	2026	5	19	7	76	138	138	25
Mindanao	2026	5	19	8	84	138	138	25
Mindanao	2026	5	19	9	98	138	138	25
Mindanao	2026	5	19	10	105	138	138	25
Mindanao	2026	5	19	11	111	138	138	25
Mindanao	2026	5	19	12	110	138	138	25
Mindanao	2026	5	19	13	111	138	138	25
Mindanao	2026	5	19	14	118	138	138	25
Mindanao	2026	5	19	15	116	138	138	25
Mindanao	2026	5	19	16	112	138	138	25
Mindanao	2026	5	19	17	105	138	138	25
Mindanao	2026	5	19	18	110	138	138	25
Mindanao	2026	5	19	19	111	138	138	25
Mindanao	2026	5	19	20	108	138	138	25
Mindanao	2026	5	19	21	102	138	138	25
Mindanao	2026	5	19	22	96	138	138	25
Mindanao	2026	5	19	23	92	138	138	25
Mindanao	2026	5	19	24	86	138	138	25
Mindanao	2026	5	20	1	82	138	138	25
Mindanao	2026	5	20	2	78	138	138	25
Mindanao	2026	5	20	3	75	138	138	25
Mindanao	2026	5	20	4	74	138	138	25
Mindanao	2026	5	20	5	77	138	138	25
Mindanao	2026	5	20	6	80	138	138	25
Mindanao	2026	5	20	7	76	138	138	25
Mindanao	2026	5	20	8	86	138	138	25
Mindanao	2026	5	20	9	100	138	138	25
Mindanao	2026	5	20	10	109	138	138	25
Mindanao	2026	5	20	11	114	138	138	25
Mindanao	2026	5	20	12	111	138	138	25
Mindanao	2026	5	20	13	113	138	138	25
Mindanao	2026	5	20	14	119	138	138	25
Mindanao	2026	5	20	15	118	138	138	25
Mindanao	2026	5	20	16	115	138	138	25
Mindanao	2026	5	20	17	109	138	138	25
Mindanao	2026	5	20	18	111	138	138	25
Mindanao	2026	5	20	19	114	138	138	25
Mindanao	2026	5	20	20	110	138	138	25
Mindanao	2026	5	20	21	109	138	138	25
Mindanao	2026	5	20	22	100	138	138	25
Mindanao	2026	5	20	23	95	138	138	25
Mindanao	2026	5	20	24	86	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	21	1	83	138	138	25
Mindanao	2026	5	21	2	81	138	138	25
Mindanao	2026	5	21	3	78	138	138	25
Mindanao	2026	5	21	4	76	138	138	25
Mindanao	2026	5	21	5	78	138	138	25
Mindanao	2026	5	21	6	81	138	138	25
Mindanao	2026	5	21	7	78	138	138	25
Mindanao	2026	5	21	8	87	138	138	25
Mindanao	2026	5	21	9	100	138	138	25
Mindanao	2026	5	21	10	110	138	138	25
Mindanao	2026	5	21	11	108	138	138	25
Mindanao	2026	5	21	12	110	138	138	25
Mindanao	2026	5	21	13	111	138	138	25
Mindanao	2026	5	21	14	117	138	138	25
Mindanao	2026	5	21	15	117	138	138	25
Mindanao	2026	5	21	16	114	138	138	25
Mindanao	2026	5	21	17	107	138	138	25
Mindanao	2026	5	21	18	113	138	138	25
Mindanao	2026	5	21	19	113	138	138	25
Mindanao	2026	5	21	20	112	138	138	25
Mindanao	2026	5	21	21	106	138	138	25
Mindanao	2026	5	21	22	102	138	138	25
Mindanao	2026	5	21	23	96	138	138	25
Mindanao	2026	5	21	24	88	138	138	25
Mindanao	2026	5	22	1	86	138	138	25
Mindanao	2026	5	22	2	82	138	138	25
Mindanao	2026	5	22	3	81	138	138	25
Mindanao	2026	5	22	4	79	138	138	25
Mindanao	2026	5	22	5	80	138	138	25
Mindanao	2026	5	22	6	83	138	138	25
Mindanao	2026	5	22	7	81	138	138	25
Mindanao	2026	5	22	8	91	138	138	25
Mindanao	2026	5	22	9	105	138	138	25
Mindanao	2026	5	22	10	112	138	138	25
Mindanao	2026	5	22	11	117	138	138	25
Mindanao	2026	5	22	12	114	138	138	25
Mindanao	2026	5	22	13	116	138	138	25
Mindanao	2026	5	22	14	121	138	138	25
Mindanao	2026	5	22	15	118	138	138	25
Mindanao	2026	5	22	16	115	138	138	25
Mindanao	2026	5	22	17	108	138	138	25
Mindanao	2026	5	22	18	112	138	138	25
Mindanao	2026	5	22	19	113	138	138	25
Mindanao	2026	5	22	20	110	138	138	25
Mindanao	2026	5	22	21	104	138	138	25
Mindanao	2026	5	22	22	99	138	138	25
Mindanao	2026	5	22	23	95	138	138	25
Mindanao	2026	5	22	24	90	138	138	25
Mindanao	2026	5	23	1	85	138	138	25
Mindanao	2026	5	23	2	81	138	138	25
Mindanao	2026	5	23	3	78	138	138	25
Mindanao	2026	5	23	4	78	138	138	25
Mindanao	2026	5	23	5	78	138	138	25
Mindanao	2026	5	23	6	79	138	138	25
Mindanao	2026	5	23	7	77	138	138	25
Mindanao	2026	5	23	8	82	138	138	25
Mindanao	2026	5	23	9	92	138	138	25
Mindanao	2026	5	23	10	97	138	138	25
Mindanao	2026	5	23	11	102	138	138	25
Mindanao	2026	5	23	12	102	138	138	25
Mindanao	2026	5	23	13	101	138	138	25
Mindanao	2026	5	23	14	104	138	138	25
Mindanao	2026	5	23	15	103	138	138	25
Mindanao	2026	5	23	16	100	138	138	25
Mindanao	2026	5	23	17	99	138	138	25
Mindanao	2026	5	23	18	105	138	138	25
Mindanao	2026	5	23	19	108	138	138	25
Mindanao	2026	5	23	20	103	138	138	25
Mindanao	2026	5	23	21	101	138	138	25
Mindanao	2026	5	23	22	95	138	138	25
Mindanao	2026	5	23	23	88	138	138	25
Mindanao	2026	5	23	24	83	138	138	25
Mindanao	2026	5	24	1	78	138	138	25
Mindanao	2026	5	24	2	76	138	138	25
Mindanao	2026	5	24	3	74	138	138	25
Mindanao	2026	5	24	4	73	138	138	25
Mindanao	2026	5	24	5	73	138	138	25
Mindanao	2026	5	24	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	24	7	67	138	138	25
Mindanao	2026	5	24	8	67	138	138	25
Mindanao	2026	5	24	9	72	138	138	25
Mindanao	2026	5	24	10	76	138	138	25
Mindanao	2026	5	24	11	82	138	138	25
Mindanao	2026	5	24	12	83	138	138	25
Mindanao	2026	5	24	13	84	138	138	25
Mindanao	2026	5	24	14	86	138	138	25
Mindanao	2026	5	24	15	85	138	138	25
Mindanao	2026	5	24	16	80	138	138	25
Mindanao	2026	5	24	17	84	138	138	25
Mindanao	2026	5	24	18	97	138	138	25
Mindanao	2026	5	24	19	100	138	138	25
Mindanao	2026	5	24	20	97	138	138	25
Mindanao	2026	5	24	21	93	138	138	25
Mindanao	2026	5	24	22	87	138	138	25
Mindanao	2026	5	24	23	84	138	138	25
Mindanao	2026	5	24	24	79	138	138	25
Mindanao	2026	5	25	1	76	138	138	25
Mindanao	2026	5	25	2	72	138	138	25
Mindanao	2026	5	25	3	70	138	138	25
Mindanao	2026	5	25	4	70	138	138	25
Mindanao	2026	5	25	5	72	138	138	25
Mindanao	2026	5	25	6	76	138	138	25
Mindanao	2026	5	25	7	75	138	138	25
Mindanao	2026	5	25	8	84	138	138	25
Mindanao	2026	5	25	9	99	138	138	25
Mindanao	2026	5	25	10	107	138	138	25
Mindanao	2026	5	25	11	113	138	138	25
Mindanao	2026	5	25	12	111	138	138	25
Mindanao	2026	5	25	13	115	138	138	25
Mindanao	2026	5	25	14	118	138	138	25
Mindanao	2026	5	25	15	119	138	138	25
Mindanao	2026	5	25	16	115	138	138	25
Mindanao	2026	5	25	17	110	138	138	25
Mindanao	2026	5	25	18	111	138	138	25
Mindanao	2026	5	25	19	114	138	138	25
Mindanao	2026	5	25	20	107	138	138	25
Mindanao	2026	5	25	21	106	138	138	25
Mindanao	2026	5	25	22	98	138	138	25
Mindanao	2026	5	25	23	92	138	138	25
Mindanao	2026	5	25	24	87	138	138	25
Mindanao	2026	5	26	1	83	138	138	25
Mindanao	2026	5	26	2	78	138	138	25
Mindanao	2026	5	26	3	76	138	138	25
Mindanao	2026	5	26	4	75	138	138	25
Mindanao	2026	5	26	5	76	138	138	25
Mindanao	2026	5	26	6	80	138	138	25
Mindanao	2026	5	26	7	79	138	138	25
Mindanao	2026	5	26	8	86	138	138	25
Mindanao	2026	5	26	9	99	138	138	25
Mindanao	2026	5	26	10	108	138	138	25
Mindanao	2026	5	26	11	111	138	138	25
Mindanao	2026	5	26	12	108	138	138	25
Mindanao	2026	5	26	13	112	138	138	25
Mindanao	2026	5	26	14	114	138	138	25
Mindanao	2026	5	26	15	113	138	138	25
Mindanao	2026	5	26	16	112	138	138	25
Mindanao	2026	5	26	17	107	138	138	25
Mindanao	2026	5	26	18	106	138	138	25
Mindanao	2026	5	26	19	113	138	138	25
Mindanao	2026	5	26	20	107	138	138	25
Mindanao	2026	5	26	21	105	138	138	25
Mindanao	2026	5	26	22	97	138	138	25
Mindanao	2026	5	26	23	93	138	138	25
Mindanao	2026	5	26	24	86	138	138	25
Mindanao	2026	5	27	1	82	138	138	25
Mindanao	2026	5	27	2	79	138	138	25
Mindanao	2026	5	27	3	76	138	138	25
Mindanao	2026	5	27	4	73	138	138	25
Mindanao	2026	5	27	5	78	138	138	25
Mindanao	2026	5	27	6	81	138	138	25
Mindanao	2026	5	27	7	78	138	138	25
Mindanao	2026	5	27	8	83	138	138	25
Mindanao	2026	5	27	9	93	138	138	25
Mindanao	2026	5	27	10	102	138	138	25
Mindanao	2026	5	27	11	106	138	138	25
Mindanao	2026	5	27	12	101	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	27	13	103	138	138	25
Mindanao	2026	5	27	14	109	138	138	25
Mindanao	2026	5	27	15	109	138	138	25
Mindanao	2026	5	27	16	107	138	138	25
Mindanao	2026	5	27	17	103	138	138	25
Mindanao	2026	5	27	18	109	138	138	25
Mindanao	2026	5	27	19	108	138	138	25
Mindanao	2026	5	27	20	105	138	138	25
Mindanao	2026	5	27	21	102	138	138	25
Mindanao	2026	5	27	22	95	138	138	25
Mindanao	2026	5	27	23	89	138	138	25
Mindanao	2026	5	27	24	83	138	138	25
Mindanao	2026	5	28	1	78	138	138	25
Mindanao	2026	5	28	2	76	138	138	25
Mindanao	2026	5	28	3	74	138	138	25
Mindanao	2026	5	28	4	71	138	138	25
Mindanao	2026	5	28	5	74	138	138	25
Mindanao	2026	5	28	6	78	138	138	25
Mindanao	2026	5	28	7	75	138	138	25
Mindanao	2026	5	28	8	83	138	138	25
Mindanao	2026	5	28	9	96	138	138	25
Mindanao	2026	5	28	10	104	138	138	25
Mindanao	2026	5	28	11	109	138	138	25
Mindanao	2026	5	28	12	108	138	138	25
Mindanao	2026	5	28	13	107	138	138	25
Mindanao	2026	5	28	14	105	138	138	25
Mindanao	2026	5	28	15	105	138	138	25
Mindanao	2026	5	28	16	103	138	138	25
Mindanao	2026	5	28	17	99	138	138	25
Mindanao	2026	5	28	18	102	138	138	25
Mindanao	2026	5	28	19	103	138	138	25
Mindanao	2026	5	28	20	101	138	138	25
Mindanao	2026	5	28	21	95	138	138	25
Mindanao	2026	5	28	22	89	138	138	25
Mindanao	2026	5	28	23	84	138	138	25
Mindanao	2026	5	28	24	80	138	138	25
Mindanao	2026	5	29	1	76	138	138	25
Mindanao	2026	5	29	2	74	138	138	25
Mindanao	2026	5	29	3	71	138	138	25
Mindanao	2026	5	29	4	70	138	138	25
Mindanao	2026	5	29	5	71	138	138	25
Mindanao	2026	5	29	6	77	138	138	25
Mindanao	2026	5	29	7	73	138	138	25
Mindanao	2026	5	29	8	81	138	138	25
Mindanao	2026	5	29	9	94	138	138	25
Mindanao	2026	5	29	10	100	138	138	25
Mindanao	2026	5	29	11	107	138	138	25
Mindanao	2026	5	29	12	105	138	138	25
Mindanao	2026	5	29	13	105	138	138	25
Mindanao	2026	5	29	14	111	138	138	25
Mindanao	2026	5	29	15	109	138	138	25
Mindanao	2026	5	29	16	107	138	138	25
Mindanao	2026	5	29	17	101	138	138	25
Mindanao	2026	5	29	18	107	138	138	25
Mindanao	2026	5	29	19	106	138	138	25
Mindanao	2026	5	29	20	103	138	138	25
Mindanao	2026	5	29	21	97	138	138	25
Mindanao	2026	5	29	22	93	138	138	25
Mindanao	2026	5	29	23	86	138	138	25
Mindanao	2026	5	29	24	81	138	138	25
Mindanao	2026	5	30	1	78	138	138	25
Mindanao	2026	5	30	2	75	138	138	25
Mindanao	2026	5	30	3	72	138	138	25
Mindanao	2026	5	30	4	70	138	138	25
Mindanao	2026	5	30	5	69	138	138	25
Mindanao	2026	5	30	6	74	138	138	25
Mindanao	2026	5	30	7	72	138	138	25
Mindanao	2026	5	30	8	76	138	138	25
Mindanao	2026	5	30	9	84	138	138	25
Mindanao	2026	5	30	10	90	138	138	25
Mindanao	2026	5	30	11	95	138	138	25
Mindanao	2026	5	30	12	93	138	138	25
Mindanao	2026	5	30	13	94	138	138	25
Mindanao	2026	5	30	14	99	138	138	25
Mindanao	2026	5	30	15	97	138	138	25
Mindanao	2026	5	30	16	94	138	138	25
Mindanao	2026	5	30	17	95	138	138	25
Mindanao	2026	5	30	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	5	30	19	103	138	138	25
Mindanao	2026	5	30	20	100	138	138	25
Mindanao	2026	5	30	21	96	138	138	25
Mindanao	2026	5	30	22	91	138	138	25
Mindanao	2026	5	30	23	84	138	138	25
Mindanao	2026	5	30	24	81	138	138	25
Mindanao	2026	5	31	1	76	138	138	25
Mindanao	2026	5	31	2	74	138	138	25
Mindanao	2026	5	31	3	72	138	138	25
Mindanao	2026	5	31	4	69	138	138	25
Mindanao	2026	5	31	5	68	138	138	25
Mindanao	2026	5	31	6	70	138	138	25
Mindanao	2026	5	31	7	69	138	138	25
Mindanao	2026	5	31	8	70	138	138	25
Mindanao	2026	5	31	9	73	138	138	25
Mindanao	2026	5	31	10	76	138	138	25
Mindanao	2026	5	31	11	82	138	138	25
Mindanao	2026	5	31	12	83	138	138	25
Mindanao	2026	5	31	13	85	138	138	25
Mindanao	2026	5	31	14	87	138	138	25
Mindanao	2026	5	31	15	87	138	138	25
Mindanao	2026	5	31	16	84	138	138	25
Mindanao	2026	5	31	17	86	138	138	25
Mindanao	2026	5	31	18	95	138	138	25
Mindanao	2026	5	31	19	96	138	138	25
Mindanao	2026	5	31	20	93	138	138	25
Mindanao	2026	5	31	21	88	138	138	25
Mindanao	2026	5	31	22	84	138	138	25
Mindanao	2026	5	31	23	79	138	138	25
Mindanao	2026	5	31	24	75	138	138	25
Mindanao	2026	6	1	1	72	138	138	25
Mindanao	2026	6	1	2	68	138	138	25
Mindanao	2026	6	1	3	66	138	138	25
Mindanao	2026	6	1	4	65	138	138	25
Mindanao	2026	6	1	5	69	138	138	25
Mindanao	2026	6	1	6	73	138	138	25
Mindanao	2026	6	1	7	73	138	138	25
Mindanao	2026	6	1	8	81	138	138	25
Mindanao	2026	6	1	9	90	138	138	25
Mindanao	2026	6	1	10	96	138	138	25
Mindanao	2026	6	1	11	101	138	138	25
Mindanao	2026	6	1	12	98	138	138	25
Mindanao	2026	6	1	13	97	138	138	25
Mindanao	2026	6	1	14	104	138	138	25
Mindanao	2026	6	1	15	103	138	138	25
Mindanao	2026	6	1	16	102	138	138	25
Mindanao	2026	6	1	17	99	138	138	25
Mindanao	2026	6	1	18	102	138	138	25
Mindanao	2026	6	1	19	102	138	138	25
Mindanao	2026	6	1	20	98	138	138	25
Mindanao	2026	6	1	21	95	138	138	25
Mindanao	2026	6	1	22	88	138	138	25
Mindanao	2026	6	1	23	83	138	138	25
Mindanao	2026	6	1	24	78	138	138	25
Mindanao	2026	6	2	1	73	138	138	25
Mindanao	2026	6	2	2	71	138	138	25
Mindanao	2026	6	2	3	68	138	138	25
Mindanao	2026	6	2	4	68	138	138	25
Mindanao	2026	6	2	5	70	138	138	25
Mindanao	2026	6	2	6	75	138	138	25
Mindanao	2026	6	2	7	74	138	138	25
Mindanao	2026	6	2	8	82	138	138	25
Mindanao	2026	6	2	9	93	138	138	25
Mindanao	2026	6	2	10	103	138	138	25
Mindanao	2026	6	2	11	107	138	138	25
Mindanao	2026	6	2	12	109	138	138	25
Mindanao	2026	6	2	13	110	138	138	25
Mindanao	2026	6	2	14	114	138	138	25
Mindanao	2026	6	2	15	113	138	138	25
Mindanao	2026	6	2	16	111	138	138	25
Mindanao	2026	6	2	17	104	138	138	25
Mindanao	2026	6	2	18	107	138	138	25
Mindanao	2026	6	2	19	112	138	138	25
Mindanao	2026	6	2	20	109	138	138	25
Mindanao	2026	6	2	21	104	138	138	25
Mindanao	2026	6	2	22	98	138	138	25
Mindanao	2026	6	2	23	90	138	138	25
Mindanao	2026	6	2	24	85	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	3	1	82	138	138	25
Mindanao	2026	6	3	2	79	138	138	25
Mindanao	2026	6	3	3	76	138	138	25
Mindanao	2026	6	3	4	75	138	138	25
Mindanao	2026	6	3	5	76	138	138	25
Mindanao	2026	6	3	6	79	138	138	25
Mindanao	2026	6	3	7	78	138	138	25
Mindanao	2026	6	3	8	87	138	138	25
Mindanao	2026	6	3	9	101	138	138	25
Mindanao	2026	6	3	10	110	138	138	25
Mindanao	2026	6	3	11	114	138	138	25
Mindanao	2026	6	3	12	112	138	138	25
Mindanao	2026	6	3	13	113	138	138	25
Mindanao	2026	6	3	14	119	138	138	25
Mindanao	2026	6	3	15	120	138	138	25
Mindanao	2026	6	3	16	117	138	138	25
Mindanao	2026	6	3	17	108	138	138	25
Mindanao	2026	6	3	18	109	138	138	25
Mindanao	2026	6	3	19	110	138	138	25
Mindanao	2026	6	3	20	106	138	138	25
Mindanao	2026	6	3	21	103	138	138	25
Mindanao	2026	6	3	22	96	138	138	25
Mindanao	2026	6	3	23	90	138	138	25
Mindanao	2026	6	3	24	85	138	138	25
Mindanao	2026	6	4	1	81	138	138	25
Mindanao	2026	6	4	2	77	138	138	25
Mindanao	2026	6	4	3	73	138	138	25
Mindanao	2026	6	4	4	73	138	138	25
Mindanao	2026	6	4	5	76	138	138	25
Mindanao	2026	6	4	6	79	138	138	25
Mindanao	2026	6	4	7	76	138	138	25
Mindanao	2026	6	4	8	86	138	138	25
Mindanao	2026	6	4	9	97	138	138	25
Mindanao	2026	6	4	10	107	138	138	25
Mindanao	2026	6	4	11	113	138	138	25
Mindanao	2026	6	4	12	112	138	138	25
Mindanao	2026	6	4	13	112	138	138	25
Mindanao	2026	6	4	14	118	138	138	25
Mindanao	2026	6	4	15	114	138	138	25
Mindanao	2026	6	4	16	109	138	138	25
Mindanao	2026	6	4	17	103	138	138	25
Mindanao	2026	6	4	18	105	138	138	25
Mindanao	2026	6	4	19	107	138	138	25
Mindanao	2026	6	4	20	104	138	138	25
Mindanao	2026	6	4	21	100	138	138	25
Mindanao	2026	6	4	22	93	138	138	25
Mindanao	2026	6	4	23	87	138	138	25
Mindanao	2026	6	4	24	80	138	138	25
Mindanao	2026	6	5	1	78	138	138	25
Mindanao	2026	6	5	2	74	138	138	25
Mindanao	2026	6	5	3	70	138	138	25
Mindanao	2026	6	5	4	69	138	138	25
Mindanao	2026	6	5	5	72	138	138	25
Mindanao	2026	6	5	6	76	138	138	25
Mindanao	2026	6	5	7	73	138	138	25
Mindanao	2026	6	5	8	83	138	138	25
Mindanao	2026	6	5	9	94	138	138	25
Mindanao	2026	6	5	10	105	138	138	25
Mindanao	2026	6	5	11	112	138	138	25
Mindanao	2026	6	5	12	109	138	138	25
Mindanao	2026	6	5	13	111	138	138	25
Mindanao	2026	6	5	14	114	138	138	25
Mindanao	2026	6	5	15	114	138	138	25
Mindanao	2026	6	5	16	110	138	138	25
Mindanao	2026	6	5	17	100	138	138	25
Mindanao	2026	6	5	18	104	138	138	25
Mindanao	2026	6	5	19	105	138	138	25
Mindanao	2026	6	5	20	103	138	138	25
Mindanao	2026	6	5	21	100	138	138	25
Mindanao	2026	6	5	22	93	138	138	25
Mindanao	2026	6	5	23	87	138	138	25
Mindanao	2026	6	5	24	79	138	138	25
Mindanao	2026	6	6	1	78	138	138	25
Mindanao	2026	6	6	2	74	138	138	25
Mindanao	2026	6	6	3	73	138	138	25
Mindanao	2026	6	6	4	71	138	138	25
Mindanao	2026	6	6	5	72	138	138	25
Mindanao	2026	6	6	6	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	6	7	73	138	138	25
Mindanao	2026	6	6	8	77	138	138	25
Mindanao	2026	6	6	9	87	138	138	25
Mindanao	2026	6	6	10	93	138	138	25
Mindanao	2026	6	6	11	97	138	138	25
Mindanao	2026	6	6	12	99	138	138	25
Mindanao	2026	6	6	13	101	138	138	25
Mindanao	2026	6	6	14	104	138	138	25
Mindanao	2026	6	6	15	101	138	138	25
Mindanao	2026	6	6	16	96	138	138	25
Mindanao	2026	6	6	17	96	138	138	25
Mindanao	2026	6	6	18	102	138	138	25
Mindanao	2026	6	6	19	105	138	138	25
Mindanao	2026	6	6	20	100	138	138	25
Mindanao	2026	6	6	21	94	138	138	25
Mindanao	2026	6	6	22	90	138	138	25
Mindanao	2026	6	6	23	86	138	138	25
Mindanao	2026	6	6	24	80	138	138	25
Mindanao	2026	6	7	1	75	138	138	25
Mindanao	2026	6	7	2	73	138	138	25
Mindanao	2026	6	7	3	70	138	138	25
Mindanao	2026	6	7	4	70	138	138	25
Mindanao	2026	6	7	5	68	138	138	25
Mindanao	2026	6	7	6	68	138	138	25
Mindanao	2026	6	7	7	67	138	138	25
Mindanao	2026	6	7	8	66	138	138	25
Mindanao	2026	6	7	9	67	138	138	25
Mindanao	2026	6	7	10	72	138	138	25
Mindanao	2026	6	7	11	76	138	138	25
Mindanao	2026	6	7	12	77	138	138	25
Mindanao	2026	6	7	13	76	138	138	25
Mindanao	2026	6	7	14	77	138	138	25
Mindanao	2026	6	7	15	75	138	138	25
Mindanao	2026	6	7	16	74	138	138	25
Mindanao	2026	6	7	17	78	138	138	25
Mindanao	2026	6	7	18	90	138	138	25
Mindanao	2026	6	7	19	88	138	138	25
Mindanao	2026	6	7	20	88	138	138	25
Mindanao	2026	6	7	21	84	138	138	25
Mindanao	2026	6	7	22	79	138	138	25
Mindanao	2026	6	7	23	72	138	138	25
Mindanao	2026	6	7	24	69	138	138	25
Mindanao	2026	6	8	1	65	138	138	25
Mindanao	2026	6	8	2	64	138	138	25
Mindanao	2026	6	8	3	61	138	138	25
Mindanao	2026	6	8	4	62	138	138	25
Mindanao	2026	6	8	5	64	138	138	25
Mindanao	2026	6	8	6	69	138	138	25
Mindanao	2026	6	8	7	69	138	138	25
Mindanao	2026	6	8	8	78	138	138	25
Mindanao	2026	6	8	9	92	138	138	25
Mindanao	2026	6	8	10	101	138	138	25
Mindanao	2026	6	8	11	107	138	138	25
Mindanao	2026	6	8	12	106	138	138	25
Mindanao	2026	6	8	13	109	138	138	25
Mindanao	2026	6	8	14	114	138	138	25
Mindanao	2026	6	8	15	114	138	138	25
Mindanao	2026	6	8	16	111	138	138	25
Mindanao	2026	6	8	17	104	138	138	25
Mindanao	2026	6	8	18	105	138	138	25
Mindanao	2026	6	8	19	108	138	138	25
Mindanao	2026	6	8	20	106	138	138	25
Mindanao	2026	6	8	21	102	138	138	25
Mindanao	2026	6	8	22	97	138	138	25
Mindanao	2026	6	8	23	91	138	138	25
Mindanao	2026	6	8	24	84	138	138	25
Mindanao	2026	6	9	1	79	138	138	25
Mindanao	2026	6	9	2	77	138	138	25
Mindanao	2026	6	9	3	73	138	138	25
Mindanao	2026	6	9	4	72	138	138	25
Mindanao	2026	6	9	5	74	138	138	25
Mindanao	2026	6	9	6	78	138	138	25
Mindanao	2026	6	9	7	76	138	138	25
Mindanao	2026	6	9	8	86	138	138	25
Mindanao	2026	6	9	9	99	138	138	25
Mindanao	2026	6	9	10	107	138	138	25
Mindanao	2026	6	9	11	114	138	138	25
Mindanao	2026	6	9	12	114	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	9	13	115	138	138	25
Mindanao	2026	6	9	14	118	138	138	25
Mindanao	2026	6	9	15	117	138	138	25
Mindanao	2026	6	9	16	115	138	138	25
Mindanao	2026	6	9	17	104	138	138	25
Mindanao	2026	6	9	18	105	138	138	25
Mindanao	2026	6	9	19	109	138	138	25
Mindanao	2026	6	9	20	106	138	138	25
Mindanao	2026	6	9	21	100	138	138	25
Mindanao	2026	6	9	22	93	138	138	25
Mindanao	2026	6	9	23	87	138	138	25
Mindanao	2026	6	9	24	81	138	138	25
Mindanao	2026	6	10	1	80	138	138	25
Mindanao	2026	6	10	2	76	138	138	25
Mindanao	2026	6	10	3	73	138	138	25
Mindanao	2026	6	10	4	71	138	138	25
Mindanao	2026	6	10	5	75	138	138	25
Mindanao	2026	6	10	6	80	138	138	25
Mindanao	2026	6	10	7	75	138	138	25
Mindanao	2026	6	10	8	83	138	138	25
Mindanao	2026	6	10	9	95	138	138	25
Mindanao	2026	6	10	10	108	138	138	25
Mindanao	2026	6	10	11	111	138	138	25
Mindanao	2026	6	10	12	111	138	138	25
Mindanao	2026	6	10	13	111	138	138	25
Mindanao	2026	6	10	14	114	138	138	25
Mindanao	2026	6	10	15	110	138	138	25
Mindanao	2026	6	10	16	111	138	138	25
Mindanao	2026	6	10	17	105	138	138	25
Mindanao	2026	6	10	18	108	138	138	25
Mindanao	2026	6	10	19	105	138	138	25
Mindanao	2026	6	10	20	99	138	138	25
Mindanao	2026	6	10	21	94	138	138	25
Mindanao	2026	6	10	22	89	138	138	25
Mindanao	2026	6	10	23	82	138	138	25
Mindanao	2026	6	10	24	77	138	138	25
Mindanao	2026	6	11	1	75	138	138	25
Mindanao	2026	6	11	2	70	138	138	25
Mindanao	2026	6	11	3	69	138	138	25
Mindanao	2026	6	11	4	69	138	138	25
Mindanao	2026	6	11	5	69	138	138	25
Mindanao	2026	6	11	6	74	138	138	25
Mindanao	2026	6	11	7	72	138	138	25
Mindanao	2026	6	11	8	80	138	138	25
Mindanao	2026	6	11	9	96	138	138	25
Mindanao	2026	6	11	10	104	138	138	25
Mindanao	2026	6	11	11	108	138	138	25
Mindanao	2026	6	11	12	107	138	138	25
Mindanao	2026	6	11	13	108	138	138	25
Mindanao	2026	6	11	14	115	138	138	25
Mindanao	2026	6	11	15	112	138	138	25
Mindanao	2026	6	11	16	110	138	138	25
Mindanao	2026	6	11	17	104	138	138	25
Mindanao	2026	6	11	18	105	138	138	25
Mindanao	2026	6	11	19	102	138	138	25
Mindanao	2026	6	11	20	105	138	138	25
Mindanao	2026	6	11	21	102	138	138	25
Mindanao	2026	6	11	22	95	138	138	25
Mindanao	2026	6	11	23	90	138	138	25
Mindanao	2026	6	11	24	84	138	138	25
Mindanao	2026	6	12	1	77	138	138	25
Mindanao	2026	6	12	2	73	138	138	25
Mindanao	2026	6	12	3	70	138	138	25
Mindanao	2026	6	12	4	67	138	138	25
Mindanao	2026	6	12	5	69	138	138	25
Mindanao	2026	6	12	6	68	138	138	25
Mindanao	2026	6	12	7	67	138	138	25
Mindanao	2026	6	12	8	66	138	138	25
Mindanao	2026	6	12	9	70	138	138	25
Mindanao	2026	6	12	10	78	138	138	25
Mindanao	2026	6	12	11	84	138	138	25
Mindanao	2026	6	12	12	83	138	138	25
Mindanao	2026	6	12	13	85	138	138	25
Mindanao	2026	6	12	14	86	138	138	25
Mindanao	2026	6	12	15	87	138	138	25
Mindanao	2026	6	12	16	84	138	138	25
Mindanao	2026	6	12	17	84	138	138	25
Mindanao	2026	6	12	18	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	12	19	96	138	138	25
Mindanao	2026	6	12	20	95	138	138	25
Mindanao	2026	6	12	21	94	138	138	25
Mindanao	2026	6	12	22	89	138	138	25
Mindanao	2026	6	12	23	83	138	138	25
Mindanao	2026	6	12	24	77	138	138	25
Mindanao	2026	6	13	1	77	138	138	25
Mindanao	2026	6	13	2	71	138	138	25
Mindanao	2026	6	13	3	70	138	138	25
Mindanao	2026	6	13	4	67	138	138	25
Mindanao	2026	6	13	5	67	138	138	25
Mindanao	2026	6	13	6	70	138	138	25
Mindanao	2026	6	13	7	69	138	138	25
Mindanao	2026	6	13	8	74	138	138	25
Mindanao	2026	6	13	9	83	138	138	25
Mindanao	2026	6	13	10	89	138	138	25
Mindanao	2026	6	13	11	96	138	138	25
Mindanao	2026	6	13	12	96	138	138	25
Mindanao	2026	6	13	13	96	138	138	25
Mindanao	2026	6	13	14	102	138	138	25
Mindanao	2026	6	13	15	100	138	138	25
Mindanao	2026	6	13	16	98	138	138	25
Mindanao	2026	6	13	17	92	138	138	25
Mindanao	2026	6	13	18	98	138	138	25
Mindanao	2026	6	13	19	103	138	138	25
Mindanao	2026	6	13	20	102	138	138	25
Mindanao	2026	6	13	21	98	138	138	25
Mindanao	2026	6	13	22	92	138	138	25
Mindanao	2026	6	13	23	87	138	138	25
Mindanao	2026	6	13	24	82	138	138	25
Mindanao	2026	6	14	1	76	138	138	25
Mindanao	2026	6	14	2	73	138	138	25
Mindanao	2026	6	14	3	71	138	138	25
Mindanao	2026	6	14	4	67	138	138	25
Mindanao	2026	6	14	5	69	138	138	25
Mindanao	2026	6	14	6	69	138	138	25
Mindanao	2026	6	14	7	68	138	138	25
Mindanao	2026	6	14	8	69	138	138	25
Mindanao	2026	6	14	9	73	138	138	25
Mindanao	2026	6	14	10	79	138	138	25
Mindanao	2026	6	14	11	83	138	138	25
Mindanao	2026	6	14	12	85	138	138	25
Mindanao	2026	6	14	13	86	138	138	25
Mindanao	2026	6	14	14	86	138	138	25
Mindanao	2026	6	14	15	85	138	138	25
Mindanao	2026	6	14	16	80	138	138	25
Mindanao	2026	6	14	17	82	138	138	25
Mindanao	2026	6	14	18	90	138	138	25
Mindanao	2026	6	14	19	93	138	138	25
Mindanao	2026	6	14	20	92	138	138	25
Mindanao	2026	6	14	21	90	138	138	25
Mindanao	2026	6	14	22	85	138	138	25
Mindanao	2026	6	14	23	79	138	138	25
Mindanao	2026	6	14	24	77	138	138	25
Mindanao	2026	6	15	1	73	138	138	25
Mindanao	2026	6	15	2	69	138	138	25
Mindanao	2026	6	15	3	67	138	138	25
Mindanao	2026	6	15	4	65	138	138	25
Mindanao	2026	6	15	5	67	138	138	25
Mindanao	2026	6	15	6	71	138	138	25
Mindanao	2026	6	15	7	72	138	138	25
Mindanao	2026	6	15	8	82	138	138	25
Mindanao	2026	6	15	9	95	138	138	25
Mindanao	2026	6	15	10	104	138	138	25
Mindanao	2026	6	15	11	110	138	138	25
Mindanao	2026	6	15	12	108	138	138	25
Mindanao	2026	6	15	13	109	138	138	25
Mindanao	2026	6	15	14	115	138	138	25
Mindanao	2026	6	15	15	111	138	138	25
Mindanao	2026	6	15	16	108	138	138	25
Mindanao	2026	6	15	17	102	138	138	25
Mindanao	2026	6	15	18	103	138	138	25
Mindanao	2026	6	15	19	104	138	138	25
Mindanao	2026	6	15	20	99	138	138	25
Mindanao	2026	6	15	21	93	138	138	25
Mindanao	2026	6	15	22	89	138	138	25
Mindanao	2026	6	15	23	84	138	138	25
Mindanao	2026	6	15	24	78	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	16	1	74	138	138	25
Mindanao	2026	6	16	2	71	138	138	25
Mindanao	2026	6	16	3	68	138	138	25
Mindanao	2026	6	16	4	67	138	138	25
Mindanao	2026	6	16	5	70	138	138	25
Mindanao	2026	6	16	6	76	138	138	25
Mindanao	2026	6	16	7	71	138	138	25
Mindanao	2026	6	16	8	79	138	138	25
Mindanao	2026	6	16	9	95	138	138	25
Mindanao	2026	6	16	10	104	138	138	25
Mindanao	2026	6	16	11	109	138	138	25
Mindanao	2026	6	16	12	107	138	138	25
Mindanao	2026	6	16	13	107	138	138	25
Mindanao	2026	6	16	14	110	138	138	25
Mindanao	2026	6	16	15	110	138	138	25
Mindanao	2026	6	16	16	107	138	138	25
Mindanao	2026	6	16	17	101	138	138	25
Mindanao	2026	6	16	18	102	138	138	25
Mindanao	2026	6	16	19	104	138	138	25
Mindanao	2026	6	16	20	101	138	138	25
Mindanao	2026	6	16	21	97	138	138	25
Mindanao	2026	6	16	22	90	138	138	25
Mindanao	2026	6	16	23	84	138	138	25
Mindanao	2026	6	16	24	78	138	138	25
Mindanao	2026	6	17	1	74	138	138	25
Mindanao	2026	6	17	2	72	138	138	25
Mindanao	2026	6	17	3	67	138	138	25
Mindanao	2026	6	17	4	67	138	138	25
Mindanao	2026	6	17	5	71	138	138	25
Mindanao	2026	6	17	6	74	138	138	25
Mindanao	2026	6	17	7	71	138	138	25
Mindanao	2026	6	17	8	81	138	138	25
Mindanao	2026	6	17	9	93	138	138	25
Mindanao	2026	6	17	10	102	138	138	25
Mindanao	2026	6	17	11	108	138	138	25
Mindanao	2026	6	17	12	108	138	138	25
Mindanao	2026	6	17	13	110	138	138	25
Mindanao	2026	6	17	14	115	138	138	25
Mindanao	2026	6	17	15	114	138	138	25
Mindanao	2026	6	17	16	109	138	138	25
Mindanao	2026	6	17	17	104	138	138	25
Mindanao	2026	6	17	18	104	138	138	25
Mindanao	2026	6	17	19	109	138	138	25
Mindanao	2026	6	17	20	106	138	138	25
Mindanao	2026	6	17	21	102	138	138	25
Mindanao	2026	6	17	22	95	138	138	25
Mindanao	2026	6	17	23	89	138	138	25
Mindanao	2026	6	17	24	84	138	138	25
Mindanao	2026	6	18	1	78	138	138	25
Mindanao	2026	6	18	2	75	138	138	25
Mindanao	2026	6	18	3	72	138	138	25
Mindanao	2026	6	18	4	69	138	138	25
Mindanao	2026	6	18	5	72	138	138	25
Mindanao	2026	6	18	6	75	138	138	25
Mindanao	2026	6	18	7	72	138	138	25
Mindanao	2026	6	18	8	82	138	138	25
Mindanao	2026	6	18	9	96	138	138	25
Mindanao	2026	6	18	10	106	138	138	25
Mindanao	2026	6	18	11	109	138	138	25
Mindanao	2026	6	18	12	105	138	138	25
Mindanao	2026	6	18	13	104	138	138	25
Mindanao	2026	6	18	14	109	138	138	25
Mindanao	2026	6	18	15	105	138	138	25
Mindanao	2026	6	18	16	104	138	138	25
Mindanao	2026	6	18	17	98	138	138	25
Mindanao	2026	6	18	18	100	138	138	25
Mindanao	2026	6	18	19	103	138	138	25
Mindanao	2026	6	18	20	98	138	138	25
Mindanao	2026	6	18	21	96	138	138	25
Mindanao	2026	6	18	22	88	138	138	25
Mindanao	2026	6	18	23	82	138	138	25
Mindanao	2026	6	18	24	76	138	138	25
Mindanao	2026	6	19	1	73	138	138	25
Mindanao	2026	6	19	2	71	138	138	25
Mindanao	2026	6	19	3	69	138	138	25
Mindanao	2026	6	19	4	68	138	138	25
Mindanao	2026	6	19	5	69	138	138	25
Mindanao	2026	6	19	6	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	19	7	72	138	138	25
Mindanao	2026	6	19	8	78	138	138	25
Mindanao	2026	6	19	9	90	138	138	25
Mindanao	2026	6	19	10	99	138	138	25
Mindanao	2026	6	19	11	105	138	138	25
Mindanao	2026	6	19	12	107	138	138	25
Mindanao	2026	6	19	13	107	138	138	25
Mindanao	2026	6	19	14	113	138	138	25
Mindanao	2026	6	19	15	111	138	138	25
Mindanao	2026	6	19	16	102	138	138	25
Mindanao	2026	6	19	17	102	138	138	25
Mindanao	2026	6	19	18	104	138	138	25
Mindanao	2026	6	19	19	107	138	138	25
Mindanao	2026	6	19	20	102	138	138	25
Mindanao	2026	6	19	21	98	138	138	25
Mindanao	2026	6	19	22	93	138	138	25
Mindanao	2026	6	19	23	87	138	138	25
Mindanao	2026	6	19	24	81	138	138	25
Mindanao	2026	6	20	1	78	138	138	25
Mindanao	2026	6	20	2	74	138	138	25
Mindanao	2026	6	20	3	67	138	138	25
Mindanao	2026	6	20	4	68	138	138	25
Mindanao	2026	6	20	5	70	138	138	25
Mindanao	2026	6	20	6	71	138	138	25
Mindanao	2026	6	20	7	70	138	138	25
Mindanao	2026	6	20	8	74	138	138	25
Mindanao	2026	6	20	9	80	138	138	25
Mindanao	2026	6	20	10	89	138	138	25
Mindanao	2026	6	20	11	95	138	138	25
Mindanao	2026	6	20	12	95	138	138	25
Mindanao	2026	6	20	13	96	138	138	25
Mindanao	2026	6	20	14	102	138	138	25
Mindanao	2026	6	20	15	101	138	138	25
Mindanao	2026	6	20	16	97	138	138	25
Mindanao	2026	6	20	17	95	138	138	25
Mindanao	2026	6	20	18	101	138	138	25
Mindanao	2026	6	20	19	102	138	138	25
Mindanao	2026	6	20	20	100	138	138	25
Mindanao	2026	6	20	21	97	138	138	25
Mindanao	2026	6	20	22	92	138	138	25
Mindanao	2026	6	20	23	87	138	138	25
Mindanao	2026	6	20	24	81	138	138	25
Mindanao	2026	6	21	1	76	138	138	25
Mindanao	2026	6	21	2	73	138	138	25
Mindanao	2026	6	21	3	71	138	138	25
Mindanao	2026	6	21	4	67	138	138	25
Mindanao	2026	6	21	5	69	138	138	25
Mindanao	2026	6	21	6	69	138	138	25
Mindanao	2026	6	21	7	68	138	138	25
Mindanao	2026	6	21	8	69	138	138	25
Mindanao	2026	6	21	9	73	138	138	25
Mindanao	2026	6	21	10	79	138	138	25
Mindanao	2026	6	21	11	83	138	138	25
Mindanao	2026	6	21	12	85	138	138	25
Mindanao	2026	6	21	13	86	138	138	25
Mindanao	2026	6	21	14	86	138	138	25
Mindanao	2026	6	21	15	85	138	138	25
Mindanao	2026	6	21	16	80	138	138	25
Mindanao	2026	6	21	17	82	138	138	25
Mindanao	2026	6	21	18	90	138	138	25
Mindanao	2026	6	21	19	93	138	138	25
Mindanao	2026	6	21	20	92	138	138	25
Mindanao	2026	6	21	21	90	138	138	25
Mindanao	2026	6	21	22	85	138	138	25
Mindanao	2026	6	21	23	79	138	138	25
Mindanao	2026	6	21	24	77	138	138	25
Mindanao	2026	6	22	1	71	138	138	25
Mindanao	2026	6	22	2	68	138	138	25
Mindanao	2026	6	22	3	67	138	138	25
Mindanao	2026	6	22	4	65	138	138	25
Mindanao	2026	6	22	5	69	138	138	25
Mindanao	2026	6	22	6	73	138	138	25
Mindanao	2026	6	22	7	70	138	138	25
Mindanao	2026	6	22	8	78	138	138	25
Mindanao	2026	6	22	9	94	138	138	25
Mindanao	2026	6	22	10	101	138	138	25
Mindanao	2026	6	22	11	107	138	138	25
Mindanao	2026	6	22	12	107	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	22	13	109	138	138	25
Mindanao	2026	6	22	14	113	138	138	25
Mindanao	2026	6	22	15	110	138	138	25
Mindanao	2026	6	22	16	108	138	138	25
Mindanao	2026	6	22	17	102	138	138	25
Mindanao	2026	6	22	18	101	138	138	25
Mindanao	2026	6	22	19	105	138	138	25
Mindanao	2026	6	22	20	101	138	138	25
Mindanao	2026	6	22	21	98	138	138	25
Mindanao	2026	6	22	22	91	138	138	25
Mindanao	2026	6	22	23	84	138	138	25
Mindanao	2026	6	22	24	80	138	138	25
Mindanao	2026	6	23	1	76	138	138	25
Mindanao	2026	6	23	2	73	138	138	25
Mindanao	2026	6	23	3	70	138	138	25
Mindanao	2026	6	23	4	69	138	138	25
Mindanao	2026	6	23	5	70	138	138	25
Mindanao	2026	6	23	6	73	138	138	25
Mindanao	2026	6	23	7	74	138	138	25
Mindanao	2026	6	23	8	80	138	138	25
Mindanao	2026	6	23	9	95	138	138	25
Mindanao	2026	6	23	10	103	138	138	25
Mindanao	2026	6	23	11	109	138	138	25
Mindanao	2026	6	23	12	107	138	138	25
Mindanao	2026	6	23	13	106	138	138	25
Mindanao	2026	6	23	14	109	138	138	25
Mindanao	2026	6	23	15	104	138	138	25
Mindanao	2026	6	23	16	100	138	138	25
Mindanao	2026	6	23	17	95	138	138	25
Mindanao	2026	6	23	18	100	138	138	25
Mindanao	2026	6	23	19	101	138	138	25
Mindanao	2026	6	23	20	96	138	138	25
Mindanao	2026	6	23	21	91	138	138	25
Mindanao	2026	6	23	22	86	138	138	25
Mindanao	2026	6	23	23	80	138	138	25
Mindanao	2026	6	23	24	74	138	138	25
Mindanao	2026	6	24	1	72	138	138	25
Mindanao	2026	6	24	2	70	138	138	25
Mindanao	2026	6	24	3	67	138	138	25
Mindanao	2026	6	24	4	67	138	138	25
Mindanao	2026	6	24	5	68	138	138	25
Mindanao	2026	6	24	6	73	138	138	25
Mindanao	2026	6	24	7	72	138	138	25
Mindanao	2026	6	24	8	79	138	138	25
Mindanao	2026	6	24	9	91	138	138	25
Mindanao	2026	6	24	10	97	138	138	25
Mindanao	2026	6	24	11	103	138	138	25
Mindanao	2026	6	24	12	102	138	138	25
Mindanao	2026	6	24	13	102	138	138	25
Mindanao	2026	6	24	14	101	138	138	25
Mindanao	2026	6	24	15	102	138	138	25
Mindanao	2026	6	24	16	100	138	138	25
Mindanao	2026	6	24	17	98	138	138	25
Mindanao	2026	6	24	18	102	138	138	25
Mindanao	2026	6	24	19	105	138	138	25
Mindanao	2026	6	24	20	101	138	138	25
Mindanao	2026	6	24	21	97	138	138	25
Mindanao	2026	6	24	22	88	138	138	25
Mindanao	2026	6	24	23	84	138	138	25
Mindanao	2026	6	24	24	78	138	138	25
Mindanao	2026	6	25	1	74	138	138	25
Mindanao	2026	6	25	2	70	138	138	25
Mindanao	2026	6	25	3	68	138	138	25
Mindanao	2026	6	25	4	69	138	138	25
Mindanao	2026	6	25	5	70	138	138	25
Mindanao	2026	6	25	6	75	138	138	25
Mindanao	2026	6	25	7	74	138	138	25
Mindanao	2026	6	25	8	83	138	138	25
Mindanao	2026	6	25	9	96	138	138	25
Mindanao	2026	6	25	10	104	138	138	25
Mindanao	2026	6	25	11	108	138	138	25
Mindanao	2026	6	25	12	108	138	138	25
Mindanao	2026	6	25	13	109	138	138	25
Mindanao	2026	6	25	14	115	138	138	25
Mindanao	2026	6	25	15	116	138	138	25
Mindanao	2026	6	25	16	113	138	138	25
Mindanao	2026	6	25	17	107	138	138	25
Mindanao	2026	6	25	18	105	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	25	19	111	138	138	25
Mindanao	2026	6	25	20	106	138	138	25
Mindanao	2026	6	25	21	103	138	138	25
Mindanao	2026	6	25	22	96	138	138	25
Mindanao	2026	6	25	23	91	138	138	25
Mindanao	2026	6	25	24	84	138	138	25
Mindanao	2026	6	26	1	79	138	138	25
Mindanao	2026	6	26	2	76	138	138	25
Mindanao	2026	6	26	3	74	138	138	25
Mindanao	2026	6	26	4	72	138	138	25
Mindanao	2026	6	26	5	74	138	138	25
Mindanao	2026	6	26	6	76	138	138	25
Mindanao	2026	6	26	7	77	138	138	25
Mindanao	2026	6	26	8	84	138	138	25
Mindanao	2026	6	26	9	98	138	138	25
Mindanao	2026	6	26	10	104	138	138	25
Mindanao	2026	6	26	11	109	138	138	25
Mindanao	2026	6	26	12	108	138	138	25
Mindanao	2026	6	26	13	109	138	138	25
Mindanao	2026	6	26	14	114	138	138	25
Mindanao	2026	6	26	15	114	138	138	25
Mindanao	2026	6	26	16	111	138	138	25
Mindanao	2026	6	26	17	104	138	138	25
Mindanao	2026	6	26	18	104	138	138	25
Mindanao	2026	6	26	19	111	138	138	25
Mindanao	2026	6	26	20	108	138	138	25
Mindanao	2026	6	26	21	105	138	138	25
Mindanao	2026	6	26	22	99	138	138	25
Mindanao	2026	6	26	23	93	138	138	25
Mindanao	2026	6	26	24	89	138	138	25
Mindanao	2026	6	27	1	84	138	138	25
Mindanao	2026	6	27	2	80	138	138	25
Mindanao	2026	6	27	3	76	138	138	25
Mindanao	2026	6	27	4	73	138	138	25
Mindanao	2026	6	27	5	70	138	138	25
Mindanao	2026	6	27	6	76	138	138	25
Mindanao	2026	6	27	7	73	138	138	25
Mindanao	2026	6	27	8	76	138	138	25
Mindanao	2026	6	27	9	85	138	138	25
Mindanao	2026	6	27	10	92	138	138	25
Mindanao	2026	6	27	11	97	138	138	25
Mindanao	2026	6	27	12	96	138	138	25
Mindanao	2026	6	27	13	96	138	138	25
Mindanao	2026	6	27	14	101	138	138	25
Mindanao	2026	6	27	15	99	138	138	25
Mindanao	2026	6	27	16	96	138	138	25
Mindanao	2026	6	27	17	95	138	138	25
Mindanao	2026	6	27	18	101	138	138	25
Mindanao	2026	6	27	19	105	138	138	25
Mindanao	2026	6	27	20	102	138	138	25
Mindanao	2026	6	27	21	97	138	138	25
Mindanao	2026	6	27	22	92	138	138	25
Mindanao	2026	6	27	23	87	138	138	25
Mindanao	2026	6	27	24	82	138	138	25
Mindanao	2026	6	28	1	77	138	138	25
Mindanao	2026	6	28	2	74	138	138	25
Mindanao	2026	6	28	3	72	138	138	25
Mindanao	2026	6	28	4	69	138	138	25
Mindanao	2026	6	28	5	72	138	138	25
Mindanao	2026	6	28	6	72	138	138	25
Mindanao	2026	6	28	7	70	138	138	25
Mindanao	2026	6	28	8	67	138	138	25
Mindanao	2026	6	28	9	69	138	138	25
Mindanao	2026	6	28	10	74	138	138	25
Mindanao	2026	6	28	11	75	138	138	25
Mindanao	2026	6	28	12	76	138	138	25
Mindanao	2026	6	28	13	79	138	138	25
Mindanao	2026	6	28	14	78	138	138	25
Mindanao	2026	6	28	15	75	138	138	25
Mindanao	2026	6	28	16	75	138	138	25
Mindanao	2026	6	28	17	77	138	138	25
Mindanao	2026	6	28	18	95	138	138	25
Mindanao	2026	6	28	19	96	138	138	25
Mindanao	2026	6	28	20	95	138	138	25
Mindanao	2026	6	28	21	88	138	138	25
Mindanao	2026	6	28	22	86	138	138	25
Mindanao	2026	6	28	23	80	138	138	25
Mindanao	2026	6	28	24	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	6	29	1	73	138	138	25
Mindanao	2026	6	29	2	70	138	138	25
Mindanao	2026	6	29	3	67	138	138	25
Mindanao	2026	6	29	4	66	138	138	25
Mindanao	2026	6	29	5	68	138	138	25
Mindanao	2026	6	29	6	74	138	138	25
Mindanao	2026	6	29	7	73	138	138	25
Mindanao	2026	6	29	8	80	138	138	25
Mindanao	2026	6	29	9	94	138	138	25
Mindanao	2026	6	29	10	101	138	138	25
Mindanao	2026	6	29	11	108	138	138	25
Mindanao	2026	6	29	12	107	138	138	25
Mindanao	2026	6	29	13	109	138	138	25
Mindanao	2026	6	29	14	116	138	138	25
Mindanao	2026	6	29	15	113	138	138	25
Mindanao	2026	6	29	16	108	138	138	25
Mindanao	2026	6	29	17	104	138	138	25
Mindanao	2026	6	29	18	105	138	138	25
Mindanao	2026	6	29	19	104	138	138	25
Mindanao	2026	6	29	20	97	138	138	25
Mindanao	2026	6	29	21	92	138	138	25
Mindanao	2026	6	29	22	87	138	138	25
Mindanao	2026	6	29	23	83	138	138	25
Mindanao	2026	6	29	24	78	138	138	25
Mindanao	2026	6	30	1	75	138	138	25
Mindanao	2026	6	30	2	70	138	138	25
Mindanao	2026	6	30	3	69	138	138	25
Mindanao	2026	6	30	4	70	138	138	25
Mindanao	2026	6	30	5	72	138	138	25
Mindanao	2026	6	30	6	75	138	138	25
Mindanao	2026	6	30	7	73	138	138	25
Mindanao	2026	6	30	8	83	138	138	25
Mindanao	2026	6	30	9	94	138	138	25
Mindanao	2026	6	30	10	104	138	138	25
Mindanao	2026	6	30	11	109	138	138	25
Mindanao	2026	6	30	12	107	138	138	25
Mindanao	2026	6	30	13	109	138	138	25
Mindanao	2026	6	30	14	113	138	138	25
Mindanao	2026	6	30	15	109	138	138	25
Mindanao	2026	6	30	16	105	138	138	25
Mindanao	2026	6	30	17	102	138	138	25
Mindanao	2026	6	30	18	104	138	138	25
Mindanao	2026	6	30	19	106	138	138	25
Mindanao	2026	6	30	20	100	138	138	25
Mindanao	2026	6	30	21	98	138	138	25
Mindanao	2026	6	30	22	92	138	138	25
Mindanao	2026	6	30	23	85	138	138	25
Mindanao	2026	6	30	24	79	138	138	25
Mindanao	2026	7	1	1	76	138	138	25
Mindanao	2026	7	1	2	74	138	138	25
Mindanao	2026	7	1	3	71	138	138	25
Mindanao	2026	7	1	4	69	138	138	25
Mindanao	2026	7	1	5	71	138	138	25
Mindanao	2026	7	1	6	77	138	138	25
Mindanao	2026	7	1	7	75	138	138	25
Mindanao	2026	7	1	8	82	138	138	25
Mindanao	2026	7	1	9	93	138	138	25
Mindanao	2026	7	1	10	105	138	138	25
Mindanao	2026	7	1	11	109	138	138	25
Mindanao	2026	7	1	12	108	138	138	25
Mindanao	2026	7	1	13	110	138	138	25
Mindanao	2026	7	1	14	113	138	138	25
Mindanao	2026	7	1	15	110	138	138	25
Mindanao	2026	7	1	16	109	138	138	25
Mindanao	2026	7	1	17	100	138	138	25
Mindanao	2026	7	1	18	104	138	138	25
Mindanao	2026	7	1	19	106	138	138	25
Mindanao	2026	7	1	20	103	138	138	25
Mindanao	2026	7	1	21	99	138	138	25
Mindanao	2026	7	1	22	92	138	138	25
Mindanao	2026	7	1	23	86	138	138	25
Mindanao	2026	7	1	24	80	138	138	25
Mindanao	2026	7	2	1	77	138	138	25
Mindanao	2026	7	2	2	75	138	138	25
Mindanao	2026	7	2	3	73	138	138	25
Mindanao	2026	7	2	4	72	138	138	25
Mindanao	2026	7	2	5	73	138	138	25
Mindanao	2026	7	2	6	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	2	7	76	138	138	25
Mindanao	2026	7	2	8	84	138	138	25
Mindanao	2026	7	2	9	97	138	138	25
Mindanao	2026	7	2	10	107	138	138	25
Mindanao	2026	7	2	11	110	138	138	25
Mindanao	2026	7	2	12	108	138	138	25
Mindanao	2026	7	2	13	110	138	138	25
Mindanao	2026	7	2	14	113	138	138	25
Mindanao	2026	7	2	15	114	138	138	25
Mindanao	2026	7	2	16	110	138	138	25
Mindanao	2026	7	2	17	102	138	138	25
Mindanao	2026	7	2	18	105	138	138	25
Mindanao	2026	7	2	19	107	138	138	25
Mindanao	2026	7	2	20	102	138	138	25
Mindanao	2026	7	2	21	100	138	138	25
Mindanao	2026	7	2	22	93	138	138	25
Mindanao	2026	7	2	23	88	138	138	25
Mindanao	2026	7	2	24	81	138	138	25
Mindanao	2026	7	3	1	79	138	138	25
Mindanao	2026	7	3	2	75	138	138	25
Mindanao	2026	7	3	3	73	138	138	25
Mindanao	2026	7	3	4	71	138	138	25
Mindanao	2026	7	3	5	73	138	138	25
Mindanao	2026	7	3	6	76	138	138	25
Mindanao	2026	7	3	7	74	138	138	25
Mindanao	2026	7	3	8	81	138	138	25
Mindanao	2026	7	3	9	97	138	138	25
Mindanao	2026	7	3	10	105	138	138	25
Mindanao	2026	7	3	11	110	138	138	25
Mindanao	2026	7	3	12	110	138	138	25
Mindanao	2026	7	3	13	111	138	138	25
Mindanao	2026	7	3	14	116	138	138	25
Mindanao	2026	7	3	15	114	138	138	25
Mindanao	2026	7	3	16	110	138	138	25
Mindanao	2026	7	3	17	102	138	138	25
Mindanao	2026	7	3	18	105	138	138	25
Mindanao	2026	7	3	19	107	138	138	25
Mindanao	2026	7	3	20	103	138	138	25
Mindanao	2026	7	3	21	98	138	138	25
Mindanao	2026	7	3	22	91	138	138	25
Mindanao	2026	7	3	23	85	138	138	25
Mindanao	2026	7	3	24	82	138	138	25
Mindanao	2026	7	4	1	77	138	138	25
Mindanao	2026	7	4	2	75	138	138	25
Mindanao	2026	7	4	3	71	138	138	25
Mindanao	2026	7	4	4	70	138	138	25
Mindanao	2026	7	4	5	72	138	138	25
Mindanao	2026	7	4	6	73	138	138	25
Mindanao	2026	7	4	7	72	138	138	25
Mindanao	2026	7	4	8	75	138	138	25
Mindanao	2026	7	4	9	83	138	138	25
Mindanao	2026	7	4	10	87	138	138	25
Mindanao	2026	7	4	11	91	138	138	25
Mindanao	2026	7	4	12	89	138	138	25
Mindanao	2026	7	4	13	89	138	138	25
Mindanao	2026	7	4	14	91	138	138	25
Mindanao	2026	7	4	15	92	138	138	25
Mindanao	2026	7	4	16	91	138	138	25
Mindanao	2026	7	4	17	91	138	138	25
Mindanao	2026	7	4	18	96	138	138	25
Mindanao	2026	7	4	19	100	138	138	25
Mindanao	2026	7	4	20	96	138	138	25
Mindanao	2026	7	4	21	94	138	138	25
Mindanao	2026	7	4	22	86	138	138	25
Mindanao	2026	7	4	23	81	138	138	25
Mindanao	2026	7	4	24	75	138	138	25
Mindanao	2026	7	5	1	72	138	138	25
Mindanao	2026	7	5	2	70	138	138	25
Mindanao	2026	7	5	3	69	138	138	25
Mindanao	2026	7	5	4	65	138	138	25
Mindanao	2026	7	5	5	65	138	138	25
Mindanao	2026	7	5	6	66	138	138	25
Mindanao	2026	7	5	7	66	138	138	25
Mindanao	2026	7	5	8	65	138	138	25
Mindanao	2026	7	5	9	70	138	138	25
Mindanao	2026	7	5	10	76	138	138	25
Mindanao	2026	7	5	11	79	138	138	25
Mindanao	2026	7	5	12	81	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	5	13	81	138	138	25
Mindanao	2026	7	5	14	80	138	138	25
Mindanao	2026	7	5	15	80	138	138	25
Mindanao	2026	7	5	16	81	138	138	25
Mindanao	2026	7	5	17	80	138	138	25
Mindanao	2026	7	5	18	85	138	138	25
Mindanao	2026	7	5	19	91	138	138	25
Mindanao	2026	7	5	20	89	138	138	25
Mindanao	2026	7	5	21	87	138	138	25
Mindanao	2026	7	5	22	82	138	138	25
Mindanao	2026	7	5	23	76	138	138	25
Mindanao	2026	7	5	24	70	138	138	25
Mindanao	2026	7	6	1	66	138	138	25
Mindanao	2026	7	6	2	63	138	138	25
Mindanao	2026	7	6	3	61	138	138	25
Mindanao	2026	7	6	4	60	138	138	25
Mindanao	2026	7	6	5	62	138	138	25
Mindanao	2026	7	6	6	64	138	138	25
Mindanao	2026	7	6	7	66	138	138	25
Mindanao	2026	7	6	8	76	138	138	25
Mindanao	2026	7	6	9	88	138	138	25
Mindanao	2026	7	6	10	96	138	138	25
Mindanao	2026	7	6	11	102	138	138	25
Mindanao	2026	7	6	12	102	138	138	25
Mindanao	2026	7	6	13	103	138	138	25
Mindanao	2026	7	6	14	107	138	138	25
Mindanao	2026	7	6	15	106	138	138	25
Mindanao	2026	7	6	16	104	138	138	25
Mindanao	2026	7	6	17	97	138	138	25
Mindanao	2026	7	6	18	98	138	138	25
Mindanao	2026	7	6	19	99	138	138	25
Mindanao	2026	7	6	20	94	138	138	25
Mindanao	2026	7	6	21	91	138	138	25
Mindanao	2026	7	6	22	84	138	138	25
Mindanao	2026	7	6	23	80	138	138	25
Mindanao	2026	7	6	24	75	138	138	25
Mindanao	2026	7	7	1	71	138	138	25
Mindanao	2026	7	7	2	69	138	138	25
Mindanao	2026	7	7	3	67	138	138	25
Mindanao	2026	7	7	4	66	138	138	25
Mindanao	2026	7	7	5	68	138	138	25
Mindanao	2026	7	7	6	70	138	138	25
Mindanao	2026	7	7	7	71	138	138	25
Mindanao	2026	7	7	8	80	138	138	25
Mindanao	2026	7	7	9	92	138	138	25
Mindanao	2026	7	7	10	100	138	138	25
Mindanao	2026	7	7	11	106	138	138	25
Mindanao	2026	7	7	12	105	138	138	25
Mindanao	2026	7	7	13	107	138	138	25
Mindanao	2026	7	7	14	110	138	138	25
Mindanao	2026	7	7	15	108	138	138	25
Mindanao	2026	7	7	16	106	138	138	25
Mindanao	2026	7	7	17	95	138	138	25
Mindanao	2026	7	7	18	97	138	138	25
Mindanao	2026	7	7	19	96	138	138	25
Mindanao	2026	7	7	20	93	138	138	25
Mindanao	2026	7	7	21	87	138	138	25
Mindanao	2026	7	7	22	82	138	138	25
Mindanao	2026	7	7	23	77	138	138	25
Mindanao	2026	7	7	24	73	138	138	25
Mindanao	2026	7	8	1	68	138	138	25
Mindanao	2026	7	8	2	66	138	138	25
Mindanao	2026	7	8	3	64	138	138	25
Mindanao	2026	7	8	4	65	138	138	25
Mindanao	2026	7	8	5	65	138	138	25
Mindanao	2026	7	8	6	70	138	138	25
Mindanao	2026	7	8	7	68	138	138	25
Mindanao	2026	7	8	8	78	138	138	25
Mindanao	2026	7	8	9	89	138	138	25
Mindanao	2026	7	8	10	98	138	138	25
Mindanao	2026	7	8	11	103	138	138	25
Mindanao	2026	7	8	12	102	138	138	25
Mindanao	2026	7	8	13	104	138	138	25
Mindanao	2026	7	8	14	107	138	138	25
Mindanao	2026	7	8	15	108	138	138	25
Mindanao	2026	7	8	16	106	138	138	25
Mindanao	2026	7	8	17	98	138	138	25
Mindanao	2026	7	8	18	97	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	8	19	103	138	138	25
Mindanao	2026	7	8	20	101	138	138	25
Mindanao	2026	7	8	21	97	138	138	25
Mindanao	2026	7	8	22	90	138	138	25
Mindanao	2026	7	8	23	83	138	138	25
Mindanao	2026	7	8	24	76	138	138	25
Mindanao	2026	7	9	1	73	138	138	25
Mindanao	2026	7	9	2	72	138	138	25
Mindanao	2026	7	9	3	69	138	138	25
Mindanao	2026	7	9	4	67	138	138	25
Mindanao	2026	7	9	5	69	138	138	25
Mindanao	2026	7	9	6	71	138	138	25
Mindanao	2026	7	9	7	70	138	138	25
Mindanao	2026	7	9	8	81	138	138	25
Mindanao	2026	7	9	9	93	138	138	25
Mindanao	2026	7	9	10	100	138	138	25
Mindanao	2026	7	9	11	107	138	138	25
Mindanao	2026	7	9	12	107	138	138	25
Mindanao	2026	7	9	13	106	138	138	25
Mindanao	2026	7	9	14	110	138	138	25
Mindanao	2026	7	9	15	106	138	138	25
Mindanao	2026	7	9	16	104	138	138	25
Mindanao	2026	7	9	17	96	138	138	25
Mindanao	2026	7	9	18	97	138	138	25
Mindanao	2026	7	9	19	98	138	138	25
Mindanao	2026	7	9	20	95	138	138	25
Mindanao	2026	7	9	21	91	138	138	25
Mindanao	2026	7	9	22	84	138	138	25
Mindanao	2026	7	9	23	80	138	138	25
Mindanao	2026	7	9	24	75	138	138	25
Mindanao	2026	7	10	1	71	138	138	25
Mindanao	2026	7	10	2	66	138	138	25
Mindanao	2026	7	10	3	67	138	138	25
Mindanao	2026	7	10	4	67	138	138	25
Mindanao	2026	7	10	5	65	138	138	25
Mindanao	2026	7	10	6	71	138	138	25
Mindanao	2026	7	10	7	71	138	138	25
Mindanao	2026	7	10	8	79	138	138	25
Mindanao	2026	7	10	9	90	138	138	25
Mindanao	2026	7	10	10	97	138	138	25
Mindanao	2026	7	10	11	104	138	138	25
Mindanao	2026	7	10	12	102	138	138	25
Mindanao	2026	7	10	13	101	138	138	25
Mindanao	2026	7	10	14	103	138	138	25
Mindanao	2026	7	10	15	103	138	138	25
Mindanao	2026	7	10	16	102	138	138	25
Mindanao	2026	7	10	17	97	138	138	25
Mindanao	2026	7	10	18	97	138	138	25
Mindanao	2026	7	10	19	99	138	138	25
Mindanao	2026	7	10	20	93	138	138	25
Mindanao	2026	7	10	21	89	138	138	25
Mindanao	2026	7	10	22	83	138	138	25
Mindanao	2026	7	10	23	77	138	138	25
Mindanao	2026	7	10	24	73	138	138	25
Mindanao	2026	7	11	1	69	138	138	25
Mindanao	2026	7	11	2	66	138	138	25
Mindanao	2026	7	11	3	64	138	138	25
Mindanao	2026	7	11	4	64	138	138	25
Mindanao	2026	7	11	5	66	138	138	25
Mindanao	2026	7	11	6	67	138	138	25
Mindanao	2026	7	11	7	66	138	138	25
Mindanao	2026	7	11	8	68	138	138	25
Mindanao	2026	7	11	9	74	138	138	25
Mindanao	2026	7	11	10	78	138	138	25
Mindanao	2026	7	11	11	83	138	138	25
Mindanao	2026	7	11	12	82	138	138	25
Mindanao	2026	7	11	13	82	138	138	25
Mindanao	2026	7	11	14	85	138	138	25
Mindanao	2026	7	11	15	83	138	138	25
Mindanao	2026	7	11	16	84	138	138	25
Mindanao	2026	7	11	17	82	138	138	25
Mindanao	2026	7	11	18	90	138	138	25
Mindanao	2026	7	11	19	90	138	138	25
Mindanao	2026	7	11	20	88	138	138	25
Mindanao	2026	7	11	21	86	138	138	25
Mindanao	2026	7	11	22	80	138	138	25
Mindanao	2026	7	11	23	76	138	138	25
Mindanao	2026	7	11	24	71	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	12	1	66	138	138	25
Mindanao	2026	7	12	2	63	138	138	25
Mindanao	2026	7	12	3	61	138	138	25
Mindanao	2026	7	12	4	62	138	138	25
Mindanao	2026	7	12	5	62	138	138	25
Mindanao	2026	7	12	6	64	138	138	25
Mindanao	2026	7	12	7	63	138	138	25
Mindanao	2026	7	12	8	62	138	138	25
Mindanao	2026	7	12	9	64	138	138	25
Mindanao	2026	7	12	10	71	138	138	25
Mindanao	2026	7	12	11	74	138	138	25
Mindanao	2026	7	12	12	75	138	138	25
Mindanao	2026	7	12	13	74	138	138	25
Mindanao	2026	7	12	14	76	138	138	25
Mindanao	2026	7	12	15	77	138	138	25
Mindanao	2026	7	12	16	76	138	138	25
Mindanao	2026	7	12	17	77	138	138	25
Mindanao	2026	7	12	18	86	138	138	25
Mindanao	2026	7	12	19	93	138	138	25
Mindanao	2026	7	12	20	91	138	138	25
Mindanao	2026	7	12	21	90	138	138	25
Mindanao	2026	7	12	22	86	138	138	25
Mindanao	2026	7	12	23	79	138	138	25
Mindanao	2026	7	12	24	74	138	138	25
Mindanao	2026	7	13	1	71	138	138	25
Mindanao	2026	7	13	2	67	138	138	25
Mindanao	2026	7	13	3	63	138	138	25
Mindanao	2026	7	13	4	64	138	138	25
Mindanao	2026	7	13	5	66	138	138	25
Mindanao	2026	7	13	6	70	138	138	25
Mindanao	2026	7	13	7	69	138	138	25
Mindanao	2026	7	13	8	78	138	138	25
Mindanao	2026	7	13	9	91	138	138	25
Mindanao	2026	7	13	10	99	138	138	25
Mindanao	2026	7	13	11	105	138	138	25
Mindanao	2026	7	13	12	99	138	138	25
Mindanao	2026	7	13	13	103	138	138	25
Mindanao	2026	7	13	14	108	138	138	25
Mindanao	2026	7	13	15	107	138	138	25
Mindanao	2026	7	13	16	106	138	138	25
Mindanao	2026	7	13	17	97	138	138	25
Mindanao	2026	7	13	18	101	138	138	25
Mindanao	2026	7	13	19	100	138	138	25
Mindanao	2026	7	13	20	97	138	138	25
Mindanao	2026	7	13	21	93	138	138	25
Mindanao	2026	7	13	22	87	138	138	25
Mindanao	2026	7	13	23	82	138	138	25
Mindanao	2026	7	13	24	75	138	138	25
Mindanao	2026	7	14	1	71	138	138	25
Mindanao	2026	7	14	2	68	138	138	25
Mindanao	2026	7	14	3	65	138	138	25
Mindanao	2026	7	14	4	65	138	138	25
Mindanao	2026	7	14	5	66	138	138	25
Mindanao	2026	7	14	6	72	138	138	25
Mindanao	2026	7	14	7	72	138	138	25
Mindanao	2026	7	14	8	79	138	138	25
Mindanao	2026	7	14	9	93	138	138	25
Mindanao	2026	7	14	10	101	138	138	25
Mindanao	2026	7	14	11	107	138	138	25
Mindanao	2026	7	14	12	106	138	138	25
Mindanao	2026	7	14	13	106	138	138	25
Mindanao	2026	7	14	14	111	138	138	25
Mindanao	2026	7	14	15	106	138	138	25
Mindanao	2026	7	14	16	105	138	138	25
Mindanao	2026	7	14	17	98	138	138	25
Mindanao	2026	7	14	18	100	138	138	25
Mindanao	2026	7	14	19	98	138	138	25
Mindanao	2026	7	14	20	97	138	138	25
Mindanao	2026	7	14	21	90	138	138	25
Mindanao	2026	7	14	22	86	138	138	25
Mindanao	2026	7	14	23	83	138	138	25
Mindanao	2026	7	14	24	77	138	138	25
Mindanao	2026	7	15	1	73	138	138	25
Mindanao	2026	7	15	2	70	138	138	25
Mindanao	2026	7	15	3	67	138	138	25
Mindanao	2026	7	15	4	65	138	138	25
Mindanao	2026	7	15	5	69	138	138	25
Mindanao	2026	7	15	6	73	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	15	7	70	138	138	25
Mindanao	2026	7	15	8	77	138	138	25
Mindanao	2026	7	15	9	92	138	138	25
Mindanao	2026	7	15	10	101	138	138	25
Mindanao	2026	7	15	11	105	138	138	25
Mindanao	2026	7	15	12	105	138	138	25
Mindanao	2026	7	15	13	108	138	138	25
Mindanao	2026	7	15	14	109	138	138	25
Mindanao	2026	7	15	15	106	138	138	25
Mindanao	2026	7	15	16	102	138	138	25
Mindanao	2026	7	15	17	99	138	138	25
Mindanao	2026	7	15	18	98	138	138	25
Mindanao	2026	7	15	19	101	138	138	25
Mindanao	2026	7	15	20	98	138	138	25
Mindanao	2026	7	15	21	95	138	138	25
Mindanao	2026	7	15	22	87	138	138	25
Mindanao	2026	7	15	23	82	138	138	25
Mindanao	2026	7	15	24	75	138	138	25
Mindanao	2026	7	16	1	71	138	138	25
Mindanao	2026	7	16	2	69	138	138	25
Mindanao	2026	7	16	3	66	138	138	25
Mindanao	2026	7	16	4	67	138	138	25
Mindanao	2026	7	16	5	67	138	138	25
Mindanao	2026	7	16	6	71	138	138	25
Mindanao	2026	7	16	7	70	138	138	25
Mindanao	2026	7	16	8	79	138	138	25
Mindanao	2026	7	16	9	93	138	138	25
Mindanao	2026	7	16	10	100	138	138	25
Mindanao	2026	7	16	11	107	138	138	25
Mindanao	2026	7	16	12	105	138	138	25
Mindanao	2026	7	16	13	107	138	138	25
Mindanao	2026	7	16	14	113	138	138	25
Mindanao	2026	7	16	15	110	138	138	25
Mindanao	2026	7	16	16	107	138	138	25
Mindanao	2026	7	16	17	101	138	138	25
Mindanao	2026	7	16	18	101	138	138	25
Mindanao	2026	7	16	19	103	138	138	25
Mindanao	2026	7	16	20	100	138	138	25
Mindanao	2026	7	16	21	96	138	138	25
Mindanao	2026	7	16	22	89	138	138	25
Mindanao	2026	7	16	23	83	138	138	25
Mindanao	2026	7	16	24	79	138	138	25
Mindanao	2026	7	17	1	76	138	138	25
Mindanao	2026	7	17	2	71	138	138	25
Mindanao	2026	7	17	3	68	138	138	25
Mindanao	2026	7	17	4	67	138	138	25
Mindanao	2026	7	17	5	69	138	138	25
Mindanao	2026	7	17	6	75	138	138	25
Mindanao	2026	7	17	7	71	138	138	25
Mindanao	2026	7	17	8	79	138	138	25
Mindanao	2026	7	17	9	93	138	138	25
Mindanao	2026	7	17	10	98	138	138	25
Mindanao	2026	7	17	11	104	138	138	25
Mindanao	2026	7	17	12	102	138	138	25
Mindanao	2026	7	17	13	102	138	138	25
Mindanao	2026	7	17	14	105	138	138	25
Mindanao	2026	7	17	15	105	138	138	25
Mindanao	2026	7	17	16	99	138	138	25
Mindanao	2026	7	17	17	96	138	138	25
Mindanao	2026	7	17	18	99	138	138	25
Mindanao	2026	7	17	19	99	138	138	25
Mindanao	2026	7	17	20	98	138	138	25
Mindanao	2026	7	17	21	94	138	138	25
Mindanao	2026	7	17	22	86	138	138	25
Mindanao	2026	7	17	23	81	138	138	25
Mindanao	2026	7	17	24	76	138	138	25
Mindanao	2026	7	18	1	74	138	138	25
Mindanao	2026	7	18	2	71	138	138	25
Mindanao	2026	7	18	3	67	138	138	25
Mindanao	2026	7	18	4	67	138	138	25
Mindanao	2026	7	18	5	65	138	138	25
Mindanao	2026	7	18	6	68	138	138	25
Mindanao	2026	7	18	7	68	138	138	25
Mindanao	2026	7	18	8	70	138	138	25
Mindanao	2026	7	18	9	82	138	138	25
Mindanao	2026	7	18	10	88	138	138	25
Mindanao	2026	7	18	11	92	138	138	25
Mindanao	2026	7	18	12	92	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	18	13	92	138	138	25
Mindanao	2026	7	18	14	95	138	138	25
Mindanao	2026	7	18	15	92	138	138	25
Mindanao	2026	7	18	16	92	138	138	25
Mindanao	2026	7	18	17	90	138	138	25
Mindanao	2026	7	18	18	93	138	138	25
Mindanao	2026	7	18	19	92	138	138	25
Mindanao	2026	7	18	20	88	138	138	25
Mindanao	2026	7	18	21	85	138	138	25
Mindanao	2026	7	18	22	79	138	138	25
Mindanao	2026	7	18	23	75	138	138	25
Mindanao	2026	7	18	24	70	138	138	25
Mindanao	2026	7	19	1	66	138	138	25
Mindanao	2026	7	19	2	64	138	138	25
Mindanao	2026	7	19	3	62	138	138	25
Mindanao	2026	7	19	4	61	138	138	25
Mindanao	2026	7	19	5	60	138	138	25
Mindanao	2026	7	19	6	64	138	138	25
Mindanao	2026	7	19	7	64	138	138	25
Mindanao	2026	7	19	8	65	138	138	25
Mindanao	2026	7	19	9	69	138	138	25
Mindanao	2026	7	19	10	73	138	138	25
Mindanao	2026	7	19	11	79	138	138	25
Mindanao	2026	7	19	12	81	138	138	25
Mindanao	2026	7	19	13	82	138	138	25
Mindanao	2026	7	19	14	84	138	138	25
Mindanao	2026	7	19	15	82	138	138	25
Mindanao	2026	7	19	16	82	138	138	25
Mindanao	2026	7	19	17	83	138	138	25
Mindanao	2026	7	19	18	88	138	138	25
Mindanao	2026	7	19	19	90	138	138	25
Mindanao	2026	7	19	20	87	138	138	25
Mindanao	2026	7	19	21	83	138	138	25
Mindanao	2026	7	19	22	78	138	138	25
Mindanao	2026	7	19	23	72	138	138	25
Mindanao	2026	7	19	24	69	138	138	25
Mindanao	2026	7	20	1	65	138	138	25
Mindanao	2026	7	20	2	63	138	138	25
Mindanao	2026	7	20	3	62	138	138	25
Mindanao	2026	7	20	4	61	138	138	25
Mindanao	2026	7	20	5	63	138	138	25
Mindanao	2026	7	20	6	67	138	138	25
Mindanao	2026	7	20	7	67	138	138	25
Mindanao	2026	7	20	8	73	138	138	25
Mindanao	2026	7	20	9	83	138	138	25
Mindanao	2026	7	20	10	93	138	138	25
Mindanao	2026	7	20	11	99	138	138	25
Mindanao	2026	7	20	12	97	138	138	25
Mindanao	2026	7	20	13	97	138	138	25
Mindanao	2026	7	20	14	97	138	138	25
Mindanao	2026	7	20	15	97	138	138	25
Mindanao	2026	7	20	16	96	138	138	25
Mindanao	2026	7	20	17	90	138	138	25
Mindanao	2026	7	20	18	96	138	138	25
Mindanao	2026	7	20	19	97	138	138	25
Mindanao	2026	7	20	20	92	138	138	25
Mindanao	2026	7	20	21	87	138	138	25
Mindanao	2026	7	20	22	80	138	138	25
Mindanao	2026	7	20	23	76	138	138	25
Mindanao	2026	7	20	24	71	138	138	25
Mindanao	2026	7	21	1	69	138	138	25
Mindanao	2026	7	21	2	67	138	138	25
Mindanao	2026	7	21	3	63	138	138	25
Mindanao	2026	7	21	4	63	138	138	25
Mindanao	2026	7	21	5	64	138	138	25
Mindanao	2026	7	21	6	70	138	138	25
Mindanao	2026	7	21	7	70	138	138	25
Mindanao	2026	7	21	8	74	138	138	25
Mindanao	2026	7	21	9	86	138	138	25
Mindanao	2026	7	21	10	90	138	138	25
Mindanao	2026	7	21	11	99	138	138	25
Mindanao	2026	7	21	12	98	138	138	25
Mindanao	2026	7	21	13	100	138	138	25
Mindanao	2026	7	21	14	107	138	138	25
Mindanao	2026	7	21	15	106	138	138	25
Mindanao	2026	7	21	16	104	138	138	25
Mindanao	2026	7	21	17	97	138	138	25
Mindanao	2026	7	21	18	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	21	19	101	138	138	25
Mindanao	2026	7	21	20	98	138	138	25
Mindanao	2026	7	21	21	93	138	138	25
Mindanao	2026	7	21	22	86	138	138	25
Mindanao	2026	7	21	23	78	138	138	25
Mindanao	2026	7	21	24	73	138	138	25
Mindanao	2026	7	22	1	70	138	138	25
Mindanao	2026	7	22	2	67	138	138	25
Mindanao	2026	7	22	3	67	138	138	25
Mindanao	2026	7	22	4	64	138	138	25
Mindanao	2026	7	22	5	65	138	138	25
Mindanao	2026	7	22	6	69	138	138	25
Mindanao	2026	7	22	7	72	138	138	25
Mindanao	2026	7	22	8	79	138	138	25
Mindanao	2026	7	22	9	92	138	138	25
Mindanao	2026	7	22	10	100	138	138	25
Mindanao	2026	7	22	11	108	138	138	25
Mindanao	2026	7	22	12	106	138	138	25
Mindanao	2026	7	22	13	106	138	138	25
Mindanao	2026	7	22	14	112	138	138	25
Mindanao	2026	7	22	15	108	138	138	25
Mindanao	2026	7	22	16	110	138	138	25
Mindanao	2026	7	22	17	102	138	138	25
Mindanao	2026	7	22	18	102	138	138	25
Mindanao	2026	7	22	19	107	138	138	25
Mindanao	2026	7	22	20	104	138	138	25
Mindanao	2026	7	22	21	101	138	138	25
Mindanao	2026	7	22	22	93	138	138	25
Mindanao	2026	7	22	23	88	138	138	25
Mindanao	2026	7	22	24	84	138	138	25
Mindanao	2026	7	23	1	78	138	138	25
Mindanao	2026	7	23	2	76	138	138	25
Mindanao	2026	7	23	3	71	138	138	25
Mindanao	2026	7	23	4	71	138	138	25
Mindanao	2026	7	23	5	71	138	138	25
Mindanao	2026	7	23	6	75	138	138	25
Mindanao	2026	7	23	7	73	138	138	25
Mindanao	2026	7	23	8	82	138	138	25
Mindanao	2026	7	23	9	95	138	138	25
Mindanao	2026	7	23	10	105	138	138	25
Mindanao	2026	7	23	11	110	138	138	25
Mindanao	2026	7	23	12	110	138	138	25
Mindanao	2026	7	23	13	111	138	138	25
Mindanao	2026	7	23	14	118	138	138	25
Mindanao	2026	7	23	15	117	138	138	25
Mindanao	2026	7	23	16	114	138	138	25
Mindanao	2026	7	23	17	107	138	138	25
Mindanao	2026	7	23	18	106	138	138	25
Mindanao	2026	7	23	19	107	138	138	25
Mindanao	2026	7	23	20	101	138	138	25
Mindanao	2026	7	23	21	99	138	138	25
Mindanao	2026	7	23	22	92	138	138	25
Mindanao	2026	7	23	23	87	138	138	25
Mindanao	2026	7	23	24	82	138	138	25
Mindanao	2026	7	24	1	79	138	138	25
Mindanao	2026	7	24	2	75	138	138	25
Mindanao	2026	7	24	3	73	138	138	25
Mindanao	2026	7	24	4	70	138	138	25
Mindanao	2026	7	24	5	72	138	138	25
Mindanao	2026	7	24	6	76	138	138	25
Mindanao	2026	7	24	7	75	138	138	25
Mindanao	2026	7	24	8	80	138	138	25
Mindanao	2026	7	24	9	92	138	138	25
Mindanao	2026	7	24	10	100	138	138	25
Mindanao	2026	7	24	11	105	138	138	25
Mindanao	2026	7	24	12	106	138	138	25
Mindanao	2026	7	24	13	106	138	138	25
Mindanao	2026	7	24	14	113	138	138	25
Mindanao	2026	7	24	15	110	138	138	25
Mindanao	2026	7	24	16	108	138	138	25
Mindanao	2026	7	24	17	101	138	138	25
Mindanao	2026	7	24	18	101	138	138	25
Mindanao	2026	7	24	19	103	138	138	25
Mindanao	2026	7	24	20	101	138	138	25
Mindanao	2026	7	24	21	97	138	138	25
Mindanao	2026	7	24	22	90	138	138	25
Mindanao	2026	7	24	23	86	138	138	25
Mindanao	2026	7	24	24	82	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	25	1	77	138	138	25
Mindanao	2026	7	25	2	74	138	138	25
Mindanao	2026	7	25	3	71	138	138	25
Mindanao	2026	7	25	4	70	138	138	25
Mindanao	2026	7	25	5	72	138	138	25
Mindanao	2026	7	25	6	73	138	138	25
Mindanao	2026	7	25	7	70	138	138	25
Mindanao	2026	7	25	8	75	138	138	25
Mindanao	2026	7	25	9	82	138	138	25
Mindanao	2026	7	25	10	87	138	138	25
Mindanao	2026	7	25	11	91	138	138	25
Mindanao	2026	7	25	12	92	138	138	25
Mindanao	2026	7	25	13	95	138	138	25
Mindanao	2026	7	25	14	101	138	138	25
Mindanao	2026	7	25	15	98	138	138	25
Mindanao	2026	7	25	16	95	138	138	25
Mindanao	2026	7	25	17	94	138	138	25
Mindanao	2026	7	25	18	98	138	138	25
Mindanao	2026	7	25	19	99	138	138	25
Mindanao	2026	7	25	20	95	138	138	25
Mindanao	2026	7	25	21	94	138	138	25
Mindanao	2026	7	25	22	88	138	138	25
Mindanao	2026	7	25	23	84	138	138	25
Mindanao	2026	7	25	24	78	138	138	25
Mindanao	2026	7	26	1	75	138	138	25
Mindanao	2026	7	26	2	72	138	138	25
Mindanao	2026	7	26	3	70	138	138	25
Mindanao	2026	7	26	4	68	138	138	25
Mindanao	2026	7	26	5	70	138	138	25
Mindanao	2026	7	26	6	69	138	138	25
Mindanao	2026	7	26	7	68	138	138	25
Mindanao	2026	7	26	8	64	138	138	25
Mindanao	2026	7	26	9	67	138	138	25
Mindanao	2026	7	26	10	72	138	138	25
Mindanao	2026	7	26	11	77	138	138	25
Mindanao	2026	7	26	12	78	138	138	25
Mindanao	2026	7	26	13	79	138	138	25
Mindanao	2026	7	26	14	83	138	138	25
Mindanao	2026	7	26	15	82	138	138	25
Mindanao	2026	7	26	16	80	138	138	25
Mindanao	2026	7	26	17	80	138	138	25
Mindanao	2026	7	26	18	87	138	138	25
Mindanao	2026	7	26	19	91	138	138	25
Mindanao	2026	7	26	20	89	138	138	25
Mindanao	2026	7	26	21	90	138	138	25
Mindanao	2026	7	26	22	84	138	138	25
Mindanao	2026	7	26	23	80	138	138	25
Mindanao	2026	7	26	24	81	138	138	25
Mindanao	2026	7	27	1	76	138	138	25
Mindanao	2026	7	27	2	73	138	138	25
Mindanao	2026	7	27	3	69	138	138	25
Mindanao	2026	7	27	4	68	138	138	25
Mindanao	2026	7	27	5	71	138	138	25
Mindanao	2026	7	27	6	74	138	138	25
Mindanao	2026	7	27	7	73	138	138	25
Mindanao	2026	7	27	8	83	138	138	25
Mindanao	2026	7	27	9	95	138	138	25
Mindanao	2026	7	27	10	105	138	138	25
Mindanao	2026	7	27	11	108	138	138	25
Mindanao	2026	7	27	12	109	138	138	25
Mindanao	2026	7	27	13	110	138	138	25
Mindanao	2026	7	27	14	116	138	138	25
Mindanao	2026	7	27	15	115	138	138	25
Mindanao	2026	7	27	16	112	138	138	25
Mindanao	2026	7	27	17	105	138	138	25
Mindanao	2026	7	27	18	105	138	138	25
Mindanao	2026	7	27	19	110	138	138	25
Mindanao	2026	7	27	20	104	138	138	25
Mindanao	2026	7	27	21	102	138	138	25
Mindanao	2026	7	27	22	96	138	138	25
Mindanao	2026	7	27	23	90	138	138	25
Mindanao	2026	7	27	24	80	138	138	25
Mindanao	2026	7	28	1	79	138	138	25
Mindanao	2026	7	28	2	75	138	138	25
Mindanao	2026	7	28	3	72	138	138	25
Mindanao	2026	7	28	4	70	138	138	25
Mindanao	2026	7	28	5	73	138	138	25
Mindanao	2026	7	28	6	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	28	7	76	138	138	25
Mindanao	2026	7	28	8	82	138	138	25
Mindanao	2026	7	28	9	96	138	138	25
Mindanao	2026	7	28	10	106	138	138	25
Mindanao	2026	7	28	11	112	138	138	25
Mindanao	2026	7	28	12	111	138	138	25
Mindanao	2026	7	28	13	113	138	138	25
Mindanao	2026	7	28	14	117	138	138	25
Mindanao	2026	7	28	15	116	138	138	25
Mindanao	2026	7	28	16	111	138	138	25
Mindanao	2026	7	28	17	105	138	138	25
Mindanao	2026	7	28	18	105	138	138	25
Mindanao	2026	7	28	19	109	138	138	25
Mindanao	2026	7	28	20	104	138	138	25
Mindanao	2026	7	28	21	100	138	138	25
Mindanao	2026	7	28	22	93	138	138	25
Mindanao	2026	7	28	23	87	138	138	25
Mindanao	2026	7	28	24	81	138	138	25
Mindanao	2026	7	29	1	77	138	138	25
Mindanao	2026	7	29	2	75	138	138	25
Mindanao	2026	7	29	3	72	138	138	25
Mindanao	2026	7	29	4	70	138	138	25
Mindanao	2026	7	29	5	69	138	138	25
Mindanao	2026	7	29	6	75	138	138	25
Mindanao	2026	7	29	7	70	138	138	25
Mindanao	2026	7	29	8	80	138	138	25
Mindanao	2026	7	29	9	92	138	138	25
Mindanao	2026	7	29	10	99	138	138	25
Mindanao	2026	7	29	11	106	138	138	25
Mindanao	2026	7	29	12	105	138	138	25
Mindanao	2026	7	29	13	109	138	138	25
Mindanao	2026	7	29	14	115	138	138	25
Mindanao	2026	7	29	15	114	138	138	25
Mindanao	2026	7	29	16	111	138	138	25
Mindanao	2026	7	29	17	104	138	138	25
Mindanao	2026	7	29	18	102	138	138	25
Mindanao	2026	7	29	19	108	138	138	25
Mindanao	2026	7	29	20	102	138	138	25
Mindanao	2026	7	29	21	101	138	138	25
Mindanao	2026	7	29	22	93	138	138	25
Mindanao	2026	7	29	23	88	138	138	25
Mindanao	2026	7	29	24	82	138	138	25
Mindanao	2026	7	30	1	79	138	138	25
Mindanao	2026	7	30	2	76	138	138	25
Mindanao	2026	7	30	3	73	138	138	25
Mindanao	2026	7	30	4	72	138	138	25
Mindanao	2026	7	30	5	72	138	138	25
Mindanao	2026	7	30	6	73	138	138	25
Mindanao	2026	7	30	7	72	138	138	25
Mindanao	2026	7	30	8	80	138	138	25
Mindanao	2026	7	30	9	94	138	138	25
Mindanao	2026	7	30	10	103	138	138	25
Mindanao	2026	7	30	11	108	138	138	25
Mindanao	2026	7	30	12	107	138	138	25
Mindanao	2026	7	30	13	106	138	138	25
Mindanao	2026	7	30	14	113	138	138	25
Mindanao	2026	7	30	15	111	138	138	25
Mindanao	2026	7	30	16	111	138	138	25
Mindanao	2026	7	30	17	103	138	138	25
Mindanao	2026	7	30	18	103	138	138	25
Mindanao	2026	7	30	19	106	138	138	25
Mindanao	2026	7	30	20	102	138	138	25
Mindanao	2026	7	30	21	96	138	138	25
Mindanao	2026	7	30	22	91	138	138	25
Mindanao	2026	7	30	23	86	138	138	25
Mindanao	2026	7	30	24	81	138	138	25
Mindanao	2026	7	31	1	76	138	138	25
Mindanao	2026	7	31	2	74	138	138	25
Mindanao	2026	7	31	3	71	138	138	25
Mindanao	2026	7	31	4	69	138	138	25
Mindanao	2026	7	31	5	70	138	138	25
Mindanao	2026	7	31	6	75	138	138	25
Mindanao	2026	7	31	7	75	138	138	25
Mindanao	2026	7	31	8	82	138	138	25
Mindanao	2026	7	31	9	94	138	138	25
Mindanao	2026	7	31	10	102	138	138	25
Mindanao	2026	7	31	11	107	138	138	25
Mindanao	2026	7	31	12	106	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	7	31	13	108	138	138	25
Mindanao	2026	7	31	14	114	138	138	25
Mindanao	2026	7	31	15	112	138	138	25
Mindanao	2026	7	31	16	110	138	138	25
Mindanao	2026	7	31	17	102	138	138	25
Mindanao	2026	7	31	18	103	138	138	25
Mindanao	2026	7	31	19	107	138	138	25
Mindanao	2026	7	31	20	103	138	138	25
Mindanao	2026	7	31	21	101	138	138	25
Mindanao	2026	7	31	22	94	138	138	25
Mindanao	2026	7	31	23	88	138	138	25
Mindanao	2026	7	31	24	84	138	138	25
Mindanao	2026	8	1	1	80	138	138	25
Mindanao	2026	8	1	2	76	138	138	25
Mindanao	2026	8	1	3	73	138	138	25
Mindanao	2026	8	1	4	71	138	138	25
Mindanao	2026	8	1	5	72	138	138	25
Mindanao	2026	8	1	6	76	138	138	25
Mindanao	2026	8	1	7	74	138	138	25
Mindanao	2026	8	1	8	78	138	138	25
Mindanao	2026	8	1	9	86	138	138	25
Mindanao	2026	8	1	10	92	138	138	25
Mindanao	2026	8	1	11	96	138	138	25
Mindanao	2026	8	1	12	94	138	138	25
Mindanao	2026	8	1	13	98	138	138	25
Mindanao	2026	8	1	14	104	138	138	25
Mindanao	2026	8	1	15	100	138	138	25
Mindanao	2026	8	1	16	96	138	138	25
Mindanao	2026	8	1	17	89	138	138	25
Mindanao	2026	8	1	18	98	138	138	25
Mindanao	2026	8	1	19	101	138	138	25
Mindanao	2026	8	1	20	98	138	138	25
Mindanao	2026	8	1	21	94	138	138	25
Mindanao	2026	8	1	22	87	138	138	25
Mindanao	2026	8	1	23	83	138	138	25
Mindanao	2026	8	1	24	77	138	138	25
Mindanao	2026	8	2	1	74	138	138	25
Mindanao	2026	8	2	2	71	138	138	25
Mindanao	2026	8	2	3	68	138	138	25
Mindanao	2026	8	2	4	66	138	138	25
Mindanao	2026	8	2	5	67	138	138	25
Mindanao	2026	8	2	6	67	138	138	25
Mindanao	2026	8	2	7	65	138	138	25
Mindanao	2026	8	2	8	63	138	138	25
Mindanao	2026	8	2	9	66	138	138	25
Mindanao	2026	8	2	10	73	138	138	25
Mindanao	2026	8	2	11	75	138	138	25
Mindanao	2026	8	2	12	77	138	138	25
Mindanao	2026	8	2	13	78	138	138	25
Mindanao	2026	8	2	14	78	138	138	25
Mindanao	2026	8	2	15	78	138	138	25
Mindanao	2026	8	2	16	77	138	138	25
Mindanao	2026	8	2	17	79	138	138	25
Mindanao	2026	8	2	18	87	138	138	25
Mindanao	2026	8	2	19	91	138	138	25
Mindanao	2026	8	2	20	89	138	138	25
Mindanao	2026	8	2	21	86	138	138	25
Mindanao	2026	8	2	22	81	138	138	25
Mindanao	2026	8	2	23	75	138	138	25
Mindanao	2026	8	2	24	73	138	138	25
Mindanao	2026	8	3	1	69	138	138	25
Mindanao	2026	8	3	2	66	138	138	25
Mindanao	2026	8	3	3	64	138	138	25
Mindanao	2026	8	3	4	64	138	138	25
Mindanao	2026	8	3	5	62	138	138	25
Mindanao	2026	8	3	6	66	138	138	25
Mindanao	2026	8	3	7	66	138	138	25
Mindanao	2026	8	3	8	75	138	138	25
Mindanao	2026	8	3	9	86	138	138	25
Mindanao	2026	8	3	10	96	138	138	25
Mindanao	2026	8	3	11	102	138	138	25
Mindanao	2026	8	3	12	101	138	138	25
Mindanao	2026	8	3	13	104	138	138	25
Mindanao	2026	8	3	14	110	138	138	25
Mindanao	2026	8	3	15	109	138	138	25
Mindanao	2026	8	3	16	107	138	138	25
Mindanao	2026	8	3	17	99	138	138	25
Mindanao	2026	8	3	18	99	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	3	19	103	138	138	25
Mindanao	2026	8	3	20	100	138	138	25
Mindanao	2026	8	3	21	95	138	138	25
Mindanao	2026	8	3	22	86	138	138	25
Mindanao	2026	8	3	23	82	138	138	25
Mindanao	2026	8	3	24	77	138	138	25
Mindanao	2026	8	4	1	72	138	138	25
Mindanao	2026	8	4	2	71	138	138	25
Mindanao	2026	8	4	3	68	138	138	25
Mindanao	2026	8	4	4	66	138	138	25
Mindanao	2026	8	4	5	67	138	138	25
Mindanao	2026	8	4	6	71	138	138	25
Mindanao	2026	8	4	7	69	138	138	25
Mindanao	2026	8	4	8	78	138	138	25
Mindanao	2026	8	4	9	93	138	138	25
Mindanao	2026	8	4	10	100	138	138	25
Mindanao	2026	8	4	11	105	138	138	25
Mindanao	2026	8	4	12	105	138	138	25
Mindanao	2026	8	4	13	104	138	138	25
Mindanao	2026	8	4	14	109	138	138	25
Mindanao	2026	8	4	15	108	138	138	25
Mindanao	2026	8	4	16	105	138	138	25
Mindanao	2026	8	4	17	97	138	138	25
Mindanao	2026	8	4	18	99	138	138	25
Mindanao	2026	8	4	19	102	138	138	25
Mindanao	2026	8	4	20	97	138	138	25
Mindanao	2026	8	4	21	95	138	138	25
Mindanao	2026	8	4	22	88	138	138	25
Mindanao	2026	8	4	23	81	138	138	25
Mindanao	2026	8	4	24	77	138	138	25
Mindanao	2026	8	5	1	73	138	138	25
Mindanao	2026	8	5	2	70	138	138	25
Mindanao	2026	8	5	3	68	138	138	25
Mindanao	2026	8	5	4	69	138	138	25
Mindanao	2026	8	5	5	68	138	138	25
Mindanao	2026	8	5	6	73	138	138	25
Mindanao	2026	8	5	7	73	138	138	25
Mindanao	2026	8	5	8	80	138	138	25
Mindanao	2026	8	5	9	95	138	138	25
Mindanao	2026	8	5	10	104	138	138	25
Mindanao	2026	8	5	11	110	138	138	25
Mindanao	2026	8	5	12	110	138	138	25
Mindanao	2026	8	5	13	111	138	138	25
Mindanao	2026	8	5	14	117	138	138	25
Mindanao	2026	8	5	15	116	138	138	25
Mindanao	2026	8	5	16	114	138	138	25
Mindanao	2026	8	5	17	105	138	138	25
Mindanao	2026	8	5	18	105	138	138	25
Mindanao	2026	8	5	19	108	138	138	25
Mindanao	2026	8	5	20	105	138	138	25
Mindanao	2026	8	5	21	103	138	138	25
Mindanao	2026	8	5	22	94	138	138	25
Mindanao	2026	8	5	23	89	138	138	25
Mindanao	2026	8	5	24	83	138	138	25
Mindanao	2026	8	6	1	80	138	138	25
Mindanao	2026	8	6	2	77	138	138	25
Mindanao	2026	8	6	3	73	138	138	25
Mindanao	2026	8	6	4	72	138	138	25
Mindanao	2026	8	6	5	73	138	138	25
Mindanao	2026	8	6	6	76	138	138	25
Mindanao	2026	8	6	7	75	138	138	25
Mindanao	2026	8	6	8	82	138	138	25
Mindanao	2026	8	6	9	95	138	138	25
Mindanao	2026	8	6	10	102	138	138	25
Mindanao	2026	8	6	11	110	138	138	25
Mindanao	2026	8	6	12	110	138	138	25
Mindanao	2026	8	6	13	108	138	138	25
Mindanao	2026	8	6	14	115	138	138	25
Mindanao	2026	8	6	15	112	138	138	25
Mindanao	2026	8	6	16	109	138	138	25
Mindanao	2026	8	6	17	100	138	138	25
Mindanao	2026	8	6	18	103	138	138	25
Mindanao	2026	8	6	19	106	138	138	25
Mindanao	2026	8	6	20	102	138	138	25
Mindanao	2026	8	6	21	100	138	138	25
Mindanao	2026	8	6	22	91	138	138	25
Mindanao	2026	8	6	23	85	138	138	25
Mindanao	2026	8	6	24	79	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	7	1	74	138	138	25
Mindanao	2026	8	7	2	71	138	138	25
Mindanao	2026	8	7	3	68	138	138	25
Mindanao	2026	8	7	4	67	138	138	25
Mindanao	2026	8	7	5	69	138	138	25
Mindanao	2026	8	7	6	74	138	138	25
Mindanao	2026	8	7	7	70	138	138	25
Mindanao	2026	8	7	8	79	138	138	25
Mindanao	2026	8	7	9	90	138	138	25
Mindanao	2026	8	7	10	95	138	138	25
Mindanao	2026	8	7	11	100	138	138	25
Mindanao	2026	8	7	12	97	138	138	25
Mindanao	2026	8	7	13	98	138	138	25
Mindanao	2026	8	7	14	102	138	138	25
Mindanao	2026	8	7	15	101	138	138	25
Mindanao	2026	8	7	16	101	138	138	25
Mindanao	2026	8	7	17	96	138	138	25
Mindanao	2026	8	7	18	98	138	138	25
Mindanao	2026	8	7	19	98	138	138	25
Mindanao	2026	8	7	20	95	138	138	25
Mindanao	2026	8	7	21	93	138	138	25
Mindanao	2026	8	7	22	88	138	138	25
Mindanao	2026	8	7	23	81	138	138	25
Mindanao	2026	8	7	24	76	138	138	25
Mindanao	2026	8	8	1	74	138	138	25
Mindanao	2026	8	8	2	71	138	138	25
Mindanao	2026	8	8	3	69	138	138	25
Mindanao	2026	8	8	4	66	138	138	25
Mindanao	2026	8	8	5	68	138	138	25
Mindanao	2026	8	8	6	72	138	138	25
Mindanao	2026	8	8	7	70	138	138	25
Mindanao	2026	8	8	8	72	138	138	25
Mindanao	2026	8	8	9	83	138	138	25
Mindanao	2026	8	8	10	88	138	138	25
Mindanao	2026	8	8	11	94	138	138	25
Mindanao	2026	8	8	12	94	138	138	25
Mindanao	2026	8	8	13	98	138	138	25
Mindanao	2026	8	8	14	102	138	138	25
Mindanao	2026	8	8	15	101	138	138	25
Mindanao	2026	8	8	16	96	138	138	25
Mindanao	2026	8	8	17	93	138	138	25
Mindanao	2026	8	8	18	97	138	138	25
Mindanao	2026	8	8	19	101	138	138	25
Mindanao	2026	8	8	20	98	138	138	25
Mindanao	2026	8	8	21	94	138	138	25
Mindanao	2026	8	8	22	87	138	138	25
Mindanao	2026	8	8	23	82	138	138	25
Mindanao	2026	8	8	24	76	138	138	25
Mindanao	2026	8	9	1	71	138	138	25
Mindanao	2026	8	9	2	69	138	138	25
Mindanao	2026	8	9	3	67	138	138	25
Mindanao	2026	8	9	4	65	138	138	25
Mindanao	2026	8	9	5	65	138	138	25
Mindanao	2026	8	9	6	68	138	138	25
Mindanao	2026	8	9	7	62	138	138	25
Mindanao	2026	8	9	8	64	138	138	25
Mindanao	2026	8	9	9	69	138	138	25
Mindanao	2026	8	9	10	75	138	138	25
Mindanao	2026	8	9	11	77	138	138	25
Mindanao	2026	8	9	12	79	138	138	25
Mindanao	2026	8	9	13	79	138	138	25
Mindanao	2026	8	9	14	80	138	138	25
Mindanao	2026	8	9	15	80	138	138	25
Mindanao	2026	8	9	16	78	138	138	25
Mindanao	2026	8	9	17	80	138	138	25
Mindanao	2026	8	9	18	87	138	138	25
Mindanao	2026	8	9	19	88	138	138	25
Mindanao	2026	8	9	20	85	138	138	25
Mindanao	2026	8	9	21	80	138	138	25
Mindanao	2026	8	9	22	76	138	138	25
Mindanao	2026	8	9	23	69	138	138	25
Mindanao	2026	8	9	24	64	138	138	25
Mindanao	2026	8	10	1	65	138	138	25
Mindanao	2026	8	10	2	61	138	138	25
Mindanao	2026	8	10	3	60	138	138	25
Mindanao	2026	8	10	4	61	138	138	25
Mindanao	2026	8	10	5	63	138	138	25
Mindanao	2026	8	10	6	68	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	10	7	66	138	138	25
Mindanao	2026	8	10	8	75	138	138	25
Mindanao	2026	8	10	9	86	138	138	25
Mindanao	2026	8	10	10	94	138	138	25
Mindanao	2026	8	10	11	99	138	138	25
Mindanao	2026	8	10	12	99	138	138	25
Mindanao	2026	8	10	13	102	138	138	25
Mindanao	2026	8	10	14	107	138	138	25
Mindanao	2026	8	10	15	103	138	138	25
Mindanao	2026	8	10	16	97	138	138	25
Mindanao	2026	8	10	17	98	138	138	25
Mindanao	2026	8	10	18	98	138	138	25
Mindanao	2026	8	10	19	95	138	138	25
Mindanao	2026	8	10	20	89	138	138	25
Mindanao	2026	8	10	21	87	138	138	25
Mindanao	2026	8	10	22	80	138	138	25
Mindanao	2026	8	10	23	76	138	138	25
Mindanao	2026	8	10	24	71	138	138	25
Mindanao	2026	8	11	1	69	138	138	25
Mindanao	2026	8	11	2	66	138	138	25
Mindanao	2026	8	11	3	65	138	138	25
Mindanao	2026	8	11	4	66	138	138	25
Mindanao	2026	8	11	5	66	138	138	25
Mindanao	2026	8	11	6	72	138	138	25
Mindanao	2026	8	11	7	70	138	138	25
Mindanao	2026	8	11	8	78	138	138	25
Mindanao	2026	8	11	9	88	138	138	25
Mindanao	2026	8	11	10	97	138	138	25
Mindanao	2026	8	11	11	102	138	138	25
Mindanao	2026	8	11	12	100	138	138	25
Mindanao	2026	8	11	13	101	138	138	25
Mindanao	2026	8	11	14	108	138	138	25
Mindanao	2026	8	11	15	107	138	138	25
Mindanao	2026	8	11	16	103	138	138	25
Mindanao	2026	8	11	17	100	138	138	25
Mindanao	2026	8	11	18	100	138	138	25
Mindanao	2026	8	11	19	98	138	138	25
Mindanao	2026	8	11	20	95	138	138	25
Mindanao	2026	8	11	21	91	138	138	25
Mindanao	2026	8	11	22	84	138	138	25
Mindanao	2026	8	11	23	78	138	138	25
Mindanao	2026	8	11	24	72	138	138	25
Mindanao	2026	8	12	1	70	138	138	25
Mindanao	2026	8	12	2	68	138	138	25
Mindanao	2026	8	12	3	66	138	138	25
Mindanao	2026	8	12	4	66	138	138	25
Mindanao	2026	8	12	5	69	138	138	25
Mindanao	2026	8	12	6	75	138	138	25
Mindanao	2026	8	12	7	72	138	138	25
Mindanao	2026	8	12	8	78	138	138	25
Mindanao	2026	8	12	9	90	138	138	25
Mindanao	2026	8	12	10	96	138	138	25
Mindanao	2026	8	12	11	102	138	138	25
Mindanao	2026	8	12	12	100	138	138	25
Mindanao	2026	8	12	13	100	138	138	25
Mindanao	2026	8	12	14	108	138	138	25
Mindanao	2026	8	12	15	109	138	138	25
Mindanao	2026	8	12	16	106	138	138	25
Mindanao	2026	8	12	17	101	138	138	25
Mindanao	2026	8	12	18	102	138	138	25
Mindanao	2026	8	12	19	106	138	138	25
Mindanao	2026	8	12	20	101	138	138	25
Mindanao	2026	8	12	21	98	138	138	25
Mindanao	2026	8	12	22	88	138	138	25
Mindanao	2026	8	12	23	83	138	138	25
Mindanao	2026	8	12	24	78	138	138	25
Mindanao	2026	8	13	1	75	138	138	25
Mindanao	2026	8	13	2	71	138	138	25
Mindanao	2026	8	13	3	68	138	138	25
Mindanao	2026	8	13	4	68	138	138	25
Mindanao	2026	8	13	5	69	138	138	25
Mindanao	2026	8	13	6	75	138	138	25
Mindanao	2026	8	13	7	74	138	138	25
Mindanao	2026	8	13	8	81	138	138	25
Mindanao	2026	8	13	9	94	138	138	25
Mindanao	2026	8	13	10	104	138	138	25
Mindanao	2026	8	13	11	108	138	138	25
Mindanao	2026	8	13	12	106	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	13	13	106	138	138	25
Mindanao	2026	8	13	14	114	138	138	25
Mindanao	2026	8	13	15	112	138	138	25
Mindanao	2026	8	13	16	109	138	138	25
Mindanao	2026	8	13	17	104	138	138	25
Mindanao	2026	8	13	18	103	138	138	25
Mindanao	2026	8	13	19	108	138	138	25
Mindanao	2026	8	13	20	105	138	138	25
Mindanao	2026	8	13	21	101	138	138	25
Mindanao	2026	8	13	22	94	138	138	25
Mindanao	2026	8	13	23	88	138	138	25
Mindanao	2026	8	13	24	82	138	138	25
Mindanao	2026	8	14	1	79	138	138	25
Mindanao	2026	8	14	2	73	138	138	25
Mindanao	2026	8	14	3	71	138	138	25
Mindanao	2026	8	14	4	71	138	138	25
Mindanao	2026	8	14	5	71	138	138	25
Mindanao	2026	8	14	6	77	138	138	25
Mindanao	2026	8	14	7	75	138	138	25
Mindanao	2026	8	14	8	82	138	138	25
Mindanao	2026	8	14	9	95	138	138	25
Mindanao	2026	8	14	10	104	138	138	25
Mindanao	2026	8	14	11	109	138	138	25
Mindanao	2026	8	14	12	110	138	138	25
Mindanao	2026	8	14	13	112	138	138	25
Mindanao	2026	8	14	14	118	138	138	25
Mindanao	2026	8	14	15	116	138	138	25
Mindanao	2026	8	14	16	113	138	138	25
Mindanao	2026	8	14	17	107	138	138	25
Mindanao	2026	8	14	18	106	138	138	25
Mindanao	2026	8	14	19	110	138	138	25
Mindanao	2026	8	14	20	106	138	138	25
Mindanao	2026	8	14	21	105	138	138	25
Mindanao	2026	8	14	22	99	138	138	25
Mindanao	2026	8	14	23	90	138	138	25
Mindanao	2026	8	14	24	85	138	138	25
Mindanao	2026	8	15	1	79	138	138	25
Mindanao	2026	8	15	2	76	138	138	25
Mindanao	2026	8	15	3	72	138	138	25
Mindanao	2026	8	15	4	71	138	138	25
Mindanao	2026	8	15	5	71	138	138	25
Mindanao	2026	8	15	6	74	138	138	25
Mindanao	2026	8	15	7	72	138	138	25
Mindanao	2026	8	15	8	75	138	138	25
Mindanao	2026	8	15	9	84	138	138	25
Mindanao	2026	8	15	10	91	138	138	25
Mindanao	2026	8	15	11	93	138	138	25
Mindanao	2026	8	15	12	93	138	138	25
Mindanao	2026	8	15	13	93	138	138	25
Mindanao	2026	8	15	14	100	138	138	25
Mindanao	2026	8	15	15	99	138	138	25
Mindanao	2026	8	15	16	95	138	138	25
Mindanao	2026	8	15	17	94	138	138	25
Mindanao	2026	8	15	18	98	138	138	25
Mindanao	2026	8	15	19	99	138	138	25
Mindanao	2026	8	15	20	96	138	138	25
Mindanao	2026	8	15	21	94	138	138	25
Mindanao	2026	8	15	22	88	138	138	25
Mindanao	2026	8	15	23	82	138	138	25
Mindanao	2026	8	15	24	76	138	138	25
Mindanao	2026	8	16	1	74	138	138	25
Mindanao	2026	8	16	2	71	138	138	25
Mindanao	2026	8	16	3	69	138	138	25
Mindanao	2026	8	16	4	65	138	138	25
Mindanao	2026	8	16	5	66	138	138	25
Mindanao	2026	8	16	6	67	138	138	25
Mindanao	2026	8	16	7	63	138	138	25
Mindanao	2026	8	16	8	54	138	138	25
Mindanao	2026	8	16	9	56	138	138	25
Mindanao	2026	8	16	10	64	138	138	25
Mindanao	2026	8	16	11	68	138	138	25
Mindanao	2026	8	16	12	68	138	138	25
Mindanao	2026	8	16	13	70	138	138	25
Mindanao	2026	8	16	14	71	138	138	25
Mindanao	2026	8	16	15	72	138	138	25
Mindanao	2026	8	16	16	69	138	138	25
Mindanao	2026	8	16	17	75	138	138	25
Mindanao	2026	8	16	18	84	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	16	19	85	138	138	25
Mindanao	2026	8	16	20	82	138	138	25
Mindanao	2026	8	16	21	80	138	138	25
Mindanao	2026	8	16	22	75	138	138	25
Mindanao	2026	8	16	23	68	138	138	25
Mindanao	2026	8	16	24	64	138	138	25
Mindanao	2026	8	17	1	62	138	138	25
Mindanao	2026	8	17	2	60	138	138	25
Mindanao	2026	8	17	3	58	138	138	25
Mindanao	2026	8	17	4	58	138	138	25
Mindanao	2026	8	17	5	60	138	138	25
Mindanao	2026	8	17	6	66	138	138	25
Mindanao	2026	8	17	7	66	138	138	25
Mindanao	2026	8	17	8	72	138	138	25
Mindanao	2026	8	17	9	84	138	138	25
Mindanao	2026	8	17	10	92	138	138	25
Mindanao	2026	8	17	11	98	138	138	25
Mindanao	2026	8	17	12	96	138	138	25
Mindanao	2026	8	17	13	98	138	138	25
Mindanao	2026	8	17	14	101	138	138	25
Mindanao	2026	8	17	15	106	138	138	25
Mindanao	2026	8	17	16	104	138	138	25
Mindanao	2026	8	17	17	95	138	138	25
Mindanao	2026	8	17	18	100	138	138	25
Mindanao	2026	8	17	19	102	138	138	25
Mindanao	2026	8	17	20	98	138	138	25
Mindanao	2026	8	17	21	95	138	138	25
Mindanao	2026	8	17	22	88	138	138	25
Mindanao	2026	8	17	23	83	138	138	25
Mindanao	2026	8	17	24	77	138	138	25
Mindanao	2026	8	18	1	73	138	138	25
Mindanao	2026	8	18	2	71	138	138	25
Mindanao	2026	8	18	3	69	138	138	25
Mindanao	2026	8	18	4	66	138	138	25
Mindanao	2026	8	18	5	67	138	138	25
Mindanao	2026	8	18	6	72	138	138	25
Mindanao	2026	8	18	7	69	138	138	25
Mindanao	2026	8	18	8	80	138	138	25
Mindanao	2026	8	18	9	93	138	138	25
Mindanao	2026	8	18	10	100	138	138	25
Mindanao	2026	8	18	11	108	138	138	25
Mindanao	2026	8	18	12	106	138	138	25
Mindanao	2026	8	18	13	109	138	138	25
Mindanao	2026	8	18	14	115	138	138	25
Mindanao	2026	8	18	15	112	138	138	25
Mindanao	2026	8	18	16	107	138	138	25
Mindanao	2026	8	18	17	100	138	138	25
Mindanao	2026	8	18	18	103	138	138	25
Mindanao	2026	8	18	19	106	138	138	25
Mindanao	2026	8	18	20	102	138	138	25
Mindanao	2026	8	18	21	97	138	138	25
Mindanao	2026	8	18	22	88	138	138	25
Mindanao	2026	8	18	23	83	138	138	25
Mindanao	2026	8	18	24	79	138	138	25
Mindanao	2026	8	19	1	74	138	138	25
Mindanao	2026	8	19	2	70	138	138	25
Mindanao	2026	8	19	3	66	138	138	25
Mindanao	2026	8	19	4	66	138	138	25
Mindanao	2026	8	19	5	68	138	138	25
Mindanao	2026	8	19	6	75	138	138	25
Mindanao	2026	8	19	7	72	138	138	25
Mindanao	2026	8	19	8	80	138	138	25
Mindanao	2026	8	19	9	93	138	138	25
Mindanao	2026	8	19	10	102	138	138	25
Mindanao	2026	8	19	11	110	138	138	25
Mindanao	2026	8	19	12	108	138	138	25
Mindanao	2026	8	19	13	109	138	138	25
Mindanao	2026	8	19	14	113	138	138	25
Mindanao	2026	8	19	15	110	138	138	25
Mindanao	2026	8	19	16	108	138	138	25
Mindanao	2026	8	19	17	103	138	138	25
Mindanao	2026	8	19	18	102	138	138	25
Mindanao	2026	8	19	19	102	138	138	25
Mindanao	2026	8	19	20	97	138	138	25
Mindanao	2026	8	19	21	93	138	138	25
Mindanao	2026	8	19	22	86	138	138	25
Mindanao	2026	8	19	23	81	138	138	25
Mindanao	2026	8	19	24	77	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	20	1	72	138	138	25
Mindanao	2026	8	20	2	69	138	138	25
Mindanao	2026	8	20	3	67	138	138	25
Mindanao	2026	8	20	4	65	138	138	25
Mindanao	2026	8	20	5	68	138	138	25
Mindanao	2026	8	20	6	72	138	138	25
Mindanao	2026	8	20	7	71	138	138	25
Mindanao	2026	8	20	8	78	138	138	25
Mindanao	2026	8	20	9	87	138	138	25
Mindanao	2026	8	20	10	92	138	138	25
Mindanao	2026	8	20	11	95	138	138	25
Mindanao	2026	8	20	12	92	138	138	25
Mindanao	2026	8	20	13	90	138	138	25
Mindanao	2026	8	20	14	97	138	138	25
Mindanao	2026	8	20	15	100	138	138	25
Mindanao	2026	8	20	16	98	138	138	25
Mindanao	2026	8	20	17	93	138	138	25
Mindanao	2026	8	20	18	99	138	138	25
Mindanao	2026	8	20	19	101	138	138	25
Mindanao	2026	8	20	20	96	138	138	25
Mindanao	2026	8	20	21	92	138	138	25
Mindanao	2026	8	20	22	85	138	138	25
Mindanao	2026	8	20	23	80	138	138	25
Mindanao	2026	8	20	24	75	138	138	25
Mindanao	2026	8	21	1	76	138	138	25
Mindanao	2026	8	21	2	70	138	138	25
Mindanao	2026	8	21	3	69	138	138	25
Mindanao	2026	8	21	4	68	138	138	25
Mindanao	2026	8	21	5	66	138	138	25
Mindanao	2026	8	21	6	67	138	138	25
Mindanao	2026	8	21	7	67	138	138	25
Mindanao	2026	8	21	8	71	138	138	25
Mindanao	2026	8	21	9	75	138	138	25
Mindanao	2026	8	21	10	79	138	138	25
Mindanao	2026	8	21	11	85	138	138	25
Mindanao	2026	8	21	12	85	138	138	25
Mindanao	2026	8	21	13	87	138	138	25
Mindanao	2026	8	21	14	89	138	138	25
Mindanao	2026	8	21	15	89	138	138	25
Mindanao	2026	8	21	16	87	138	138	25
Mindanao	2026	8	21	17	85	138	138	25
Mindanao	2026	8	21	18	95	138	138	25
Mindanao	2026	8	21	19	99	138	138	25
Mindanao	2026	8	21	20	97	138	138	25
Mindanao	2026	8	21	21	93	138	138	25
Mindanao	2026	8	21	22	87	138	138	25
Mindanao	2026	8	21	23	81	138	138	25
Mindanao	2026	8	21	24	76	138	138	25
Mindanao	2026	8	22	1	75	138	138	25
Mindanao	2026	8	22	2	74	138	138	25
Mindanao	2026	8	22	3	71	138	138	25
Mindanao	2026	8	22	4	70	138	138	25
Mindanao	2026	8	22	5	69	138	138	25
Mindanao	2026	8	22	6	73	138	138	25
Mindanao	2026	8	22	7	72	138	138	25
Mindanao	2026	8	22	8	77	138	138	25
Mindanao	2026	8	22	9	82	138	138	25
Mindanao	2026	8	22	10	88	138	138	25
Mindanao	2026	8	22	11	92	138	138	25
Mindanao	2026	8	22	12	89	138	138	25
Mindanao	2026	8	22	13	92	138	138	25
Mindanao	2026	8	22	14	97	138	138	25
Mindanao	2026	8	22	15	95	138	138	25
Mindanao	2026	8	22	16	91	138	138	25
Mindanao	2026	8	22	17	89	138	138	25
Mindanao	2026	8	22	18	95	138	138	25
Mindanao	2026	8	22	19	99	138	138	25
Mindanao	2026	8	22	20	97	138	138	25
Mindanao	2026	8	22	21	97	138	138	25
Mindanao	2026	8	22	22	91	138	138	25
Mindanao	2026	8	22	23	86	138	138	25
Mindanao	2026	8	22	24	80	138	138	25
Mindanao	2026	8	23	1	79	138	138	25
Mindanao	2026	8	23	2	76	138	138	25
Mindanao	2026	8	23	3	72	138	138	25
Mindanao	2026	8	23	4	69	138	138	25
Mindanao	2026	8	23	5	69	138	138	25
Mindanao	2026	8	23	6	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	23	7	68	138	138	25
Mindanao	2026	8	23	8	68	138	138	25
Mindanao	2026	8	23	9	75	138	138	25
Mindanao	2026	8	23	10	82	138	138	25
Mindanao	2026	8	23	11	85	138	138	25
Mindanao	2026	8	23	12	87	138	138	25
Mindanao	2026	8	23	13	90	138	138	25
Mindanao	2026	8	23	14	92	138	138	25
Mindanao	2026	8	23	15	92	138	138	25
Mindanao	2026	8	23	16	92	138	138	25
Mindanao	2026	8	23	17	89	138	138	25
Mindanao	2026	8	23	18	97	138	138	25
Mindanao	2026	8	23	19	103	138	138	25
Mindanao	2026	8	23	20	99	138	138	25
Mindanao	2026	8	23	21	98	138	138	25
Mindanao	2026	8	23	22	92	138	138	25
Mindanao	2026	8	23	23	86	138	138	25
Mindanao	2026	8	23	24	80	138	138	25
Mindanao	2026	8	24	1	73	138	138	25
Mindanao	2026	8	24	2	68	138	138	25
Mindanao	2026	8	24	3	67	138	138	25
Mindanao	2026	8	24	4	67	138	138	25
Mindanao	2026	8	24	5	73	138	138	25
Mindanao	2026	8	24	6	74	138	138	25
Mindanao	2026	8	24	7	67	138	138	25
Mindanao	2026	8	24	8	77	138	138	25
Mindanao	2026	8	24	9	93	138	138	25
Mindanao	2026	8	24	10	101	138	138	25
Mindanao	2026	8	24	11	110	138	138	25
Mindanao	2026	8	24	12	108	138	138	25
Mindanao	2026	8	24	13	108	138	138	25
Mindanao	2026	8	24	14	109	138	138	25
Mindanao	2026	8	24	15	105	138	138	25
Mindanao	2026	8	24	16	103	138	138	25
Mindanao	2026	8	24	17	97	138	138	25
Mindanao	2026	8	24	18	101	138	138	25
Mindanao	2026	8	24	19	99	138	138	25
Mindanao	2026	8	24	20	98	138	138	25
Mindanao	2026	8	24	21	94	138	138	25
Mindanao	2026	8	24	22	85	138	138	25
Mindanao	2026	8	24	23	79	138	138	25
Mindanao	2026	8	24	24	75	138	138	25
Mindanao	2026	8	25	1	72	138	138	25
Mindanao	2026	8	25	2	70	138	138	25
Mindanao	2026	8	25	3	67	138	138	25
Mindanao	2026	8	25	4	67	138	138	25
Mindanao	2026	8	25	5	71	138	138	25
Mindanao	2026	8	25	6	75	138	138	25
Mindanao	2026	8	25	7	67	138	138	25
Mindanao	2026	8	25	8	80	138	138	25
Mindanao	2026	8	25	9	93	138	138	25
Mindanao	2026	8	25	10	103	138	138	25
Mindanao	2026	8	25	11	108	138	138	25
Mindanao	2026	8	25	12	106	138	138	25
Mindanao	2026	8	25	13	107	138	138	25
Mindanao	2026	8	25	14	111	138	138	25
Mindanao	2026	8	25	15	110	138	138	25
Mindanao	2026	8	25	16	109	138	138	25
Mindanao	2026	8	25	17	102	138	138	25
Mindanao	2026	8	25	18	103	138	138	25
Mindanao	2026	8	25	19	104	138	138	25
Mindanao	2026	8	25	20	102	138	138	25
Mindanao	2026	8	25	21	96	138	138	25
Mindanao	2026	8	25	22	91	138	138	25
Mindanao	2026	8	25	23	83	138	138	25
Mindanao	2026	8	25	24	77	138	138	25
Mindanao	2026	8	26	1	76	138	138	25
Mindanao	2026	8	26	2	67	138	138	25
Mindanao	2026	8	26	3	68	138	138	25
Mindanao	2026	8	26	4	66	138	138	25
Mindanao	2026	8	26	5	71	138	138	25
Mindanao	2026	8	26	6	76	138	138	25
Mindanao	2026	8	26	7	74	138	138	25
Mindanao	2026	8	26	8	84	138	138	25
Mindanao	2026	8	26	9	86	138	138	25
Mindanao	2026	8	26	10	95	138	138	25
Mindanao	2026	8	26	11	101	138	138	25
Mindanao	2026	8	26	12	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	26	13	104	138	138	25
Mindanao	2026	8	26	14	109	138	138	25
Mindanao	2026	8	26	15	111	138	138	25
Mindanao	2026	8	26	16	110	138	138	25
Mindanao	2026	8	26	17	108	138	138	25
Mindanao	2026	8	26	18	110	138	138	25
Mindanao	2026	8	26	19	109	138	138	25
Mindanao	2026	8	26	20	104	138	138	25
Mindanao	2026	8	26	21	100	138	138	25
Mindanao	2026	8	26	22	90	138	138	25
Mindanao	2026	8	26	23	84	138	138	25
Mindanao	2026	8	26	24	81	138	138	25
Mindanao	2026	8	27	1	78	138	138	25
Mindanao	2026	8	27	2	75	138	138	25
Mindanao	2026	8	27	3	72	138	138	25
Mindanao	2026	8	27	4	73	138	138	25
Mindanao	2026	8	27	5	76	138	138	25
Mindanao	2026	8	27	6	83	138	138	25
Mindanao	2026	8	27	7	73	138	138	25
Mindanao	2026	8	27	8	81	138	138	25
Mindanao	2026	8	27	9	95	138	138	25
Mindanao	2026	8	27	10	103	138	138	25
Mindanao	2026	8	27	11	107	138	138	25
Mindanao	2026	8	27	12	107	138	138	25
Mindanao	2026	8	27	13	110	138	138	25
Mindanao	2026	8	27	14	116	138	138	25
Mindanao	2026	8	27	15	111	138	138	25
Mindanao	2026	8	27	16	110	138	138	25
Mindanao	2026	8	27	17	105	138	138	25
Mindanao	2026	8	27	18	108	138	138	25
Mindanao	2026	8	27	19	108	138	138	25
Mindanao	2026	8	27	20	104	138	138	25
Mindanao	2026	8	27	21	101	138	138	25
Mindanao	2026	8	27	22	94	138	138	25
Mindanao	2026	8	27	23	87	138	138	25
Mindanao	2026	8	27	24	79	138	138	25
Mindanao	2026	8	28	1	78	138	138	25
Mindanao	2026	8	28	2	74	138	138	25
Mindanao	2026	8	28	3	73	138	138	25
Mindanao	2026	8	28	4	71	138	138	25
Mindanao	2026	8	28	5	74	138	138	25
Mindanao	2026	8	28	6	78	138	138	25
Mindanao	2026	8	28	7	73	138	138	25
Mindanao	2026	8	28	8	80	138	138	25
Mindanao	2026	8	28	9	93	138	138	25
Mindanao	2026	8	28	10	104	138	138	25
Mindanao	2026	8	28	11	111	138	138	25
Mindanao	2026	8	28	12	108	138	138	25
Mindanao	2026	8	28	13	111	138	138	25
Mindanao	2026	8	28	14	115	138	138	25
Mindanao	2026	8	28	15	114	138	138	25
Mindanao	2026	8	28	16	114	138	138	25
Mindanao	2026	8	28	17	105	138	138	25
Mindanao	2026	8	28	18	109	138	138	25
Mindanao	2026	8	28	19	108	138	138	25
Mindanao	2026	8	28	20	104	138	138	25
Mindanao	2026	8	28	21	98	138	138	25
Mindanao	2026	8	28	22	90	138	138	25
Mindanao	2026	8	28	23	85	138	138	25
Mindanao	2026	8	28	24	79	138	138	25
Mindanao	2026	8	29	1	72	138	138	25
Mindanao	2026	8	29	2	72	138	138	25
Mindanao	2026	8	29	3	70	138	138	25
Mindanao	2026	8	29	4	71	138	138	25
Mindanao	2026	8	29	5	70	138	138	25
Mindanao	2026	8	29	6	74	138	138	25
Mindanao	2026	8	29	7	72	138	138	25
Mindanao	2026	8	29	8	78	138	138	25
Mindanao	2026	8	29	9	86	138	138	25
Mindanao	2026	8	29	10	92	138	138	25
Mindanao	2026	8	29	11	98	138	138	25
Mindanao	2026	8	29	12	96	138	138	25
Mindanao	2026	8	29	13	100	138	138	25
Mindanao	2026	8	29	14	106	138	138	25
Mindanao	2026	8	29	15	105	138	138	25
Mindanao	2026	8	29	16	101	138	138	25
Mindanao	2026	8	29	17	96	138	138	25
Mindanao	2026	8	29	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	8	29	19	107	138	138	25
Mindanao	2026	8	29	20	103	138	138	25
Mindanao	2026	8	29	21	99	138	138	25
Mindanao	2026	8	29	22	92	138	138	25
Mindanao	2026	8	29	23	87	138	138	25
Mindanao	2026	8	29	24	82	138	138	25
Mindanao	2026	8	30	1	79	138	138	25
Mindanao	2026	8	30	2	76	138	138	25
Mindanao	2026	8	30	3	72	138	138	25
Mindanao	2026	8	30	4	69	138	138	25
Mindanao	2026	8	30	5	69	138	138	25
Mindanao	2026	8	30	6	72	138	138	25
Mindanao	2026	8	30	7	68	138	138	25
Mindanao	2026	8	30	8	68	138	138	25
Mindanao	2026	8	30	9	75	138	138	25
Mindanao	2026	8	30	10	82	138	138	25
Mindanao	2026	8	30	11	85	138	138	25
Mindanao	2026	8	30	12	87	138	138	25
Mindanao	2026	8	30	13	90	138	138	25
Mindanao	2026	8	30	14	92	138	138	25
Mindanao	2026	8	30	15	92	138	138	25
Mindanao	2026	8	30	16	92	138	138	25
Mindanao	2026	8	30	17	89	138	138	25
Mindanao	2026	8	30	18	97	138	138	25
Mindanao	2026	8	30	19	103	138	138	25
Mindanao	2026	8	30	20	99	138	138	25
Mindanao	2026	8	30	21	98	138	138	25
Mindanao	2026	8	30	22	92	138	138	25
Mindanao	2026	8	30	23	86	138	138	25
Mindanao	2026	8	30	24	80	138	138	25
Mindanao	2026	8	31	1	80	138	138	25
Mindanao	2026	8	31	2	76	138	138	25
Mindanao	2026	8	31	3	73	138	138	25
Mindanao	2026	8	31	4	73	138	138	25
Mindanao	2026	8	31	5	78	138	138	25
Mindanao	2026	8	31	6	82	138	138	25
Mindanao	2026	8	31	7	74	138	138	25
Mindanao	2026	8	31	8	84	138	138	25
Mindanao	2026	8	31	9	98	138	138	25
Mindanao	2026	8	31	10	106	138	138	25
Mindanao	2026	8	31	11	111	138	138	25
Mindanao	2026	8	31	12	107	138	138	25
Mindanao	2026	8	31	13	112	138	138	25
Mindanao	2026	8	31	14	117	138	138	25
Mindanao	2026	8	31	15	116	138	138	25
Mindanao	2026	8	31	16	114	138	138	25
Mindanao	2026	8	31	17	105	138	138	25
Mindanao	2026	8	31	18	109	138	138	25
Mindanao	2026	8	31	19	108	138	138	25
Mindanao	2026	8	31	20	106	138	138	25
Mindanao	2026	8	31	21	101	138	138	25
Mindanao	2026	8	31	22	94	138	138	25
Mindanao	2026	8	31	23	87	138	138	25
Mindanao	2026	8	31	24	82	138	138	25
Mindanao	2026	9	1	1	68	138	138	25
Mindanao	2026	9	1	2	66	138	138	25
Mindanao	2026	9	1	3	65	138	138	25
Mindanao	2026	9	1	4	64	138	138	25
Mindanao	2026	9	1	5	72	138	138	25
Mindanao	2026	9	1	6	74	138	138	25
Mindanao	2026	9	1	7	65	138	138	25
Mindanao	2026	9	1	8	74	138	138	25
Mindanao	2026	9	1	9	88	138	138	25
Mindanao	2026	9	1	10	101	138	138	25
Mindanao	2026	9	1	11	106	138	138	25
Mindanao	2026	9	1	12	104	138	138	25
Mindanao	2026	9	1	13	109	138	138	25
Mindanao	2026	9	1	14	116	138	138	25
Mindanao	2026	9	1	15	116	138	138	25
Mindanao	2026	9	1	16	114	138	138	25
Mindanao	2026	9	1	17	107	138	138	25
Mindanao	2026	9	1	18	109	138	138	25
Mindanao	2026	9	1	19	111	138	138	25
Mindanao	2026	9	1	20	108	138	138	25
Mindanao	2026	9	1	21	104	138	138	25
Mindanao	2026	9	1	22	96	138	138	25
Mindanao	2026	9	1	23	89	138	138	25
Mindanao	2026	9	1	24	83	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	2	1	71	138	138	25
Mindanao	2026	9	2	2	68	138	138	25
Mindanao	2026	9	2	3	66	138	138	25
Mindanao	2026	9	2	4	66	138	138	25
Mindanao	2026	9	2	5	70	138	138	25
Mindanao	2026	9	2	6	76	138	138	25
Mindanao	2026	9	2	7	67	138	138	25
Mindanao	2026	9	2	8	79	138	138	25
Mindanao	2026	9	2	9	92	138	138	25
Mindanao	2026	9	2	10	101	138	138	25
Mindanao	2026	9	2	11	106	138	138	25
Mindanao	2026	9	2	12	104	138	138	25
Mindanao	2026	9	2	13	107	138	138	25
Mindanao	2026	9	2	14	113	138	138	25
Mindanao	2026	9	2	15	112	138	138	25
Mindanao	2026	9	2	16	108	138	138	25
Mindanao	2026	9	2	17	102	138	138	25
Mindanao	2026	9	2	18	106	138	138	25
Mindanao	2026	9	2	19	104	138	138	25
Mindanao	2026	9	2	20	100	138	138	25
Mindanao	2026	9	2	21	96	138	138	25
Mindanao	2026	9	2	22	89	138	138	25
Mindanao	2026	9	2	23	83	138	138	25
Mindanao	2026	9	2	24	78	138	138	25
Mindanao	2026	9	3	1	77	138	138	25
Mindanao	2026	9	3	2	76	138	138	25
Mindanao	2026	9	3	3	71	138	138	25
Mindanao	2026	9	3	4	71	138	138	25
Mindanao	2026	9	3	5	75	138	138	25
Mindanao	2026	9	3	6	78	138	138	25
Mindanao	2026	9	3	7	71	138	138	25
Mindanao	2026	9	3	8	82	138	138	25
Mindanao	2026	9	3	9	97	138	138	25
Mindanao	2026	9	3	10	99	138	138	25
Mindanao	2026	9	3	11	108	138	138	25
Mindanao	2026	9	3	12	106	138	138	25
Mindanao	2026	9	3	13	107	138	138	25
Mindanao	2026	9	3	14	110	138	138	25
Mindanao	2026	9	3	15	111	138	138	25
Mindanao	2026	9	3	16	110	138	138	25
Mindanao	2026	9	3	17	99	138	138	25
Mindanao	2026	9	3	18	102	138	138	25
Mindanao	2026	9	3	19	104	138	138	25
Mindanao	2026	9	3	20	102	138	138	25
Mindanao	2026	9	3	21	98	138	138	25
Mindanao	2026	9	3	22	90	138	138	25
Mindanao	2026	9	3	23	83	138	138	25
Mindanao	2026	9	3	24	77	138	138	25
Mindanao	2026	9	4	1	75	138	138	25
Mindanao	2026	9	4	2	70	138	138	25
Mindanao	2026	9	4	3	69	138	138	25
Mindanao	2026	9	4	4	67	138	138	25
Mindanao	2026	9	4	5	70	138	138	25
Mindanao	2026	9	4	6	73	138	138	25
Mindanao	2026	9	4	7	70	138	138	25
Mindanao	2026	9	4	8	82	138	138	25
Mindanao	2026	9	4	9	96	138	138	25
Mindanao	2026	9	4	10	106	138	138	25
Mindanao	2026	9	4	11	111	138	138	25
Mindanao	2026	9	4	12	109	138	138	25
Mindanao	2026	9	4	13	113	138	138	25
Mindanao	2026	9	4	14	114	138	138	25
Mindanao	2026	9	4	15	110	138	138	25
Mindanao	2026	9	4	16	115	138	138	25
Mindanao	2026	9	4	17	107	138	138	25
Mindanao	2026	9	4	18	112	138	138	25
Mindanao	2026	9	4	19	107	138	138	25
Mindanao	2026	9	4	20	106	138	138	25
Mindanao	2026	9	4	21	105	138	138	25
Mindanao	2026	9	4	22	98	138	138	25
Mindanao	2026	9	4	23	94	138	138	25
Mindanao	2026	9	4	24	88	138	138	25
Mindanao	2026	9	5	1	83	138	138	25
Mindanao	2026	9	5	2	80	138	138	25
Mindanao	2026	9	5	3	78	138	138	25
Mindanao	2026	9	5	4	76	138	138	25
Mindanao	2026	9	5	5	75	138	138	25
Mindanao	2026	9	5	6	79	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	5	7	77	138	138	25
Mindanao	2026	9	5	8	82	138	138	25
Mindanao	2026	9	5	9	90	138	138	25
Mindanao	2026	9	5	10	96	138	138	25
Mindanao	2026	9	5	11	102	138	138	25
Mindanao	2026	9	5	12	102	138	138	25
Mindanao	2026	9	5	13	101	138	138	25
Mindanao	2026	9	5	14	106	138	138	25
Mindanao	2026	9	5	15	108	138	138	25
Mindanao	2026	9	5	16	100	138	138	25
Mindanao	2026	9	5	17	97	138	138	25
Mindanao	2026	9	5	18	107	138	138	25
Mindanao	2026	9	5	19	104	138	138	25
Mindanao	2026	9	5	20	102	138	138	25
Mindanao	2026	9	5	21	98	138	138	25
Mindanao	2026	9	5	22	93	138	138	25
Mindanao	2026	9	5	23	87	138	138	25
Mindanao	2026	9	5	24	79	138	138	25
Mindanao	2026	9	6	1	76	138	138	25
Mindanao	2026	9	6	2	74	138	138	25
Mindanao	2026	9	6	3	70	138	138	25
Mindanao	2026	9	6	4	68	138	138	25
Mindanao	2026	9	6	5	67	138	138	25
Mindanao	2026	9	6	6	68	138	138	25
Mindanao	2026	9	6	7	67	138	138	25
Mindanao	2026	9	6	8	69	138	138	25
Mindanao	2026	9	6	9	72	138	138	25
Mindanao	2026	9	6	10	81	138	138	25
Mindanao	2026	9	6	11	85	138	138	25
Mindanao	2026	9	6	12	86	138	138	25
Mindanao	2026	9	6	13	87	138	138	25
Mindanao	2026	9	6	14	90	138	138	25
Mindanao	2026	9	6	15	89	138	138	25
Mindanao	2026	9	6	16	83	138	138	25
Mindanao	2026	9	6	17	89	138	138	25
Mindanao	2026	9	6	18	98	138	138	25
Mindanao	2026	9	6	19	96	138	138	25
Mindanao	2026	9	6	20	94	138	138	25
Mindanao	2026	9	6	21	90	138	138	25
Mindanao	2026	9	6	22	85	138	138	25
Mindanao	2026	9	6	23	79	138	138	25
Mindanao	2026	9	6	24	75	138	138	25
Mindanao	2026	9	7	1	70	138	138	25
Mindanao	2026	9	7	2	68	138	138	25
Mindanao	2026	9	7	3	66	138	138	25
Mindanao	2026	9	7	4	64	138	138	25
Mindanao	2026	9	7	5	71	138	138	25
Mindanao	2026	9	7	6	72	138	138	25
Mindanao	2026	9	7	7	66	138	138	25
Mindanao	2026	9	7	8	78	138	138	25
Mindanao	2026	9	7	9	91	138	138	25
Mindanao	2026	9	7	10	98	138	138	25
Mindanao	2026	9	7	11	105	138	138	25
Mindanao	2026	9	7	12	104	138	138	25
Mindanao	2026	9	7	13	105	138	138	25
Mindanao	2026	9	7	14	109	138	138	25
Mindanao	2026	9	7	15	107	138	138	25
Mindanao	2026	9	7	16	104	138	138	25
Mindanao	2026	9	7	17	100	138	138	25
Mindanao	2026	9	7	18	105	138	138	25
Mindanao	2026	9	7	19	99	138	138	25
Mindanao	2026	9	7	20	97	138	138	25
Mindanao	2026	9	7	21	92	138	138	25
Mindanao	2026	9	7	22	86	138	138	25
Mindanao	2026	9	7	23	82	138	138	25
Mindanao	2026	9	7	24	76	138	138	25
Mindanao	2026	9	8	1	72	138	138	25
Mindanao	2026	9	8	2	69	138	138	25
Mindanao	2026	9	8	3	67	138	138	25
Mindanao	2026	9	8	4	66	138	138	25
Mindanao	2026	9	8	5	73	138	138	25
Mindanao	2026	9	8	6	78	138	138	25
Mindanao	2026	9	8	7	70	138	138	25
Mindanao	2026	9	8	8	80	138	138	25
Mindanao	2026	9	8	9	92	138	138	25
Mindanao	2026	9	8	10	101	138	138	25
Mindanao	2026	9	8	11	106	138	138	25
Mindanao	2026	9	8	12	101	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	8	13	96	138	138	25
Mindanao	2026	9	8	14	106	138	138	25
Mindanao	2026	9	8	15	105	138	138	25
Mindanao	2026	9	8	16	104	138	138	25
Mindanao	2026	9	8	17	100	138	138	25
Mindanao	2026	9	8	18	105	138	138	25
Mindanao	2026	9	8	19	102	138	138	25
Mindanao	2026	9	8	20	96	138	138	25
Mindanao	2026	9	8	21	92	138	138	25
Mindanao	2026	9	8	22	85	138	138	25
Mindanao	2026	9	8	23	80	138	138	25
Mindanao	2026	9	8	24	75	138	138	25
Mindanao	2026	9	9	1	71	138	138	25
Mindanao	2026	9	9	2	68	138	138	25
Mindanao	2026	9	9	3	66	138	138	25
Mindanao	2026	9	9	4	66	138	138	25
Mindanao	2026	9	9	5	70	138	138	25
Mindanao	2026	9	9	6	76	138	138	25
Mindanao	2026	9	9	7	67	138	138	25
Mindanao	2026	9	9	8	79	138	138	25
Mindanao	2026	9	9	9	92	138	138	25
Mindanao	2026	9	9	10	101	138	138	25
Mindanao	2026	9	9	11	106	138	138	25
Mindanao	2026	9	9	12	104	138	138	25
Mindanao	2026	9	9	13	107	138	138	25
Mindanao	2026	9	9	14	113	138	138	25
Mindanao	2026	9	9	15	112	138	138	25
Mindanao	2026	9	9	16	108	138	138	25
Mindanao	2026	9	9	17	102	138	138	25
Mindanao	2026	9	9	18	106	138	138	25
Mindanao	2026	9	9	19	104	138	138	25
Mindanao	2026	9	9	20	100	138	138	25
Mindanao	2026	9	9	21	96	138	138	25
Mindanao	2026	9	9	22	89	138	138	25
Mindanao	2026	9	9	23	83	138	138	25
Mindanao	2026	9	9	24	78	138	138	25
Mindanao	2026	9	10	1	74	138	138	25
Mindanao	2026	9	10	2	71	138	138	25
Mindanao	2026	9	10	3	69	138	138	25
Mindanao	2026	9	10	4	64	138	138	25
Mindanao	2026	9	10	5	72	138	138	25
Mindanao	2026	9	10	6	77	138	138	25
Mindanao	2026	9	10	7	69	138	138	25
Mindanao	2026	9	10	8	81	138	138	25
Mindanao	2026	9	10	9	95	138	138	25
Mindanao	2026	9	10	10	103	138	138	25
Mindanao	2026	9	10	11	108	138	138	25
Mindanao	2026	9	10	12	106	138	138	25
Mindanao	2026	9	10	13	108	138	138	25
Mindanao	2026	9	10	14	113	138	138	25
Mindanao	2026	9	10	15	111	138	138	25
Mindanao	2026	9	10	16	108	138	138	25
Mindanao	2026	9	10	17	103	138	138	25
Mindanao	2026	9	10	18	105	138	138	25
Mindanao	2026	9	10	19	101	138	138	25
Mindanao	2026	9	10	20	97	138	138	25
Mindanao	2026	9	10	21	91	138	138	25
Mindanao	2026	9	10	22	85	138	138	25
Mindanao	2026	9	10	23	80	138	138	25
Mindanao	2026	9	10	24	75	138	138	25
Mindanao	2026	9	11	1	71	138	138	25
Mindanao	2026	9	11	2	68	138	138	25
Mindanao	2026	9	11	3	65	138	138	25
Mindanao	2026	9	11	4	65	138	138	25
Mindanao	2026	9	11	5	70	138	138	25
Mindanao	2026	9	11	6	75	138	138	25
Mindanao	2026	9	11	7	70	138	138	25
Mindanao	2026	9	11	8	78	138	138	25
Mindanao	2026	9	11	9	91	138	138	25
Mindanao	2026	9	11	10	100	138	138	25
Mindanao	2026	9	11	11	106	138	138	25
Mindanao	2026	9	11	12	104	138	138	25
Mindanao	2026	9	11	13	108	138	138	25
Mindanao	2026	9	11	14	114	138	138	25
Mindanao	2026	9	11	15	112	138	138	25
Mindanao	2026	9	11	16	109	138	138	25
Mindanao	2026	9	11	17	101	138	138	25
Mindanao	2026	9	11	18	105	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	11	19	101	138	138	25
Mindanao	2026	9	11	20	99	138	138	25
Mindanao	2026	9	11	21	93	138	138	25
Mindanao	2026	9	11	22	87	138	138	25
Mindanao	2026	9	11	23	83	138	138	25
Mindanao	2026	9	11	24	79	138	138	25
Mindanao	2026	9	12	1	74	138	138	25
Mindanao	2026	9	12	2	70	138	138	25
Mindanao	2026	9	12	3	67	138	138	25
Mindanao	2026	9	12	4	67	138	138	25
Mindanao	2026	9	12	5	68	138	138	25
Mindanao	2026	9	12	6	71	138	138	25
Mindanao	2026	9	12	7	68	138	138	25
Mindanao	2026	9	12	8	72	138	138	25
Mindanao	2026	9	12	9	82	138	138	25
Mindanao	2026	9	12	10	90	138	138	25
Mindanao	2026	9	12	11	95	138	138	25
Mindanao	2026	9	12	12	95	138	138	25
Mindanao	2026	9	12	13	98	138	138	25
Mindanao	2026	9	12	14	102	138	138	25
Mindanao	2026	9	12	15	102	138	138	25
Mindanao	2026	9	12	16	96	138	138	25
Mindanao	2026	9	12	17	92	138	138	25
Mindanao	2026	9	12	18	99	138	138	25
Mindanao	2026	9	12	19	101	138	138	25
Mindanao	2026	9	12	20	100	138	138	25
Mindanao	2026	9	12	21	94	138	138	25
Mindanao	2026	9	12	22	88	138	138	25
Mindanao	2026	9	12	23	82	138	138	25
Mindanao	2026	9	12	24	77	138	138	25
Mindanao	2026	9	13	1	72	138	138	25
Mindanao	2026	9	13	2	70	138	138	25
Mindanao	2026	9	13	3	67	138	138	25
Mindanao	2026	9	13	4	64	138	138	25
Mindanao	2026	9	13	5	65	138	138	25
Mindanao	2026	9	13	6	67	138	138	25
Mindanao	2026	9	13	7	63	138	138	25
Mindanao	2026	9	13	8	65	138	138	25
Mindanao	2026	9	13	9	67	138	138	25
Mindanao	2026	9	13	10	76	138	138	25
Mindanao	2026	9	13	11	79	138	138	25
Mindanao	2026	9	13	12	80	138	138	25
Mindanao	2026	9	13	13	81	138	138	25
Mindanao	2026	9	13	14	88	138	138	25
Mindanao	2026	9	13	15	86	138	138	25
Mindanao	2026	9	13	16	85	138	138	25
Mindanao	2026	9	13	17	86	138	138	25
Mindanao	2026	9	13	18	97	138	138	25
Mindanao	2026	9	13	19	98	138	138	25
Mindanao	2026	9	13	20	95	138	138	25
Mindanao	2026	9	13	21	93	138	138	25
Mindanao	2026	9	13	22	86	138	138	25
Mindanao	2026	9	13	23	80	138	138	25
Mindanao	2026	9	13	24	76	138	138	25
Mindanao	2026	9	14	1	71	138	138	25
Mindanao	2026	9	14	2	66	138	138	25
Mindanao	2026	9	14	3	64	138	138	25
Mindanao	2026	9	14	4	64	138	138	25
Mindanao	2026	9	14	5	71	138	138	25
Mindanao	2026	9	14	6	70	138	138	25
Mindanao	2026	9	14	7	66	138	138	25
Mindanao	2026	9	14	8	78	138	138	25
Mindanao	2026	9	14	9	93	138	138	25
Mindanao	2026	9	14	10	105	138	138	25
Mindanao	2026	9	14	11	109	138	138	25
Mindanao	2026	9	14	12	108	138	138	25
Mindanao	2026	9	14	13	111	138	138	25
Mindanao	2026	9	14	14	118	138	138	25
Mindanao	2026	9	14	15	115	138	138	25
Mindanao	2026	9	14	16	112	138	138	25
Mindanao	2026	9	14	17	104	138	138	25
Mindanao	2026	9	14	18	110	138	138	25
Mindanao	2026	9	14	19	107	138	138	25
Mindanao	2026	9	14	20	104	138	138	25
Mindanao	2026	9	14	21	101	138	138	25
Mindanao	2026	9	14	22	93	138	138	25
Mindanao	2026	9	14	23	86	138	138	25
Mindanao	2026	9	14	24	81	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	15	1	77	138	138	25
Mindanao	2026	9	15	2	74	138	138	25
Mindanao	2026	9	15	3	71	138	138	25
Mindanao	2026	9	15	4	70	138	138	25
Mindanao	2026	9	15	5	78	138	138	25
Mindanao	2026	9	15	6	77	138	138	25
Mindanao	2026	9	15	7	72	138	138	25
Mindanao	2026	9	15	8	85	138	138	25
Mindanao	2026	9	15	9	99	138	138	25
Mindanao	2026	9	15	10	106	138	138	25
Mindanao	2026	9	15	11	112	138	138	25
Mindanao	2026	9	15	12	110	138	138	25
Mindanao	2026	9	15	13	112	138	138	25
Mindanao	2026	9	15	14	118	138	138	25
Mindanao	2026	9	15	15	117	138	138	25
Mindanao	2026	9	15	16	109	138	138	25
Mindanao	2026	9	15	17	106	138	138	25
Mindanao	2026	9	15	18	109	138	138	25
Mindanao	2026	9	15	19	108	138	138	25
Mindanao	2026	9	15	20	103	138	138	25
Mindanao	2026	9	15	21	99	138	138	25
Mindanao	2026	9	15	22	89	138	138	25
Mindanao	2026	9	15	23	84	138	138	25
Mindanao	2026	9	15	24	78	138	138	25
Mindanao	2026	9	16	1	74	138	138	25
Mindanao	2026	9	16	2	71	138	138	25
Mindanao	2026	9	16	3	69	138	138	25
Mindanao	2026	9	16	4	69	138	138	25
Mindanao	2026	9	16	5	74	138	138	25
Mindanao	2026	9	16	6	76	138	138	25
Mindanao	2026	9	16	7	68	138	138	25
Mindanao	2026	9	16	8	82	138	138	25
Mindanao	2026	9	16	9	96	138	138	25
Mindanao	2026	9	16	10	107	138	138	25
Mindanao	2026	9	16	11	111	138	138	25
Mindanao	2026	9	16	12	109	138	138	25
Mindanao	2026	9	16	13	112	138	138	25
Mindanao	2026	9	16	14	117	138	138	25
Mindanao	2026	9	16	15	113	138	138	25
Mindanao	2026	9	16	16	108	138	138	25
Mindanao	2026	9	16	17	101	138	138	25
Mindanao	2026	9	16	18	108	138	138	25
Mindanao	2026	9	16	19	102	138	138	25
Mindanao	2026	9	16	20	104	138	138	25
Mindanao	2026	9	16	21	98	138	138	25
Mindanao	2026	9	16	22	91	138	138	25
Mindanao	2026	9	16	23	85	138	138	25
Mindanao	2026	9	16	24	81	138	138	25
Mindanao	2026	9	17	1	78	138	138	25
Mindanao	2026	9	17	2	74	138	138	25
Mindanao	2026	9	17	3	71	138	138	25
Mindanao	2026	9	17	4	69	138	138	25
Mindanao	2026	9	17	5	76	138	138	25
Mindanao	2026	9	17	6	79	138	138	25
Mindanao	2026	9	17	7	74	138	138	25
Mindanao	2026	9	17	8	81	138	138	25
Mindanao	2026	9	17	9	96	138	138	25
Mindanao	2026	9	17	10	105	138	138	25
Mindanao	2026	9	17	11	108	138	138	25
Mindanao	2026	9	17	12	104	138	138	25
Mindanao	2026	9	17	13	105	138	138	25
Mindanao	2026	9	17	14	108	138	138	25
Mindanao	2026	9	17	15	105	138	138	25
Mindanao	2026	9	17	16	103	138	138	25
Mindanao	2026	9	17	17	98	138	138	25
Mindanao	2026	9	17	18	105	138	138	25
Mindanao	2026	9	17	19	99	138	138	25
Mindanao	2026	9	17	20	98	138	138	25
Mindanao	2026	9	17	21	92	138	138	25
Mindanao	2026	9	17	22	86	138	138	25
Mindanao	2026	9	17	23	80	138	138	25
Mindanao	2026	9	17	24	76	138	138	25
Mindanao	2026	9	18	1	71	138	138	25
Mindanao	2026	9	18	2	69	138	138	25
Mindanao	2026	9	18	3	67	138	138	25
Mindanao	2026	9	18	4	65	138	138	25
Mindanao	2026	9	18	5	69	138	138	25
Mindanao	2026	9	18	6	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	18	7	69	138	138	25
Mindanao	2026	9	18	8	79	138	138	25
Mindanao	2026	9	18	9	93	138	138	25
Mindanao	2026	9	18	10	96	138	138	25
Mindanao	2026	9	18	11	102	138	138	25
Mindanao	2026	9	18	12	103	138	138	25
Mindanao	2026	9	18	13	106	138	138	25
Mindanao	2026	9	18	14	114	138	138	25
Mindanao	2026	9	18	15	112	138	138	25
Mindanao	2026	9	18	16	109	138	138	25
Mindanao	2026	9	18	17	103	138	138	25
Mindanao	2026	9	18	18	110	138	138	25
Mindanao	2026	9	18	19	105	138	138	25
Mindanao	2026	9	18	20	101	138	138	25
Mindanao	2026	9	18	21	98	138	138	25
Mindanao	2026	9	18	22	91	138	138	25
Mindanao	2026	9	18	23	86	138	138	25
Mindanao	2026	9	18	24	80	138	138	25
Mindanao	2026	9	19	1	77	138	138	25
Mindanao	2026	9	19	2	73	138	138	25
Mindanao	2026	9	19	3	70	138	138	25
Mindanao	2026	9	19	4	69	138	138	25
Mindanao	2026	9	19	5	69	138	138	25
Mindanao	2026	9	19	6	72	138	138	25
Mindanao	2026	9	19	7	68	138	138	25
Mindanao	2026	9	19	8	76	138	138	25
Mindanao	2026	9	19	9	86	138	138	25
Mindanao	2026	9	19	10	94	138	138	25
Mindanao	2026	9	19	11	98	138	138	25
Mindanao	2026	9	19	12	98	138	138	25
Mindanao	2026	9	19	13	101	138	138	25
Mindanao	2026	9	19	14	106	138	138	25
Mindanao	2026	9	19	15	104	138	138	25
Mindanao	2026	9	19	16	101	138	138	25
Mindanao	2026	9	19	17	96	138	138	25
Mindanao	2026	9	19	18	108	138	138	25
Mindanao	2026	9	19	19	107	138	138	25
Mindanao	2026	9	19	20	101	138	138	25
Mindanao	2026	9	19	21	99	138	138	25
Mindanao	2026	9	19	22	94	138	138	25
Mindanao	2026	9	19	23	89	138	138	25
Mindanao	2026	9	19	24	83	138	138	25
Mindanao	2026	9	20	1	79	138	138	25
Mindanao	2026	9	20	2	76	138	138	25
Mindanao	2026	9	20	3	72	138	138	25
Mindanao	2026	9	20	4	69	138	138	25
Mindanao	2026	9	20	5	70	138	138	25
Mindanao	2026	9	20	6	70	138	138	25
Mindanao	2026	9	20	7	70	138	138	25
Mindanao	2026	9	20	8	70	138	138	25
Mindanao	2026	9	20	9	75	138	138	25
Mindanao	2026	9	20	10	81	138	138	25
Mindanao	2026	9	20	11	86	138	138	25
Mindanao	2026	9	20	12	88	138	138	25
Mindanao	2026	9	20	13	90	138	138	25
Mindanao	2026	9	20	14	93	138	138	25
Mindanao	2026	9	20	15	91	138	138	25
Mindanao	2026	9	20	16	89	138	138	25
Mindanao	2026	9	20	17	84	138	138	25
Mindanao	2026	9	20	18	98	138	138	25
Mindanao	2026	9	20	19	100	138	138	25
Mindanao	2026	9	20	20	97	138	138	25
Mindanao	2026	9	20	21	95	138	138	25
Mindanao	2026	9	20	22	88	138	138	25
Mindanao	2026	9	20	23	83	138	138	25
Mindanao	2026	9	20	24	78	138	138	25
Mindanao	2026	9	21	1	75	138	138	25
Mindanao	2026	9	21	2	71	138	138	25
Mindanao	2026	9	21	3	67	138	138	25
Mindanao	2026	9	21	4	68	138	138	25
Mindanao	2026	9	21	5	72	138	138	25
Mindanao	2026	9	21	6	75	138	138	25
Mindanao	2026	9	21	7	67	138	138	25
Mindanao	2026	9	21	8	78	138	138	25
Mindanao	2026	9	21	9	95	138	138	25
Mindanao	2026	9	21	10	105	138	138	25
Mindanao	2026	9	21	11	110	138	138	25
Mindanao	2026	9	21	12	109	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	21	13	111	138	138	25
Mindanao	2026	9	21	14	118	138	138	25
Mindanao	2026	9	21	15	117	138	138	25
Mindanao	2026	9	21	16	113	138	138	25
Mindanao	2026	9	21	17	104	138	138	25
Mindanao	2026	9	21	18	113	138	138	25
Mindanao	2026	9	21	19	109	138	138	25
Mindanao	2026	9	21	20	107	138	138	25
Mindanao	2026	9	21	21	102	138	138	25
Mindanao	2026	9	21	22	95	138	138	25
Mindanao	2026	9	21	23	89	138	138	25
Mindanao	2026	9	21	24	83	138	138	25
Mindanao	2026	9	22	1	80	138	138	25
Mindanao	2026	9	22	2	77	138	138	25
Mindanao	2026	9	22	3	73	138	138	25
Mindanao	2026	9	22	4	73	138	138	25
Mindanao	2026	9	22	5	77	138	138	25
Mindanao	2026	9	22	6	80	138	138	25
Mindanao	2026	9	22	7	74	138	138	25
Mindanao	2026	9	22	8	84	138	138	25
Mindanao	2026	9	22	9	98	138	138	25
Mindanao	2026	9	22	10	105	138	138	25
Mindanao	2026	9	22	11	112	138	138	25
Mindanao	2026	9	22	12	112	138	138	25
Mindanao	2026	9	22	13	113	138	138	25
Mindanao	2026	9	22	14	120	138	138	25
Mindanao	2026	9	22	15	116	138	138	25
Mindanao	2026	9	22	16	110	138	138	25
Mindanao	2026	9	22	17	105	138	138	25
Mindanao	2026	9	22	18	109	138	138	25
Mindanao	2026	9	22	19	104	138	138	25
Mindanao	2026	9	22	20	102	138	138	25
Mindanao	2026	9	22	21	98	138	138	25
Mindanao	2026	9	22	22	90	138	138	25
Mindanao	2026	9	22	23	83	138	138	25
Mindanao	2026	9	22	24	79	138	138	25
Mindanao	2026	9	23	1	76	138	138	25
Mindanao	2026	9	23	2	72	138	138	25
Mindanao	2026	9	23	3	69	138	138	25
Mindanao	2026	9	23	4	70	138	138	25
Mindanao	2026	9	23	5	75	138	138	25
Mindanao	2026	9	23	6	78	138	138	25
Mindanao	2026	9	23	7	71	138	138	25
Mindanao	2026	9	23	8	83	138	138	25
Mindanao	2026	9	23	9	96	138	138	25
Mindanao	2026	9	23	10	106	138	138	25
Mindanao	2026	9	23	11	110	138	138	25
Mindanao	2026	9	23	12	109	138	138	25
Mindanao	2026	9	23	13	112	138	138	25
Mindanao	2026	9	23	14	117	138	138	25
Mindanao	2026	9	23	15	115	138	138	25
Mindanao	2026	9	23	16	112	138	138	25
Mindanao	2026	9	23	17	104	138	138	25
Mindanao	2026	9	23	18	111	138	138	25
Mindanao	2026	9	23	19	107	138	138	25
Mindanao	2026	9	23	20	105	138	138	25
Mindanao	2026	9	23	21	101	138	138	25
Mindanao	2026	9	23	22	94	138	138	25
Mindanao	2026	9	23	23	88	138	138	25
Mindanao	2026	9	23	24	83	138	138	25
Mindanao	2026	9	24	1	78	138	138	25
Mindanao	2026	9	24	2	76	138	138	25
Mindanao	2026	9	24	3	72	138	138	25
Mindanao	2026	9	24	4	70	138	138	25
Mindanao	2026	9	24	5	76	138	138	25
Mindanao	2026	9	24	6	79	138	138	25
Mindanao	2026	9	24	7	71	138	138	25
Mindanao	2026	9	24	8	83	138	138	25
Mindanao	2026	9	24	9	96	138	138	25
Mindanao	2026	9	24	10	103	138	138	25
Mindanao	2026	9	24	11	111	138	138	25
Mindanao	2026	9	24	12	109	138	138	25
Mindanao	2026	9	24	13	111	138	138	25
Mindanao	2026	9	24	14	116	138	138	25
Mindanao	2026	9	24	15	114	138	138	25
Mindanao	2026	9	24	16	110	138	138	25
Mindanao	2026	9	24	17	104	138	138	25
Mindanao	2026	9	24	18	112	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	24	19	108	138	138	25
Mindanao	2026	9	24	20	104	138	138	25
Mindanao	2026	9	24	21	101	138	138	25
Mindanao	2026	9	24	22	94	138	138	25
Mindanao	2026	9	24	23	88	138	138	25
Mindanao	2026	9	24	24	82	138	138	25
Mindanao	2026	9	25	1	78	138	138	25
Mindanao	2026	9	25	2	75	138	138	25
Mindanao	2026	9	25	3	70	138	138	25
Mindanao	2026	9	25	4	70	138	138	25
Mindanao	2026	9	25	5	74	138	138	25
Mindanao	2026	9	25	6	79	138	138	25
Mindanao	2026	9	25	7	72	138	138	25
Mindanao	2026	9	25	8	84	138	138	25
Mindanao	2026	9	25	9	98	138	138	25
Mindanao	2026	9	25	10	104	138	138	25
Mindanao	2026	9	25	11	110	138	138	25
Mindanao	2026	9	25	12	110	138	138	25
Mindanao	2026	9	25	13	112	138	138	25
Mindanao	2026	9	25	14	115	138	138	25
Mindanao	2026	9	25	15	114	138	138	25
Mindanao	2026	9	25	16	109	138	138	25
Mindanao	2026	9	25	17	104	138	138	25
Mindanao	2026	9	25	18	109	138	138	25
Mindanao	2026	9	25	19	100	138	138	25
Mindanao	2026	9	25	20	98	138	138	25
Mindanao	2026	9	25	21	95	138	138	25
Mindanao	2026	9	25	22	89	138	138	25
Mindanao	2026	9	25	23	84	138	138	25
Mindanao	2026	9	25	24	78	138	138	25
Mindanao	2026	9	26	1	74	138	138	25
Mindanao	2026	9	26	2	71	138	138	25
Mindanao	2026	9	26	3	70	138	138	25
Mindanao	2026	9	26	4	68	138	138	25
Mindanao	2026	9	26	5	68	138	138	25
Mindanao	2026	9	26	6	70	138	138	25
Mindanao	2026	9	26	7	69	138	138	25
Mindanao	2026	9	26	8	76	138	138	25
Mindanao	2026	9	26	9	83	138	138	25
Mindanao	2026	9	26	10	89	138	138	25
Mindanao	2026	9	26	11	94	138	138	25
Mindanao	2026	9	26	12	94	138	138	25
Mindanao	2026	9	26	13	95	138	138	25
Mindanao	2026	9	26	14	99	138	138	25
Mindanao	2026	9	26	15	95	138	138	25
Mindanao	2026	9	26	16	93	138	138	25
Mindanao	2026	9	26	17	92	138	138	25
Mindanao	2026	9	26	18	104	138	138	25
Mindanao	2026	9	26	19	99	138	138	25
Mindanao	2026	9	26	20	95	138	138	25
Mindanao	2026	9	26	21	92	138	138	25
Mindanao	2026	9	26	22	87	138	138	25
Mindanao	2026	9	26	23	81	138	138	25
Mindanao	2026	9	26	24	77	138	138	25
Mindanao	2026	9	27	1	73	138	138	25
Mindanao	2026	9	27	2	70	138	138	25
Mindanao	2026	9	27	3	65	138	138	25
Mindanao	2026	9	27	4	64	138	138	25
Mindanao	2026	9	27	5	65	138	138	25
Mindanao	2026	9	27	6	65	138	138	25
Mindanao	2026	9	27	7	65	138	138	25
Mindanao	2026	9	27	8	67	138	138	25
Mindanao	2026	9	27	9	70	138	138	25
Mindanao	2026	9	27	10	73	138	138	25
Mindanao	2026	9	27	11	79	138	138	25
Mindanao	2026	9	27	12	78	138	138	25
Mindanao	2026	9	27	13	79	138	138	25
Mindanao	2026	9	27	14	79	138	138	25
Mindanao	2026	9	27	15	78	138	138	25
Mindanao	2026	9	27	16	76	138	138	25
Mindanao	2026	9	27	17	81	138	138	25
Mindanao	2026	9	27	18	94	138	138	25
Mindanao	2026	9	27	19	86	138	138	25
Mindanao	2026	9	27	20	84	138	138	25
Mindanao	2026	9	27	21	81	138	138	25
Mindanao	2026	9	27	22	74	138	138	25
Mindanao	2026	9	27	23	70	138	138	25
Mindanao	2026	9	27	24	67	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	9	28	1	65	138	138	25
Mindanao	2026	9	28	2	63	138	138	25
Mindanao	2026	9	28	3	60	138	138	25
Mindanao	2026	9	28	4	61	138	138	25
Mindanao	2026	9	28	5	67	138	138	25
Mindanao	2026	9	28	6	68	138	138	25
Mindanao	2026	9	28	7	64	138	138	25
Mindanao	2026	9	28	8	76	138	138	25
Mindanao	2026	9	28	9	88	138	138	25
Mindanao	2026	9	28	10	97	138	138	25
Mindanao	2026	9	28	11	104	138	138	25
Mindanao	2026	9	28	12	102	138	138	25
Mindanao	2026	9	28	13	105	138	138	25
Mindanao	2026	9	28	14	111	138	138	25
Mindanao	2026	9	28	15	111	138	138	25
Mindanao	2026	9	28	16	106	138	138	25
Mindanao	2026	9	28	17	100	138	138	25
Mindanao	2026	9	28	18	111	138	138	25
Mindanao	2026	9	28	19	105	138	138	25
Mindanao	2026	9	28	20	101	138	138	25
Mindanao	2026	9	28	21	99	138	138	25
Mindanao	2026	9	28	22	92	138	138	25
Mindanao	2026	9	28	23	86	138	138	25
Mindanao	2026	9	28	24	80	138	138	25
Mindanao	2026	9	29	1	75	138	138	25
Mindanao	2026	9	29	2	73	138	138	25
Mindanao	2026	9	29	3	71	138	138	25
Mindanao	2026	9	29	4	69	138	138	25
Mindanao	2026	9	29	5	76	138	138	25
Mindanao	2026	9	29	6	78	138	138	25
Mindanao	2026	9	29	7	71	138	138	25
Mindanao	2026	9	29	8	83	138	138	25
Mindanao	2026	9	29	9	96	138	138	25
Mindanao	2026	9	29	10	105	138	138	25
Mindanao	2026	9	29	11	110	138	138	25
Mindanao	2026	9	29	12	108	138	138	25
Mindanao	2026	9	29	13	108	138	138	25
Mindanao	2026	9	29	14	115	138	138	25
Mindanao	2026	9	29	15	112	138	138	25
Mindanao	2026	9	29	16	109	138	138	25
Mindanao	2026	9	29	17	103	138	138	25
Mindanao	2026	9	29	18	111	138	138	25
Mindanao	2026	9	29	19	107	138	138	25
Mindanao	2026	9	29	20	104	138	138	25
Mindanao	2026	9	29	21	99	138	138	25
Mindanao	2026	9	29	22	91	138	138	25
Mindanao	2026	9	29	23	88	138	138	25
Mindanao	2026	9	29	24	82	138	138	25
Mindanao	2026	9	30	1	79	138	138	25
Mindanao	2026	9	30	2	75	138	138	25
Mindanao	2026	9	30	3	70	138	138	25
Mindanao	2026	9	30	4	73	138	138	25
Mindanao	2026	9	30	5	76	138	138	25
Mindanao	2026	9	30	6	78	138	138	25
Mindanao	2026	9	30	7	71	138	138	25
Mindanao	2026	9	30	8	83	138	138	25
Mindanao	2026	9	30	9	94	138	138	25
Mindanao	2026	9	30	10	104	138	138	25
Mindanao	2026	9	30	11	108	138	138	25
Mindanao	2026	9	30	12	106	138	138	25
Mindanao	2026	9	30	13	107	138	138	25
Mindanao	2026	9	30	14	112	138	138	25
Mindanao	2026	9	30	15	108	138	138	25
Mindanao	2026	9	30	16	105	138	138	25
Mindanao	2026	9	30	17	100	138	138	25
Mindanao	2026	9	30	18	106	138	138	25
Mindanao	2026	9	30	19	101	138	138	25
Mindanao	2026	9	30	20	96	138	138	25
Mindanao	2026	9	30	21	93	138	138	25
Mindanao	2026	9	30	22	86	138	138	25
Mindanao	2026	9	30	23	81	138	138	25
Mindanao	2026	9	30	24	77	138	138	25
Mindanao	2026	10	1	1	72	138	138	25
Mindanao	2026	10	1	2	70	138	138	25
Mindanao	2026	10	1	3	68	138	138	25
Mindanao	2026	10	1	4	67	138	138	25
Mindanao	2026	10	1	5	69	138	138	25
Mindanao	2026	10	1	6	74	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	1	7	68	138	138	25
Mindanao	2026	10	1	8	78	138	138	25
Mindanao	2026	10	1	9	92	138	138	25
Mindanao	2026	10	1	10	97	138	138	25
Mindanao	2026	10	1	11	106	138	138	25
Mindanao	2026	10	1	12	104	138	138	25
Mindanao	2026	10	1	13	107	138	138	25
Mindanao	2026	10	1	14	112	138	138	25
Mindanao	2026	10	1	15	108	138	138	25
Mindanao	2026	10	1	16	106	138	138	25
Mindanao	2026	10	1	17	101	138	138	25
Mindanao	2026	10	1	18	107	138	138	25
Mindanao	2026	10	1	19	103	138	138	25
Mindanao	2026	10	1	20	99	138	138	25
Mindanao	2026	10	1	21	94	138	138	25
Mindanao	2026	10	1	22	89	138	138	25
Mindanao	2026	10	1	23	84	138	138	25
Mindanao	2026	10	1	24	76	138	138	25
Mindanao	2026	10	2	1	74	138	138	25
Mindanao	2026	10	2	2	72	138	138	25
Mindanao	2026	10	2	3	69	138	138	25
Mindanao	2026	10	2	4	68	138	138	25
Mindanao	2026	10	2	5	72	138	138	25
Mindanao	2026	10	2	6	76	138	138	25
Mindanao	2026	10	2	7	70	138	138	25
Mindanao	2026	10	2	8	80	138	138	25
Mindanao	2026	10	2	9	92	138	138	25
Mindanao	2026	10	2	10	101	138	138	25
Mindanao	2026	10	2	11	105	138	138	25
Mindanao	2026	10	2	12	103	138	138	25
Mindanao	2026	10	2	13	105	138	138	25
Mindanao	2026	10	2	14	106	138	138	25
Mindanao	2026	10	2	15	103	138	138	25
Mindanao	2026	10	2	16	101	138	138	25
Mindanao	2026	10	2	17	96	138	138	25
Mindanao	2026	10	2	18	103	138	138	25
Mindanao	2026	10	2	19	99	138	138	25
Mindanao	2026	10	2	20	97	138	138	25
Mindanao	2026	10	2	21	93	138	138	25
Mindanao	2026	10	2	22	86	138	138	25
Mindanao	2026	10	2	23	82	138	138	25
Mindanao	2026	10	2	24	77	138	138	25
Mindanao	2026	10	3	1	73	138	138	25
Mindanao	2026	10	3	2	71	138	138	25
Mindanao	2026	10	3	3	67	138	138	25
Mindanao	2026	10	3	4	66	138	138	25
Mindanao	2026	10	3	5	67	138	138	25
Mindanao	2026	10	3	6	69	138	138	25
Mindanao	2026	10	3	7	68	138	138	25
Mindanao	2026	10	3	8	73	138	138	25
Mindanao	2026	10	3	9	83	138	138	25
Mindanao	2026	10	3	10	90	138	138	25
Mindanao	2026	10	3	11	97	138	138	25
Mindanao	2026	10	3	12	96	138	138	25
Mindanao	2026	10	3	13	95	138	138	25
Mindanao	2026	10	3	14	98	138	138	25
Mindanao	2026	10	3	15	97	138	138	25
Mindanao	2026	10	3	16	94	138	138	25
Mindanao	2026	10	3	17	93	138	138	25
Mindanao	2026	10	3	18	103	138	138	25
Mindanao	2026	10	3	19	97	138	138	25
Mindanao	2026	10	3	20	94	138	138	25
Mindanao	2026	10	3	21	92	138	138	25
Mindanao	2026	10	3	22	85	138	138	25
Mindanao	2026	10	3	23	81	138	138	25
Mindanao	2026	10	3	24	74	138	138	25
Mindanao	2026	10	4	1	70	138	138	25
Mindanao	2026	10	4	2	68	138	138	25
Mindanao	2026	10	4	3	65	138	138	25
Mindanao	2026	10	4	4	61	138	138	25
Mindanao	2026	10	4	5	61	138	138	25
Mindanao	2026	10	4	6	62	138	138	25
Mindanao	2026	10	4	7	60	138	138	25
Mindanao	2026	10	4	8	63	138	138	25
Mindanao	2026	10	4	9	73	138	138	25
Mindanao	2026	10	4	10	78	138	138	25
Mindanao	2026	10	4	11	82	138	138	25
Mindanao	2026	10	4	12	83	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	4	13	83	138	138	25
Mindanao	2026	10	4	14	79	138	138	25
Mindanao	2026	10	4	15	83	138	138	25
Mindanao	2026	10	4	16	81	138	138	25
Mindanao	2026	10	4	17	78	138	138	25
Mindanao	2026	10	4	18	91	138	138	25
Mindanao	2026	10	4	19	88	138	138	25
Mindanao	2026	10	4	20	90	138	138	25
Mindanao	2026	10	4	21	87	138	138	25
Mindanao	2026	10	4	22	80	138	138	25
Mindanao	2026	10	4	23	75	138	138	25
Mindanao	2026	10	4	24	72	138	138	25
Mindanao	2026	10	5	1	68	138	138	25
Mindanao	2026	10	5	2	67	138	138	25
Mindanao	2026	10	5	3	63	138	138	25
Mindanao	2026	10	5	4	63	138	138	25
Mindanao	2026	10	5	5	68	138	138	25
Mindanao	2026	10	5	6	71	138	138	25
Mindanao	2026	10	5	7	64	138	138	25
Mindanao	2026	10	5	8	77	138	138	25
Mindanao	2026	10	5	9	90	138	138	25
Mindanao	2026	10	5	10	100	138	138	25
Mindanao	2026	10	5	11	101	138	138	25
Mindanao	2026	10	5	12	100	138	138	25
Mindanao	2026	10	5	13	98	138	138	25
Mindanao	2026	10	5	14	103	138	138	25
Mindanao	2026	10	5	15	105	138	138	25
Mindanao	2026	10	5	16	102	138	138	25
Mindanao	2026	10	5	17	97	138	138	25
Mindanao	2026	10	5	18	107	138	138	25
Mindanao	2026	10	5	19	101	138	138	25
Mindanao	2026	10	5	20	98	138	138	25
Mindanao	2026	10	5	21	93	138	138	25
Mindanao	2026	10	5	22	86	138	138	25
Mindanao	2026	10	5	23	80	138	138	25
Mindanao	2026	10	5	24	74	138	138	25
Mindanao	2026	10	6	1	71	138	138	25
Mindanao	2026	10	6	2	69	138	138	25
Mindanao	2026	10	6	3	66	138	138	25
Mindanao	2026	10	6	4	64	138	138	25
Mindanao	2026	10	6	5	72	138	138	25
Mindanao	2026	10	6	6	73	138	138	25
Mindanao	2026	10	6	7	66	138	138	25
Mindanao	2026	10	6	8	78	138	138	25
Mindanao	2026	10	6	9	93	138	138	25
Mindanao	2026	10	6	10	101	138	138	25
Mindanao	2026	10	6	11	107	138	138	25
Mindanao	2026	10	6	12	104	138	138	25
Mindanao	2026	10	6	13	107	138	138	25
Mindanao	2026	10	6	14	111	138	138	25
Mindanao	2026	10	6	15	106	138	138	25
Mindanao	2026	10	6	16	99	138	138	25
Mindanao	2026	10	6	17	91	138	138	25
Mindanao	2026	10	6	18	99	138	138	25
Mindanao	2026	10	6	19	92	138	138	25
Mindanao	2026	10	6	20	91	138	138	25
Mindanao	2026	10	6	21	86	138	138	25
Mindanao	2026	10	6	22	82	138	138	25
Mindanao	2026	10	6	23	77	138	138	25
Mindanao	2026	10	6	24	70	138	138	25
Mindanao	2026	10	7	1	68	138	138	25
Mindanao	2026	10	7	2	66	138	138	25
Mindanao	2026	10	7	3	65	138	138	25
Mindanao	2026	10	7	4	62	138	138	25
Mindanao	2026	10	7	5	68	138	138	25
Mindanao	2026	10	7	6	73	138	138	25
Mindanao	2026	10	7	7	65	138	138	25
Mindanao	2026	10	7	8	77	138	138	25
Mindanao	2026	10	7	9	89	138	138	25
Mindanao	2026	10	7	10	95	138	138	25
Mindanao	2026	10	7	11	98	138	138	25
Mindanao	2026	10	7	12	90	138	138	25
Mindanao	2026	10	7	13	94	138	138	25
Mindanao	2026	10	7	14	98	138	138	25
Mindanao	2026	10	7	15	99	138	138	25
Mindanao	2026	10	7	16	98	138	138	25
Mindanao	2026	10	7	17	95	138	138	25
Mindanao	2026	10	7	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	7	19	94	138	138	25
Mindanao	2026	10	7	20	92	138	138	25
Mindanao	2026	10	7	21	88	138	138	25
Mindanao	2026	10	7	22	80	138	138	25
Mindanao	2026	10	7	23	76	138	138	25
Mindanao	2026	10	7	24	70	138	138	25
Mindanao	2026	10	8	1	67	138	138	25
Mindanao	2026	10	8	2	65	138	138	25
Mindanao	2026	10	8	3	64	138	138	25
Mindanao	2026	10	8	4	64	138	138	25
Mindanao	2026	10	8	5	70	138	138	25
Mindanao	2026	10	8	6	73	138	138	25
Mindanao	2026	10	8	7	66	138	138	25
Mindanao	2026	10	8	8	76	138	138	25
Mindanao	2026	10	8	9	89	138	138	25
Mindanao	2026	10	8	10	99	138	138	25
Mindanao	2026	10	8	11	105	138	138	25
Mindanao	2026	10	8	12	103	138	138	25
Mindanao	2026	10	8	13	106	138	138	25
Mindanao	2026	10	8	14	111	138	138	25
Mindanao	2026	10	8	15	109	138	138	25
Mindanao	2026	10	8	16	107	138	138	25
Mindanao	2026	10	8	17	101	138	138	25
Mindanao	2026	10	8	18	111	138	138	25
Mindanao	2026	10	8	19	104	138	138	25
Mindanao	2026	10	8	20	99	138	138	25
Mindanao	2026	10	8	21	92	138	138	25
Mindanao	2026	10	8	22	86	138	138	25
Mindanao	2026	10	8	23	81	138	138	25
Mindanao	2026	10	8	24	75	138	138	25
Mindanao	2026	10	9	1	71	138	138	25
Mindanao	2026	10	9	2	68	138	138	25
Mindanao	2026	10	9	3	65	138	138	25
Mindanao	2026	10	9	4	67	138	138	25
Mindanao	2026	10	9	5	70	138	138	25
Mindanao	2026	10	9	6	75	138	138	25
Mindanao	2026	10	9	7	69	138	138	25
Mindanao	2026	10	9	8	80	138	138	25
Mindanao	2026	10	9	9	95	138	138	25
Mindanao	2026	10	9	10	102	138	138	25
Mindanao	2026	10	9	11	108	138	138	25
Mindanao	2026	10	9	12	108	138	138	25
Mindanao	2026	10	9	13	110	138	138	25
Mindanao	2026	10	9	14	115	138	138	25
Mindanao	2026	10	9	15	112	138	138	25
Mindanao	2026	10	9	16	109	138	138	25
Mindanao	2026	10	9	17	100	138	138	25
Mindanao	2026	10	9	18	110	138	138	25
Mindanao	2026	10	9	19	104	138	138	25
Mindanao	2026	10	9	20	102	138	138	25
Mindanao	2026	10	9	21	97	138	138	25
Mindanao	2026	10	9	22	89	138	138	25
Mindanao	2026	10	9	23	85	138	138	25
Mindanao	2026	10	9	24	79	138	138	25
Mindanao	2026	10	10	1	75	138	138	25
Mindanao	2026	10	10	2	72	138	138	25
Mindanao	2026	10	10	3	69	138	138	25
Mindanao	2026	10	10	4	68	138	138	25
Mindanao	2026	10	10	5	71	138	138	25
Mindanao	2026	10	10	6	71	138	138	25
Mindanao	2026	10	10	7	69	138	138	25
Mindanao	2026	10	10	8	73	138	138	25
Mindanao	2026	10	10	9	84	138	138	25
Mindanao	2026	10	10	10	92	138	138	25
Mindanao	2026	10	10	11	96	138	138	25
Mindanao	2026	10	10	12	96	138	138	25
Mindanao	2026	10	10	13	99	138	138	25
Mindanao	2026	10	10	14	102	138	138	25
Mindanao	2026	10	10	15	100	138	138	25
Mindanao	2026	10	10	16	93	138	138	25
Mindanao	2026	10	10	17	91	138	138	25
Mindanao	2026	10	10	18	108	138	138	25
Mindanao	2026	10	10	19	102	138	138	25
Mindanao	2026	10	10	20	100	138	138	25
Mindanao	2026	10	10	21	96	138	138	25
Mindanao	2026	10	10	22	90	138	138	25
Mindanao	2026	10	10	23	84	138	138	25
Mindanao	2026	10	10	24	79	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	11	1	75	138	138	25
Mindanao	2026	10	11	2	70	138	138	25
Mindanao	2026	10	11	3	68	138	138	25
Mindanao	2026	10	11	4	67	138	138	25
Mindanao	2026	10	11	5	68	138	138	25
Mindanao	2026	10	11	6	66	138	138	25
Mindanao	2026	10	11	7	65	138	138	25
Mindanao	2026	10	11	8	67	138	138	25
Mindanao	2026	10	11	9	73	138	138	25
Mindanao	2026	10	11	10	78	138	138	25
Mindanao	2026	10	11	11	82	138	138	25
Mindanao	2026	10	11	12	83	138	138	25
Mindanao	2026	10	11	13	84	138	138	25
Mindanao	2026	10	11	14	84	138	138	25
Mindanao	2026	10	11	15	81	138	138	25
Mindanao	2026	10	11	16	83	138	138	25
Mindanao	2026	10	11	17	83	138	138	25
Mindanao	2026	10	11	18	95	138	138	25
Mindanao	2026	10	11	19	94	138	138	25
Mindanao	2026	10	11	20	90	138	138	25
Mindanao	2026	10	11	21	87	138	138	25
Mindanao	2026	10	11	22	82	138	138	25
Mindanao	2026	10	11	23	77	138	138	25
Mindanao	2026	10	11	24	72	138	138	25
Mindanao	2026	10	12	1	69	138	138	25
Mindanao	2026	10	12	2	66	138	138	25
Mindanao	2026	10	12	3	63	138	138	25
Mindanao	2026	10	12	4	65	138	138	25
Mindanao	2026	10	12	5	70	138	138	25
Mindanao	2026	10	12	6	72	138	138	25
Mindanao	2026	10	12	7	64	138	138	25
Mindanao	2026	10	12	8	79	138	138	25
Mindanao	2026	10	12	9	93	138	138	25
Mindanao	2026	10	12	10	103	138	138	25
Mindanao	2026	10	12	11	109	138	138	25
Mindanao	2026	10	12	12	108	138	138	25
Mindanao	2026	10	12	13	109	138	138	25
Mindanao	2026	10	12	14	116	138	138	25
Mindanao	2026	10	12	15	114	138	138	25
Mindanao	2026	10	12	16	111	138	138	25
Mindanao	2026	10	12	17	104	138	138	25
Mindanao	2026	10	12	18	112	138	138	25
Mindanao	2026	10	12	19	106	138	138	25
Mindanao	2026	10	12	20	101	138	138	25
Mindanao	2026	10	12	21	97	138	138	25
Mindanao	2026	10	12	22	88	138	138	25
Mindanao	2026	10	12	23	84	138	138	25
Mindanao	2026	10	12	24	78	138	138	25
Mindanao	2026	10	13	1	75	138	138	25
Mindanao	2026	10	13	2	70	138	138	25
Mindanao	2026	10	13	3	69	138	138	25
Mindanao	2026	10	13	4	68	138	138	25
Mindanao	2026	10	13	5	72	138	138	25
Mindanao	2026	10	13	6	74	138	138	25
Mindanao	2026	10	13	7	69	138	138	25
Mindanao	2026	10	13	8	79	138	138	25
Mindanao	2026	10	13	9	94	138	138	25
Mindanao	2026	10	13	10	105	138	138	25
Mindanao	2026	10	13	11	111	138	138	25
Mindanao	2026	10	13	12	109	138	138	25
Mindanao	2026	10	13	13	110	138	138	25
Mindanao	2026	10	13	14	116	138	138	25
Mindanao	2026	10	13	15	115	138	138	25
Mindanao	2026	10	13	16	110	138	138	25
Mindanao	2026	10	13	17	104	138	138	25
Mindanao	2026	10	13	18	112	138	138	25
Mindanao	2026	10	13	19	105	138	138	25
Mindanao	2026	10	13	20	102	138	138	25
Mindanao	2026	10	13	21	97	138	138	25
Mindanao	2026	10	13	22	90	138	138	25
Mindanao	2026	10	13	23	86	138	138	25
Mindanao	2026	10	13	24	80	138	138	25
Mindanao	2026	10	14	1	76	138	138	25
Mindanao	2026	10	14	2	73	138	138	25
Mindanao	2026	10	14	3	71	138	138	25
Mindanao	2026	10	14	4	70	138	138	25
Mindanao	2026	10	14	5	73	138	138	25
Mindanao	2026	10	14	6	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	14	7	68	138	138	25
Mindanao	2026	10	14	8	81	138	138	25
Mindanao	2026	10	14	9	95	138	138	25
Mindanao	2026	10	14	10	105	138	138	25
Mindanao	2026	10	14	11	109	138	138	25
Mindanao	2026	10	14	12	106	138	138	25
Mindanao	2026	10	14	13	107	138	138	25
Mindanao	2026	10	14	14	112	138	138	25
Mindanao	2026	10	14	15	109	138	138	25
Mindanao	2026	10	14	16	107	138	138	25
Mindanao	2026	10	14	17	102	138	138	25
Mindanao	2026	10	14	18	111	138	138	25
Mindanao	2026	10	14	19	104	138	138	25
Mindanao	2026	10	14	20	100	138	138	25
Mindanao	2026	10	14	21	96	138	138	25
Mindanao	2026	10	14	22	90	138	138	25
Mindanao	2026	10	14	23	83	138	138	25
Mindanao	2026	10	14	24	80	138	138	25
Mindanao	2026	10	15	1	75	138	138	25
Mindanao	2026	10	15	2	73	138	138	25
Mindanao	2026	10	15	3	69	138	138	25
Mindanao	2026	10	15	4	70	138	138	25
Mindanao	2026	10	15	5	74	138	138	25
Mindanao	2026	10	15	6	76	138	138	25
Mindanao	2026	10	15	7	68	138	138	25
Mindanao	2026	10	15	8	83	138	138	25
Mindanao	2026	10	15	9	95	138	138	25
Mindanao	2026	10	15	10	104	138	138	25
Mindanao	2026	10	15	11	110	138	138	25
Mindanao	2026	10	15	12	109	138	138	25
Mindanao	2026	10	15	13	112	138	138	25
Mindanao	2026	10	15	14	115	138	138	25
Mindanao	2026	10	15	15	107	138	138	25
Mindanao	2026	10	15	16	106	138	138	25
Mindanao	2026	10	15	17	106	138	138	25
Mindanao	2026	10	15	18	112	138	138	25
Mindanao	2026	10	15	19	108	138	138	25
Mindanao	2026	10	15	20	103	138	138	25
Mindanao	2026	10	15	21	100	138	138	25
Mindanao	2026	10	15	22	91	138	138	25
Mindanao	2026	10	15	23	85	138	138	25
Mindanao	2026	10	15	24	80	138	138	25
Mindanao	2026	10	16	1	76	138	138	25
Mindanao	2026	10	16	2	73	138	138	25
Mindanao	2026	10	16	3	69	138	138	25
Mindanao	2026	10	16	4	67	138	138	25
Mindanao	2026	10	16	5	73	138	138	25
Mindanao	2026	10	16	6	74	138	138	25
Mindanao	2026	10	16	7	69	138	138	25
Mindanao	2026	10	16	8	82	138	138	25
Mindanao	2026	10	16	9	93	138	138	25
Mindanao	2026	10	16	10	105	138	138	25
Mindanao	2026	10	16	11	110	138	138	25
Mindanao	2026	10	16	12	108	138	138	25
Mindanao	2026	10	16	13	109	138	138	25
Mindanao	2026	10	16	14	113	138	138	25
Mindanao	2026	10	16	15	111	138	138	25
Mindanao	2026	10	16	16	105	138	138	25
Mindanao	2026	10	16	17	99	138	138	25
Mindanao	2026	10	16	18	104	138	138	25
Mindanao	2026	10	16	19	98	138	138	25
Mindanao	2026	10	16	20	96	138	138	25
Mindanao	2026	10	16	21	93	138	138	25
Mindanao	2026	10	16	22	86	138	138	25
Mindanao	2026	10	16	23	81	138	138	25
Mindanao	2026	10	16	24	77	138	138	25
Mindanao	2026	10	17	1	73	138	138	25
Mindanao	2026	10	17	2	71	138	138	25
Mindanao	2026	10	17	3	67	138	138	25
Mindanao	2026	10	17	4	66	138	138	25
Mindanao	2026	10	17	5	67	138	138	25
Mindanao	2026	10	17	6	68	138	138	25
Mindanao	2026	10	17	7	62	138	138	25
Mindanao	2026	10	17	8	70	138	138	25
Mindanao	2026	10	17	9	78	138	138	25
Mindanao	2026	10	17	10	84	138	138	25
Mindanao	2026	10	17	11	89	138	138	25
Mindanao	2026	10	17	12	88	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	17	13	90	138	138	25
Mindanao	2026	10	17	14	91	138	138	25
Mindanao	2026	10	17	15	90	138	138	25
Mindanao	2026	10	17	16	89	138	138	25
Mindanao	2026	10	17	17	91	138	138	25
Mindanao	2026	10	17	18	100	138	138	25
Mindanao	2026	10	17	19	99	138	138	25
Mindanao	2026	10	17	20	97	138	138	25
Mindanao	2026	10	17	21	92	138	138	25
Mindanao	2026	10	17	22	88	138	138	25
Mindanao	2026	10	17	23	81	138	138	25
Mindanao	2026	10	17	24	78	138	138	25
Mindanao	2026	10	18	1	74	138	138	25
Mindanao	2026	10	18	2	70	138	138	25
Mindanao	2026	10	18	3	68	138	138	25
Mindanao	2026	10	18	4	67	138	138	25
Mindanao	2026	10	18	5	66	138	138	25
Mindanao	2026	10	18	6	66	138	138	25
Mindanao	2026	10	18	7	63	138	138	25
Mindanao	2026	10	18	8	65	138	138	25
Mindanao	2026	10	18	9	71	138	138	25
Mindanao	2026	10	18	10	79	138	138	25
Mindanao	2026	10	18	11	85	138	138	25
Mindanao	2026	10	18	12	86	138	138	25
Mindanao	2026	10	18	13	87	138	138	25
Mindanao	2026	10	18	14	88	138	138	25
Mindanao	2026	10	18	15	87	138	138	25
Mindanao	2026	10	18	16	83	138	138	25
Mindanao	2026	10	18	17	87	138	138	25
Mindanao	2026	10	18	18	96	138	138	25
Mindanao	2026	10	18	19	93	138	138	25
Mindanao	2026	10	18	20	90	138	138	25
Mindanao	2026	10	18	21	87	138	138	25
Mindanao	2026	10	18	22	79	138	138	25
Mindanao	2026	10	18	23	76	138	138	25
Mindanao	2026	10	18	24	72	138	138	25
Mindanao	2026	10	19	1	70	138	138	25
Mindanao	2026	10	19	2	66	138	138	25
Mindanao	2026	10	19	3	65	138	138	25
Mindanao	2026	10	19	4	65	138	138	25
Mindanao	2026	10	19	5	69	138	138	25
Mindanao	2026	10	19	6	73	138	138	25
Mindanao	2026	10	19	7	65	138	138	25
Mindanao	2026	10	19	8	76	138	138	25
Mindanao	2026	10	19	9	89	138	138	25
Mindanao	2026	10	19	10	98	138	138	25
Mindanao	2026	10	19	11	105	138	138	25
Mindanao	2026	10	19	12	104	138	138	25
Mindanao	2026	10	19	13	104	138	138	25
Mindanao	2026	10	19	14	109	138	138	25
Mindanao	2026	10	19	15	107	138	138	25
Mindanao	2026	10	19	16	103	138	138	25
Mindanao	2026	10	19	17	101	138	138	25
Mindanao	2026	10	19	18	106	138	138	25
Mindanao	2026	10	19	19	100	138	138	25
Mindanao	2026	10	19	20	96	138	138	25
Mindanao	2026	10	19	21	92	138	138	25
Mindanao	2026	10	19	22	84	138	138	25
Mindanao	2026	10	19	23	80	138	138	25
Mindanao	2026	10	19	24	75	138	138	25
Mindanao	2026	10	20	1	70	138	138	25
Mindanao	2026	10	20	2	69	138	138	25
Mindanao	2026	10	20	3	66	138	138	25
Mindanao	2026	10	20	4	66	138	138	25
Mindanao	2026	10	20	5	70	138	138	25
Mindanao	2026	10	20	6	75	138	138	25
Mindanao	2026	10	20	7	70	138	138	25
Mindanao	2026	10	20	8	79	138	138	25
Mindanao	2026	10	20	9	92	138	138	25
Mindanao	2026	10	20	10	100	138	138	25
Mindanao	2026	10	20	11	102	138	138	25
Mindanao	2026	10	20	12	104	138	138	25
Mindanao	2026	10	20	13	107	138	138	25
Mindanao	2026	10	20	14	112	138	138	25
Mindanao	2026	10	20	15	111	138	138	25
Mindanao	2026	10	20	16	107	138	138	25
Mindanao	2026	10	20	17	102	138	138	25
Mindanao	2026	10	20	18	109	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	20	19	103	138	138	25
Mindanao	2026	10	20	20	102	138	138	25
Mindanao	2026	10	20	21	98	138	138	25
Mindanao	2026	10	20	22	90	138	138	25
Mindanao	2026	10	20	23	84	138	138	25
Mindanao	2026	10	20	24	79	138	138	25
Mindanao	2026	10	21	1	75	138	138	25
Mindanao	2026	10	21	2	71	138	138	25
Mindanao	2026	10	21	3	70	138	138	25
Mindanao	2026	10	21	4	69	138	138	25
Mindanao	2026	10	21	5	74	138	138	25
Mindanao	2026	10	21	6	77	138	138	25
Mindanao	2026	10	21	7	68	138	138	25
Mindanao	2026	10	21	8	79	138	138	25
Mindanao	2026	10	21	9	93	138	138	25
Mindanao	2026	10	21	10	102	138	138	25
Mindanao	2026	10	21	11	108	138	138	25
Mindanao	2026	10	21	12	106	138	138	25
Mindanao	2026	10	21	13	108	138	138	25
Mindanao	2026	10	21	14	113	138	138	25
Mindanao	2026	10	21	15	111	138	138	25
Mindanao	2026	10	21	16	107	138	138	25
Mindanao	2026	10	21	17	102	138	138	25
Mindanao	2026	10	21	18	108	138	138	25
Mindanao	2026	10	21	19	102	138	138	25
Mindanao	2026	10	21	20	98	138	138	25
Mindanao	2026	10	21	21	91	138	138	25
Mindanao	2026	10	21	22	86	138	138	25
Mindanao	2026	10	21	23	80	138	138	25
Mindanao	2026	10	21	24	74	138	138	25
Mindanao	2026	10	22	1	71	138	138	25
Mindanao	2026	10	22	2	69	138	138	25
Mindanao	2026	10	22	3	66	138	138	25
Mindanao	2026	10	22	4	65	138	138	25
Mindanao	2026	10	22	5	72	138	138	25
Mindanao	2026	10	22	6	75	138	138	25
Mindanao	2026	10	22	7	68	138	138	25
Mindanao	2026	10	22	8	79	138	138	25
Mindanao	2026	10	22	9	92	138	138	25
Mindanao	2026	10	22	10	102	138	138	25
Mindanao	2026	10	22	11	108	138	138	25
Mindanao	2026	10	22	12	105	138	138	25
Mindanao	2026	10	22	13	104	138	138	25
Mindanao	2026	10	22	14	109	138	138	25
Mindanao	2026	10	22	15	107	138	138	25
Mindanao	2026	10	22	16	105	138	138	25
Mindanao	2026	10	22	17	99	138	138	25
Mindanao	2026	10	22	18	111	138	138	25
Mindanao	2026	10	22	19	103	138	138	25
Mindanao	2026	10	22	20	100	138	138	25
Mindanao	2026	10	22	21	95	138	138	25
Mindanao	2026	10	22	22	88	138	138	25
Mindanao	2026	10	22	23	81	138	138	25
Mindanao	2026	10	22	24	78	138	138	25
Mindanao	2026	10	23	1	74	138	138	25
Mindanao	2026	10	23	2	70	138	138	25
Mindanao	2026	10	23	3	68	138	138	25
Mindanao	2026	10	23	4	67	138	138	25
Mindanao	2026	10	23	5	72	138	138	25
Mindanao	2026	10	23	6	74	138	138	25
Mindanao	2026	10	23	7	70	138	138	25
Mindanao	2026	10	23	8	79	138	138	25
Mindanao	2026	10	23	9	95	138	138	25
Mindanao	2026	10	23	10	104	138	138	25
Mindanao	2026	10	23	11	109	138	138	25
Mindanao	2026	10	23	12	104	138	138	25
Mindanao	2026	10	23	13	108	138	138	25
Mindanao	2026	10	23	14	113	138	138	25
Mindanao	2026	10	23	15	111	138	138	25
Mindanao	2026	10	23	16	109	138	138	25
Mindanao	2026	10	23	17	108	138	138	25
Mindanao	2026	10	23	18	115	138	138	25
Mindanao	2026	10	23	19	111	138	138	25
Mindanao	2026	10	23	20	107	138	138	25
Mindanao	2026	10	23	21	104	138	138	25
Mindanao	2026	10	23	22	96	138	138	25
Mindanao	2026	10	23	23	89	138	138	25
Mindanao	2026	10	23	24	79	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	24	1	74	138	138	25
Mindanao	2026	10	24	2	71	138	138	25
Mindanao	2026	10	24	3	69	138	138	25
Mindanao	2026	10	24	4	67	138	138	25
Mindanao	2026	10	24	5	68	138	138	25
Mindanao	2026	10	24	6	73	138	138	25
Mindanao	2026	10	24	7	70	138	138	25
Mindanao	2026	10	24	8	75	138	138	25
Mindanao	2026	10	24	9	85	138	138	25
Mindanao	2026	10	24	10	90	138	138	25
Mindanao	2026	10	24	11	98	138	138	25
Mindanao	2026	10	24	12	96	138	138	25
Mindanao	2026	10	24	13	97	138	138	25
Mindanao	2026	10	24	14	101	138	138	25
Mindanao	2026	10	24	15	101	138	138	25
Mindanao	2026	10	24	16	96	138	138	25
Mindanao	2026	10	24	17	96	138	138	25
Mindanao	2026	10	24	18	103	138	138	25
Mindanao	2026	10	24	19	99	138	138	25
Mindanao	2026	10	24	20	96	138	138	25
Mindanao	2026	10	24	21	91	138	138	25
Mindanao	2026	10	24	22	86	138	138	25
Mindanao	2026	10	24	23	80	138	138	25
Mindanao	2026	10	24	24	74	138	138	25
Mindanao	2026	10	25	1	71	138	138	25
Mindanao	2026	10	25	2	69	138	138	25
Mindanao	2026	10	25	3	65	138	138	25
Mindanao	2026	10	25	4	63	138	138	25
Mindanao	2026	10	25	5	64	138	138	25
Mindanao	2026	10	25	6	64	138	138	25
Mindanao	2026	10	25	7	63	138	138	25
Mindanao	2026	10	25	8	65	138	138	25
Mindanao	2026	10	25	9	70	138	138	25
Mindanao	2026	10	25	10	75	138	138	25
Mindanao	2026	10	25	11	80	138	138	25
Mindanao	2026	10	25	12	79	138	138	25
Mindanao	2026	10	25	13	78	138	138	25
Mindanao	2026	10	25	14	82	138	138	25
Mindanao	2026	10	25	15	81	138	138	25
Mindanao	2026	10	25	16	80	138	138	25
Mindanao	2026	10	25	17	82	138	138	25
Mindanao	2026	10	25	18	94	138	138	25
Mindanao	2026	10	25	19	92	138	138	25
Mindanao	2026	10	25	20	90	138	138	25
Mindanao	2026	10	25	21	85	138	138	25
Mindanao	2026	10	25	22	80	138	138	25
Mindanao	2026	10	25	23	75	138	138	25
Mindanao	2026	10	25	24	70	138	138	25
Mindanao	2026	10	26	1	67	138	138	25
Mindanao	2026	10	26	2	65	138	138	25
Mindanao	2026	10	26	3	62	138	138	25
Mindanao	2026	10	26	4	63	138	138	25
Mindanao	2026	10	26	5	69	138	138	25
Mindanao	2026	10	26	6	74	138	138	25
Mindanao	2026	10	26	7	66	138	138	25
Mindanao	2026	10	26	8	79	138	138	25
Mindanao	2026	10	26	9	93	138	138	25
Mindanao	2026	10	26	10	101	138	138	25
Mindanao	2026	10	26	11	107	138	138	25
Mindanao	2026	10	26	12	103	138	138	25
Mindanao	2026	10	26	13	106	138	138	25
Mindanao	2026	10	26	14	110	138	138	25
Mindanao	2026	10	26	15	109	138	138	25
Mindanao	2026	10	26	16	108	138	138	25
Mindanao	2026	10	26	17	94	138	138	25
Mindanao	2026	10	26	18	100	138	138	25
Mindanao	2026	10	26	19	97	138	138	25
Mindanao	2026	10	26	20	93	138	138	25
Mindanao	2026	10	26	21	91	138	138	25
Mindanao	2026	10	26	22	84	138	138	25
Mindanao	2026	10	26	23	80	138	138	25
Mindanao	2026	10	26	24	76	138	138	25
Mindanao	2026	10	27	1	73	138	138	25
Mindanao	2026	10	27	2	70	138	138	25
Mindanao	2026	10	27	3	68	138	138	25
Mindanao	2026	10	27	4	68	138	138	25
Mindanao	2026	10	27	5	72	138	138	25
Mindanao	2026	10	27	6	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	27	7	68	138	138	25
Mindanao	2026	10	27	8	77	138	138	25
Mindanao	2026	10	27	9	87	138	138	25
Mindanao	2026	10	27	10	95	138	138	25
Mindanao	2026	10	27	11	100	138	138	25
Mindanao	2026	10	27	12	97	138	138	25
Mindanao	2026	10	27	13	99	138	138	25
Mindanao	2026	10	27	14	103	138	138	25
Mindanao	2026	10	27	15	101	138	138	25
Mindanao	2026	10	27	16	97	138	138	25
Mindanao	2026	10	27	17	94	138	138	25
Mindanao	2026	10	27	18	100	138	138	25
Mindanao	2026	10	27	19	93	138	138	25
Mindanao	2026	10	27	20	91	138	138	25
Mindanao	2026	10	27	21	87	138	138	25
Mindanao	2026	10	27	22	82	138	138	25
Mindanao	2026	10	27	23	80	138	138	25
Mindanao	2026	10	27	24	74	138	138	25
Mindanao	2026	10	28	1	71	138	138	25
Mindanao	2026	10	28	2	69	138	138	25
Mindanao	2026	10	28	3	67	138	138	25
Mindanao	2026	10	28	4	67	138	138	25
Mindanao	2026	10	28	5	73	138	138	25
Mindanao	2026	10	28	6	75	138	138	25
Mindanao	2026	10	28	7	69	138	138	25
Mindanao	2026	10	28	8	78	138	138	25
Mindanao	2026	10	28	9	92	138	138	25
Mindanao	2026	10	28	10	99	138	138	25
Mindanao	2026	10	28	11	104	138	138	25
Mindanao	2026	10	28	12	101	138	138	25
Mindanao	2026	10	28	13	101	138	138	25
Mindanao	2026	10	28	14	107	138	138	25
Mindanao	2026	10	28	15	104	138	138	25
Mindanao	2026	10	28	16	102	138	138	25
Mindanao	2026	10	28	17	102	138	138	25
Mindanao	2026	10	28	18	109	138	138	25
Mindanao	2026	10	28	19	103	138	138	25
Mindanao	2026	10	28	20	98	138	138	25
Mindanao	2026	10	28	21	94	138	138	25
Mindanao	2026	10	28	22	85	138	138	25
Mindanao	2026	10	28	23	82	138	138	25
Mindanao	2026	10	28	24	76	138	138	25
Mindanao	2026	10	29	1	73	138	138	25
Mindanao	2026	10	29	2	70	138	138	25
Mindanao	2026	10	29	3	69	138	138	25
Mindanao	2026	10	29	4	68	138	138	25
Mindanao	2026	10	29	5	72	138	138	25
Mindanao	2026	10	29	6	77	138	138	25
Mindanao	2026	10	29	7	70	138	138	25
Mindanao	2026	10	29	8	81	138	138	25
Mindanao	2026	10	29	9	94	138	138	25
Mindanao	2026	10	29	10	102	138	138	25
Mindanao	2026	10	29	11	107	138	138	25
Mindanao	2026	10	29	12	103	138	138	25
Mindanao	2026	10	29	13	105	138	138	25
Mindanao	2026	10	29	14	109	138	138	25
Mindanao	2026	10	29	15	109	138	138	25
Mindanao	2026	10	29	16	105	138	138	25
Mindanao	2026	10	29	17	102	138	138	25
Mindanao	2026	10	29	18	111	138	138	25
Mindanao	2026	10	29	19	103	138	138	25
Mindanao	2026	10	29	20	98	138	138	25
Mindanao	2026	10	29	21	94	138	138	25
Mindanao	2026	10	29	22	87	138	138	25
Mindanao	2026	10	29	23	81	138	138	25
Mindanao	2026	10	29	24	77	138	138	25
Mindanao	2026	10	30	1	72	138	138	25
Mindanao	2026	10	30	2	68	138	138	25
Mindanao	2026	10	30	3	65	138	138	25
Mindanao	2026	10	30	4	65	138	138	25
Mindanao	2026	10	30	5	68	138	138	25
Mindanao	2026	10	30	6	73	138	138	25
Mindanao	2026	10	30	7	67	138	138	25
Mindanao	2026	10	30	8	76	138	138	25
Mindanao	2026	10	30	9	86	138	138	25
Mindanao	2026	10	30	10	91	138	138	25
Mindanao	2026	10	30	11	93	138	138	25
Mindanao	2026	10	30	12	88	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	10	30	13	88	138	138	25
Mindanao	2026	10	30	14	92	138	138	25
Mindanao	2026	10	30	15	91	138	138	25
Mindanao	2026	10	30	16	92	138	138	25
Mindanao	2026	10	30	17	92	138	138	25
Mindanao	2026	10	30	18	94	138	138	25
Mindanao	2026	10	30	19	89	138	138	25
Mindanao	2026	10	30	20	82	138	138	25
Mindanao	2026	10	30	21	80	138	138	25
Mindanao	2026	10	30	22	72	138	138	25
Mindanao	2026	10	30	23	68	138	138	25
Mindanao	2026	10	30	24	66	138	138	25
Mindanao	2026	10	31	1	63	138	138	25
Mindanao	2026	10	31	2	62	138	138	25
Mindanao	2026	10	31	3	61	138	138	25
Mindanao	2026	10	31	4	60	138	138	25
Mindanao	2026	10	31	5	59	138	138	25
Mindanao	2026	10	31	6	62	138	138	25
Mindanao	2026	10	31	7	63	138	138	25
Mindanao	2026	10	31	8	68	138	138	25
Mindanao	2026	10	31	9	79	138	138	25
Mindanao	2026	10	31	10	86	138	138	25
Mindanao	2026	10	31	11	91	138	138	25
Mindanao	2026	10	31	12	89	138	138	25
Mindanao	2026	10	31	13	89	138	138	25
Mindanao	2026	10	31	14	88	138	138	25
Mindanao	2026	10	31	15	85	138	138	25
Mindanao	2026	10	31	16	88	138	138	25
Mindanao	2026	10	31	17	90	138	138	25
Mindanao	2026	10	31	18	100	138	138	25
Mindanao	2026	10	31	19	90	138	138	25
Mindanao	2026	10	31	20	86	138	138	25
Mindanao	2026	10	31	21	84	138	138	25
Mindanao	2026	10	31	22	80	138	138	25
Mindanao	2026	10	31	23	75	138	138	25
Mindanao	2026	10	31	24	71	138	138	25
Mindanao	2026	11	1	1	70	138	138	25
Mindanao	2026	11	1	2	68	138	138	25
Mindanao	2026	11	1	3	64	138	138	25
Mindanao	2026	11	1	4	62	138	138	25
Mindanao	2026	11	1	5	64	138	138	25
Mindanao	2026	11	1	6	63	138	138	25
Mindanao	2026	11	1	7	62	138	138	25
Mindanao	2026	11	1	8	63	138	138	25
Mindanao	2026	11	1	9	66	138	138	25
Mindanao	2026	11	1	10	74	138	138	25
Mindanao	2026	11	1	11	78	138	138	25
Mindanao	2026	11	1	12	79	138	138	25
Mindanao	2026	11	1	13	77	138	138	25
Mindanao	2026	11	1	14	79	138	138	25
Mindanao	2026	11	1	15	79	138	138	25
Mindanao	2026	11	1	16	76	138	138	25
Mindanao	2026	11	1	17	79	138	138	25
Mindanao	2026	11	1	18	91	138	138	25
Mindanao	2026	11	1	19	88	138	138	25
Mindanao	2026	11	1	20	86	138	138	25
Mindanao	2026	11	1	21	85	138	138	25
Mindanao	2026	11	1	22	79	138	138	25
Mindanao	2026	11	1	23	72	138	138	25
Mindanao	2026	11	1	24	68	138	138	25
Mindanao	2026	11	2	1	67	138	138	25
Mindanao	2026	11	2	2	65	138	138	25
Mindanao	2026	11	2	3	61	138	138	25
Mindanao	2026	11	2	4	60	138	138	25
Mindanao	2026	11	2	5	61	138	138	25
Mindanao	2026	11	2	6	63	138	138	25
Mindanao	2026	11	2	7	62	138	138	25
Mindanao	2026	11	2	8	68	138	138	25
Mindanao	2026	11	2	9	77	138	138	25
Mindanao	2026	11	2	10	84	138	138	25
Mindanao	2026	11	2	11	88	138	138	25
Mindanao	2026	11	2	12	81	138	138	25
Mindanao	2026	11	2	13	85	138	138	25
Mindanao	2026	11	2	14	93	138	138	25
Mindanao	2026	11	2	15	92	138	138	25
Mindanao	2026	11	2	16	90	138	138	25
Mindanao	2026	11	2	17	89	138	138	25
Mindanao	2026	11	2	18	102	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	2	19	97	138	138	25
Mindanao	2026	11	2	20	95	138	138	25
Mindanao	2026	11	2	21	91	138	138	25
Mindanao	2026	11	2	22	85	138	138	25
Mindanao	2026	11	2	23	81	138	138	25
Mindanao	2026	11	2	24	76	138	138	25
Mindanao	2026	11	3	1	77	138	138	25
Mindanao	2026	11	3	2	74	138	138	25
Mindanao	2026	11	3	3	70	138	138	25
Mindanao	2026	11	3	4	70	138	138	25
Mindanao	2026	11	3	5	74	138	138	25
Mindanao	2026	11	3	6	78	138	138	25
Mindanao	2026	11	3	7	69	138	138	25
Mindanao	2026	11	3	8	83	138	138	25
Mindanao	2026	11	3	9	97	138	138	25
Mindanao	2026	11	3	10	106	138	138	25
Mindanao	2026	11	3	11	111	138	138	25
Mindanao	2026	11	3	12	108	138	138	25
Mindanao	2026	11	3	13	108	138	138	25
Mindanao	2026	11	3	14	113	138	138	25
Mindanao	2026	11	3	15	110	138	138	25
Mindanao	2026	11	3	16	107	138	138	25
Mindanao	2026	11	3	17	102	138	138	25
Mindanao	2026	11	3	18	110	138	138	25
Mindanao	2026	11	3	19	104	138	138	25
Mindanao	2026	11	3	20	100	138	138	25
Mindanao	2026	11	3	21	98	138	138	25
Mindanao	2026	11	3	22	91	138	138	25
Mindanao	2026	11	3	23	86	138	138	25
Mindanao	2026	11	3	24	79	138	138	25
Mindanao	2026	11	4	1	67	138	138	25
Mindanao	2026	11	4	2	65	138	138	25
Mindanao	2026	11	4	3	63	138	138	25
Mindanao	2026	11	4	4	62	138	138	25
Mindanao	2026	11	4	5	63	138	138	25
Mindanao	2026	11	4	6	67	138	138	25
Mindanao	2026	11	4	7	65	138	138	25
Mindanao	2026	11	4	8	73	138	138	25
Mindanao	2026	11	4	9	85	138	138	25
Mindanao	2026	11	4	10	90	138	138	25
Mindanao	2026	11	4	11	98	138	138	25
Mindanao	2026	11	4	12	97	138	138	25
Mindanao	2026	11	4	13	98	138	138	25
Mindanao	2026	11	4	14	97	138	138	25
Mindanao	2026	11	4	15	94	138	138	25
Mindanao	2026	11	4	16	95	138	138	25
Mindanao	2026	11	4	17	95	138	138	25
Mindanao	2026	11	4	18	100	138	138	25
Mindanao	2026	11	4	19	96	138	138	25
Mindanao	2026	11	4	20	93	138	138	25
Mindanao	2026	11	4	21	90	138	138	25
Mindanao	2026	11	4	22	83	138	138	25
Mindanao	2026	11	4	23	79	138	138	25
Mindanao	2026	11	4	24	74	138	138	25
Mindanao	2026	11	5	1	72	138	138	25
Mindanao	2026	11	5	2	69	138	138	25
Mindanao	2026	11	5	3	67	138	138	25
Mindanao	2026	11	5	4	66	138	138	25
Mindanao	2026	11	5	5	69	138	138	25
Mindanao	2026	11	5	6	76	138	138	25
Mindanao	2026	11	5	7	69	138	138	25
Mindanao	2026	11	5	8	75	138	138	25
Mindanao	2026	11	5	9	86	138	138	25
Mindanao	2026	11	5	10	94	138	138	25
Mindanao	2026	11	5	11	98	138	138	25
Mindanao	2026	11	5	12	93	138	138	25
Mindanao	2026	11	5	13	96	138	138	25
Mindanao	2026	11	5	14	99	138	138	25
Mindanao	2026	11	5	15	96	138	138	25
Mindanao	2026	11	5	16	96	138	138	25
Mindanao	2026	11	5	17	95	138	138	25
Mindanao	2026	11	5	18	104	138	138	25
Mindanao	2026	11	5	19	99	138	138	25
Mindanao	2026	11	5	20	93	138	138	25
Mindanao	2026	11	5	21	89	138	138	25
Mindanao	2026	11	5	22	82	138	138	25
Mindanao	2026	11	5	23	77	138	138	25
Mindanao	2026	11	5	24	72	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	6	1	68	138	138	25
Mindanao	2026	11	6	2	66	138	138	25
Mindanao	2026	11	6	3	64	138	138	25
Mindanao	2026	11	6	4	65	138	138	25
Mindanao	2026	11	6	5	70	138	138	25
Mindanao	2026	11	6	6	73	138	138	25
Mindanao	2026	11	6	7	66	138	138	25
Mindanao	2026	11	6	8	76	138	138	25
Mindanao	2026	11	6	9	89	138	138	25
Mindanao	2026	11	6	10	101	138	138	25
Mindanao	2026	11	6	11	106	138	138	25
Mindanao	2026	11	6	12	103	138	138	25
Mindanao	2026	11	6	13	106	138	138	25
Mindanao	2026	11	6	14	112	138	138	25
Mindanao	2026	11	6	15	111	138	138	25
Mindanao	2026	11	6	16	106	138	138	25
Mindanao	2026	11	6	17	104	138	138	25
Mindanao	2026	11	6	18	110	138	138	25
Mindanao	2026	11	6	19	103	138	138	25
Mindanao	2026	11	6	20	98	138	138	25
Mindanao	2026	11	6	21	94	138	138	25
Mindanao	2026	11	6	22	88	138	138	25
Mindanao	2026	11	6	23	83	138	138	25
Mindanao	2026	11	6	24	79	138	138	25
Mindanao	2026	11	7	1	75	138	138	25
Mindanao	2026	11	7	2	71	138	138	25
Mindanao	2026	11	7	3	69	138	138	25
Mindanao	2026	11	7	4	67	138	138	25
Mindanao	2026	11	7	5	69	138	138	25
Mindanao	2026	11	7	6	72	138	138	25
Mindanao	2026	11	7	7	68	138	138	25
Mindanao	2026	11	7	8	73	138	138	25
Mindanao	2026	11	7	9	79	138	138	25
Mindanao	2026	11	7	10	87	138	138	25
Mindanao	2026	11	7	11	92	138	138	25
Mindanao	2026	11	7	12	89	138	138	25
Mindanao	2026	11	7	13	92	138	138	25
Mindanao	2026	11	7	14	96	138	138	25
Mindanao	2026	11	7	15	95	138	138	25
Mindanao	2026	11	7	16	93	138	138	25
Mindanao	2026	11	7	17	92	138	138	25
Mindanao	2026	11	7	18	101	138	138	25
Mindanao	2026	11	7	19	102	138	138	25
Mindanao	2026	11	7	20	97	138	138	25
Mindanao	2026	11	7	21	94	138	138	25
Mindanao	2026	11	7	22	88	138	138	25
Mindanao	2026	11	7	23	83	138	138	25
Mindanao	2026	11	7	24	77	138	138	25
Mindanao	2026	11	8	1	72	138	138	25
Mindanao	2026	11	8	2	70	138	138	25
Mindanao	2026	11	8	3	68	138	138	25
Mindanao	2026	11	8	4	66	138	138	25
Mindanao	2026	11	8	5	67	138	138	25
Mindanao	2026	11	8	6	67	138	138	25
Mindanao	2026	11	8	7	61	138	138	25
Mindanao	2026	11	8	8	60	138	138	25
Mindanao	2026	11	8	9	66	138	138	25
Mindanao	2026	11	8	10	77	138	138	25
Mindanao	2026	11	8	11	80	138	138	25
Mindanao	2026	11	8	12	83	138	138	25
Mindanao	2026	11	8	13	86	138	138	25
Mindanao	2026	11	8	14	86	138	138	25
Mindanao	2026	11	8	15	85	138	138	25
Mindanao	2026	11	8	16	77	138	138	25
Mindanao	2026	11	8	17	81	138	138	25
Mindanao	2026	11	8	18	97	138	138	25
Mindanao	2026	11	8	19	99	138	138	25
Mindanao	2026	11	8	20	97	138	138	25
Mindanao	2026	11	8	21	94	138	138	25
Mindanao	2026	11	8	22	86	138	138	25
Mindanao	2026	11	8	23	81	138	138	25
Mindanao	2026	11	8	24	75	138	138	25
Mindanao	2026	11	9	1	72	138	138	25
Mindanao	2026	11	9	2	68	138	138	25
Mindanao	2026	11	9	3	66	138	138	25
Mindanao	2026	11	9	4	67	138	138	25
Mindanao	2026	11	9	5	70	138	138	25
Mindanao	2026	11	9	6	74	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	9	7	66	138	138	25
Mindanao	2026	11	9	8	79	138	138	25
Mindanao	2026	11	9	9	94	138	138	25
Mindanao	2026	11	9	10	103	138	138	25
Mindanao	2026	11	9	11	110	138	138	25
Mindanao	2026	11	9	12	107	138	138	25
Mindanao	2026	11	9	13	107	138	138	25
Mindanao	2026	11	9	14	114	138	138	25
Mindanao	2026	11	9	15	114	138	138	25
Mindanao	2026	11	9	16	107	138	138	25
Mindanao	2026	11	9	17	104	138	138	25
Mindanao	2026	11	9	18	112	138	138	25
Mindanao	2026	11	9	19	107	138	138	25
Mindanao	2026	11	9	20	105	138	138	25
Mindanao	2026	11	9	21	99	138	138	25
Mindanao	2026	11	9	22	90	138	138	25
Mindanao	2026	11	9	23	85	138	138	25
Mindanao	2026	11	9	24	81	138	138	25
Mindanao	2026	11	10	1	77	138	138	25
Mindanao	2026	11	10	2	74	138	138	25
Mindanao	2026	11	10	3	70	138	138	25
Mindanao	2026	11	10	4	70	138	138	25
Mindanao	2026	11	10	5	74	138	138	25
Mindanao	2026	11	10	6	78	138	138	25
Mindanao	2026	11	10	7	69	138	138	25
Mindanao	2026	11	10	8	83	138	138	25
Mindanao	2026	11	10	9	97	138	138	25
Mindanao	2026	11	10	10	106	138	138	25
Mindanao	2026	11	10	11	111	138	138	25
Mindanao	2026	11	10	12	108	138	138	25
Mindanao	2026	11	10	13	108	138	138	25
Mindanao	2026	11	10	14	113	138	138	25
Mindanao	2026	11	10	15	110	138	138	25
Mindanao	2026	11	10	16	107	138	138	25
Mindanao	2026	11	10	17	102	138	138	25
Mindanao	2026	11	10	18	110	138	138	25
Mindanao	2026	11	10	19	104	138	138	25
Mindanao	2026	11	10	20	100	138	138	25
Mindanao	2026	11	10	21	98	138	138	25
Mindanao	2026	11	10	22	91	138	138	25
Mindanao	2026	11	10	23	86	138	138	25
Mindanao	2026	11	10	24	79	138	138	25
Mindanao	2026	11	11	1	77	138	138	25
Mindanao	2026	11	11	2	73	138	138	25
Mindanao	2026	11	11	3	72	138	138	25
Mindanao	2026	11	11	4	71	138	138	25
Mindanao	2026	11	11	5	75	138	138	25
Mindanao	2026	11	11	6	79	138	138	25
Mindanao	2026	11	11	7	71	138	138	25
Mindanao	2026	11	11	8	81	138	138	25
Mindanao	2026	11	11	9	94	138	138	25
Mindanao	2026	11	11	10	100	138	138	25
Mindanao	2026	11	11	11	105	138	138	25
Mindanao	2026	11	11	12	104	138	138	25
Mindanao	2026	11	11	13	105	138	138	25
Mindanao	2026	11	11	14	111	138	138	25
Mindanao	2026	11	11	15	111	138	138	25
Mindanao	2026	11	11	16	108	138	138	25
Mindanao	2026	11	11	17	105	138	138	25
Mindanao	2026	11	11	18	113	138	138	25
Mindanao	2026	11	11	19	105	138	138	25
Mindanao	2026	11	11	20	103	138	138	25
Mindanao	2026	11	11	21	94	138	138	25
Mindanao	2026	11	11	22	88	138	138	25
Mindanao	2026	11	11	23	84	138	138	25
Mindanao	2026	11	11	24	80	138	138	25
Mindanao	2026	11	12	1	76	138	138	25
Mindanao	2026	11	12	2	73	138	138	25
Mindanao	2026	11	12	3	68	138	138	25
Mindanao	2026	11	12	4	70	138	138	25
Mindanao	2026	11	12	5	74	138	138	25
Mindanao	2026	11	12	6	78	138	138	25
Mindanao	2026	11	12	7	71	138	138	25
Mindanao	2026	11	12	8	82	138	138	25
Mindanao	2026	11	12	9	94	138	138	25
Mindanao	2026	11	12	10	105	138	138	25
Mindanao	2026	11	12	11	110	138	138	25
Mindanao	2026	11	12	12	108	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	12	13	109	138	138	25
Mindanao	2026	11	12	14	112	138	138	25
Mindanao	2026	11	12	15	112	138	138	25
Mindanao	2026	11	12	16	107	138	138	25
Mindanao	2026	11	12	17	103	138	138	25
Mindanao	2026	11	12	18	108	138	138	25
Mindanao	2026	11	12	19	102	138	138	25
Mindanao	2026	11	12	20	97	138	138	25
Mindanao	2026	11	12	21	92	138	138	25
Mindanao	2026	11	12	22	88	138	138	25
Mindanao	2026	11	12	23	80	138	138	25
Mindanao	2026	11	12	24	76	138	138	25
Mindanao	2026	11	13	1	75	138	138	25
Mindanao	2026	11	13	2	72	138	138	25
Mindanao	2026	11	13	3	69	138	138	25
Mindanao	2026	11	13	4	69	138	138	25
Mindanao	2026	11	13	5	73	138	138	25
Mindanao	2026	11	13	6	77	138	138	25
Mindanao	2026	11	13	7	70	138	138	25
Mindanao	2026	11	13	8	78	138	138	25
Mindanao	2026	11	13	9	90	138	138	25
Mindanao	2026	11	13	10	99	138	138	25
Mindanao	2026	11	13	11	105	138	138	25
Mindanao	2026	11	13	12	102	138	138	25
Mindanao	2026	11	13	13	103	138	138	25
Mindanao	2026	11	13	14	108	138	138	25
Mindanao	2026	11	13	15	105	138	138	25
Mindanao	2026	11	13	16	101	138	138	25
Mindanao	2026	11	13	17	100	138	138	25
Mindanao	2026	11	13	18	105	138	138	25
Mindanao	2026	11	13	19	98	138	138	25
Mindanao	2026	11	13	20	95	138	138	25
Mindanao	2026	11	13	21	91	138	138	25
Mindanao	2026	11	13	22	83	138	138	25
Mindanao	2026	11	13	23	77	138	138	25
Mindanao	2026	11	13	24	74	138	138	25
Mindanao	2026	11	14	1	71	138	138	25
Mindanao	2026	11	14	2	69	138	138	25
Mindanao	2026	11	14	3	65	138	138	25
Mindanao	2026	11	14	4	64	138	138	25
Mindanao	2026	11	14	5	67	138	138	25
Mindanao	2026	11	14	6	70	138	138	25
Mindanao	2026	11	14	7	69	138	138	25
Mindanao	2026	11	14	8	75	138	138	25
Mindanao	2026	11	14	9	84	138	138	25
Mindanao	2026	11	14	10	92	138	138	25
Mindanao	2026	11	14	11	96	138	138	25
Mindanao	2026	11	14	12	95	138	138	25
Mindanao	2026	11	14	13	96	138	138	25
Mindanao	2026	11	14	14	98	138	138	25
Mindanao	2026	11	14	15	98	138	138	25
Mindanao	2026	11	14	16	95	138	138	25
Mindanao	2026	11	14	17	95	138	138	25
Mindanao	2026	11	14	18	108	138	138	25
Mindanao	2026	11	14	19	102	138	138	25
Mindanao	2026	11	14	20	96	138	138	25
Mindanao	2026	11	14	21	94	138	138	25
Mindanao	2026	11	14	22	87	138	138	25
Mindanao	2026	11	14	23	82	138	138	25
Mindanao	2026	11	14	24	76	138	138	25
Mindanao	2026	11	15	1	74	138	138	25
Mindanao	2026	11	15	2	67	138	138	25
Mindanao	2026	11	15	3	66	138	138	25
Mindanao	2026	11	15	4	65	138	138	25
Mindanao	2026	11	15	5	66	138	138	25
Mindanao	2026	11	15	6	66	138	138	25
Mindanao	2026	11	15	7	64	138	138	25
Mindanao	2026	11	15	8	65	138	138	25
Mindanao	2026	11	15	9	69	138	138	25
Mindanao	2026	11	15	10	75	138	138	25
Mindanao	2026	11	15	11	81	138	138	25
Mindanao	2026	11	15	12	82	138	138	25
Mindanao	2026	11	15	13	86	138	138	25
Mindanao	2026	11	15	14	86	138	138	25
Mindanao	2026	11	15	15	86	138	138	25
Mindanao	2026	11	15	16	83	138	138	25
Mindanao	2026	11	15	17	85	138	138	25
Mindanao	2026	11	15	18	98	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	15	19	93	138	138	25
Mindanao	2026	11	15	20	91	138	138	25
Mindanao	2026	11	15	21	91	138	138	25
Mindanao	2026	11	15	22	85	138	138	25
Mindanao	2026	11	15	23	78	138	138	25
Mindanao	2026	11	15	24	72	138	138	25
Mindanao	2026	11	16	1	69	138	138	25
Mindanao	2026	11	16	2	65	138	138	25
Mindanao	2026	11	16	3	65	138	138	25
Mindanao	2026	11	16	4	65	138	138	25
Mindanao	2026	11	16	5	71	138	138	25
Mindanao	2026	11	16	6	72	138	138	25
Mindanao	2026	11	16	7	64	138	138	25
Mindanao	2026	11	16	8	79	138	138	25
Mindanao	2026	11	16	9	94	138	138	25
Mindanao	2026	11	16	10	103	138	138	25
Mindanao	2026	11	16	11	91	138	138	25
Mindanao	2026	11	16	12	106	138	138	25
Mindanao	2026	11	16	13	107	138	138	25
Mindanao	2026	11	16	14	113	138	138	25
Mindanao	2026	11	16	15	114	138	138	25
Mindanao	2026	11	16	16	108	138	138	25
Mindanao	2026	11	16	17	105	138	138	25
Mindanao	2026	11	16	18	112	138	138	25
Mindanao	2026	11	16	19	103	138	138	25
Mindanao	2026	11	16	20	101	138	138	25
Mindanao	2026	11	16	21	98	138	138	25
Mindanao	2026	11	16	22	90	138	138	25
Mindanao	2026	11	16	23	83	138	138	25
Mindanao	2026	11	16	24	77	138	138	25
Mindanao	2026	11	17	1	76	138	138	25
Mindanao	2026	11	17	2	72	138	138	25
Mindanao	2026	11	17	3	71	138	138	25
Mindanao	2026	11	17	4	70	138	138	25
Mindanao	2026	11	17	5	75	138	138	25
Mindanao	2026	11	17	6	78	138	138	25
Mindanao	2026	11	17	7	69	138	138	25
Mindanao	2026	11	17	8	82	138	138	25
Mindanao	2026	11	17	9	96	138	138	25
Mindanao	2026	11	17	10	100	138	138	25
Mindanao	2026	11	17	11	101	138	138	25
Mindanao	2026	11	17	12	99	138	138	25
Mindanao	2026	11	17	13	106	138	138	25
Mindanao	2026	11	17	14	108	138	138	25
Mindanao	2026	11	17	15	104	138	138	25
Mindanao	2026	11	17	16	103	138	138	25
Mindanao	2026	11	17	17	102	138	138	25
Mindanao	2026	11	17	18	105	138	138	25
Mindanao	2026	11	17	19	101	138	138	25
Mindanao	2026	11	17	20	102	138	138	25
Mindanao	2026	11	17	21	97	138	138	25
Mindanao	2026	11	17	22	91	138	138	25
Mindanao	2026	11	17	23	86	138	138	25
Mindanao	2026	11	17	24	82	138	138	25
Mindanao	2026	11	18	1	77	138	138	25
Mindanao	2026	11	18	2	72	138	138	25
Mindanao	2026	11	18	3	72	138	138	25
Mindanao	2026	11	18	4	72	138	138	25
Mindanao	2026	11	18	5	75	138	138	25
Mindanao	2026	11	18	6	77	138	138	25
Mindanao	2026	11	18	7	69	138	138	25
Mindanao	2026	11	18	8	81	138	138	25
Mindanao	2026	11	18	9	93	138	138	25
Mindanao	2026	11	18	10	103	138	138	25
Mindanao	2026	11	18	11	106	138	138	25
Mindanao	2026	11	18	12	104	138	138	25
Mindanao	2026	11	18	13	107	138	138	25
Mindanao	2026	11	18	14	109	138	138	25
Mindanao	2026	11	18	15	101	138	138	25
Mindanao	2026	11	18	16	99	138	138	25
Mindanao	2026	11	18	17	94	138	138	25
Mindanao	2026	11	18	18	103	138	138	25
Mindanao	2026	11	18	19	100	138	138	25
Mindanao	2026	11	18	20	95	138	138	25
Mindanao	2026	11	18	21	90	138	138	25
Mindanao	2026	11	18	22	84	138	138	25
Mindanao	2026	11	18	23	78	138	138	25
Mindanao	2026	11	18	24	76	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	19	1	72	138	138	25
Mindanao	2026	11	19	2	70	138	138	25
Mindanao	2026	11	19	3	67	138	138	25
Mindanao	2026	11	19	4	67	138	138	25
Mindanao	2026	11	19	5	68	138	138	25
Mindanao	2026	11	19	6	70	138	138	25
Mindanao	2026	11	19	7	66	138	138	25
Mindanao	2026	11	19	8	77	138	138	25
Mindanao	2026	11	19	9	86	138	138	25
Mindanao	2026	11	19	10	93	138	138	25
Mindanao	2026	11	19	11	95	138	138	25
Mindanao	2026	11	19	12	89	138	138	25
Mindanao	2026	11	19	13	90	138	138	25
Mindanao	2026	11	19	14	94	138	138	25
Mindanao	2026	11	19	15	94	138	138	25
Mindanao	2026	11	19	16	95	138	138	25
Mindanao	2026	11	19	17	93	138	138	25
Mindanao	2026	11	19	18	104	138	138	25
Mindanao	2026	11	19	19	100	138	138	25
Mindanao	2026	11	19	20	95	138	138	25
Mindanao	2026	11	19	21	89	138	138	25
Mindanao	2026	11	19	22	82	138	138	25
Mindanao	2026	11	19	23	79	138	138	25
Mindanao	2026	11	19	24	75	138	138	25
Mindanao	2026	11	20	1	71	138	138	25
Mindanao	2026	11	20	2	69	138	138	25
Mindanao	2026	11	20	3	66	138	138	25
Mindanao	2026	11	20	4	66	138	138	25
Mindanao	2026	11	20	5	67	138	138	25
Mindanao	2026	11	20	6	76	138	138	25
Mindanao	2026	11	20	7	68	138	138	25
Mindanao	2026	11	20	8	74	138	138	25
Mindanao	2026	11	20	9	87	138	138	25
Mindanao	2026	11	20	10	92	138	138	25
Mindanao	2026	11	20	11	97	138	138	25
Mindanao	2026	11	20	12	93	138	138	25
Mindanao	2026	11	20	13	91	138	138	25
Mindanao	2026	11	20	14	94	138	138	25
Mindanao	2026	11	20	15	97	138	138	25
Mindanao	2026	11	20	16	100	138	138	25
Mindanao	2026	11	20	17	96	138	138	25
Mindanao	2026	11	20	18	100	138	138	25
Mindanao	2026	11	20	19	94	138	138	25
Mindanao	2026	11	20	20	93	138	138	25
Mindanao	2026	11	20	21	88	138	138	25
Mindanao	2026	11	20	22	80	138	138	25
Mindanao	2026	11	20	23	75	138	138	25
Mindanao	2026	11	20	24	73	138	138	25
Mindanao	2026	11	21	1	71	138	138	25
Mindanao	2026	11	21	2	69	138	138	25
Mindanao	2026	11	21	3	67	138	138	25
Mindanao	2026	11	21	4	66	138	138	25
Mindanao	2026	11	21	5	67	138	138	25
Mindanao	2026	11	21	6	73	138	138	25
Mindanao	2026	11	21	7	72	138	138	25
Mindanao	2026	11	21	8	68	138	138	25
Mindanao	2026	11	21	9	75	138	138	25
Mindanao	2026	11	21	10	81	138	138	25
Mindanao	2026	11	21	11	84	138	138	25
Mindanao	2026	11	21	12	84	138	138	25
Mindanao	2026	11	21	13	82	138	138	25
Mindanao	2026	11	21	14	85	138	138	25
Mindanao	2026	11	21	15	86	138	138	25
Mindanao	2026	11	21	16	85	138	138	25
Mindanao	2026	11	21	17	87	138	138	25
Mindanao	2026	11	21	18	95	138	138	25
Mindanao	2026	11	21	19	90	138	138	25
Mindanao	2026	11	21	20	90	138	138	25
Mindanao	2026	11	21	21	85	138	138	25
Mindanao	2026	11	21	22	79	138	138	25
Mindanao	2026	11	21	23	75	138	138	25
Mindanao	2026	11	21	24	67	138	138	25
Mindanao	2026	11	22	1	64	138	138	25
Mindanao	2026	11	22	2	64	138	138	25
Mindanao	2026	11	22	3	63	138	138	25
Mindanao	2026	11	22	4	61	138	138	25
Mindanao	2026	11	22	5	62	138	138	25
Mindanao	2026	11	22	6	65	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	22	7	62	138	138	25
Mindanao	2026	11	22	8	66	138	138	25
Mindanao	2026	11	22	9	66	138	138	25
Mindanao	2026	11	22	10	67	138	138	25
Mindanao	2026	11	22	11	70	138	138	25
Mindanao	2026	11	22	12	72	138	138	25
Mindanao	2026	11	22	13	71	138	138	25
Mindanao	2026	11	22	14	72	138	138	25
Mindanao	2026	11	22	15	74	138	138	25
Mindanao	2026	11	22	16	77	138	138	25
Mindanao	2026	11	22	17	81	138	138	25
Mindanao	2026	11	22	18	90	138	138	25
Mindanao	2026	11	22	19	88	138	138	25
Mindanao	2026	11	22	20	86	138	138	25
Mindanao	2026	11	22	21	84	138	138	25
Mindanao	2026	11	22	22	77	138	138	25
Mindanao	2026	11	22	23	72	138	138	25
Mindanao	2026	11	22	24	67	138	138	25
Mindanao	2026	11	23	1	65	138	138	25
Mindanao	2026	11	23	2	63	138	138	25
Mindanao	2026	11	23	3	62	138	138	25
Mindanao	2026	11	23	4	62	138	138	25
Mindanao	2026	11	23	5	69	138	138	25
Mindanao	2026	11	23	6	72	138	138	25
Mindanao	2026	11	23	7	65	138	138	25
Mindanao	2026	11	23	8	76	138	138	25
Mindanao	2026	11	23	9	88	138	138	25
Mindanao	2026	11	23	10	97	138	138	25
Mindanao	2026	11	23	11	100	138	138	25
Mindanao	2026	11	23	12	99	138	138	25
Mindanao	2026	11	23	13	100	138	138	25
Mindanao	2026	11	23	14	102	138	138	25
Mindanao	2026	11	23	15	103	138	138	25
Mindanao	2026	11	23	16	102	138	138	25
Mindanao	2026	11	23	17	95	138	138	25
Mindanao	2026	11	23	18	99	138	138	25
Mindanao	2026	11	23	19	95	138	138	25
Mindanao	2026	11	23	20	92	138	138	25
Mindanao	2026	11	23	21	86	138	138	25
Mindanao	2026	11	23	22	79	138	138	25
Mindanao	2026	11	23	23	76	138	138	25
Mindanao	2026	11	23	24	72	138	138	25
Mindanao	2026	11	24	1	69	138	138	25
Mindanao	2026	11	24	2	66	138	138	25
Mindanao	2026	11	24	3	64	138	138	25
Mindanao	2026	11	24	4	65	138	138	25
Mindanao	2026	11	24	5	70	138	138	25
Mindanao	2026	11	24	6	77	138	138	25
Mindanao	2026	11	24	7	67	138	138	25
Mindanao	2026	11	24	8	77	138	138	25
Mindanao	2026	11	24	9	89	138	138	25
Mindanao	2026	11	24	10	98	138	138	25
Mindanao	2026	11	24	11	103	138	138	25
Mindanao	2026	11	24	12	97	138	138	25
Mindanao	2026	11	24	13	101	138	138	25
Mindanao	2026	11	24	14	109	138	138	25
Mindanao	2026	11	24	15	107	138	138	25
Mindanao	2026	11	24	16	107	138	138	25
Mindanao	2026	11	24	17	102	138	138	25
Mindanao	2026	11	24	18	107	138	138	25
Mindanao	2026	11	24	19	100	138	138	25
Mindanao	2026	11	24	20	99	138	138	25
Mindanao	2026	11	24	21	96	138	138	25
Mindanao	2026	11	24	22	88	138	138	25
Mindanao	2026	11	24	23	81	138	138	25
Mindanao	2026	11	24	24	75	138	138	25
Mindanao	2026	11	25	1	71	138	138	25
Mindanao	2026	11	25	2	70	138	138	25
Mindanao	2026	11	25	3	68	138	138	25
Mindanao	2026	11	25	4	67	138	138	25
Mindanao	2026	11	25	5	73	138	138	25
Mindanao	2026	11	25	6	78	138	138	25
Mindanao	2026	11	25	7	68	138	138	25
Mindanao	2026	11	25	8	77	138	138	25
Mindanao	2026	11	25	9	92	138	138	25
Mindanao	2026	11	25	10	97	138	138	25
Mindanao	2026	11	25	11	104	138	138	25
Mindanao	2026	11	25	12	103	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

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GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	25	13	105	138	138	25
Mindanao	2026	11	25	14	108	138	138	25
Mindanao	2026	11	25	15	105	138	138	25
Mindanao	2026	11	25	16	102	138	138	25
Mindanao	2026	11	25	17	100	138	138	25
Mindanao	2026	11	25	18	106	138	138	25
Mindanao	2026	11	25	19	97	138	138	25
Mindanao	2026	11	25	20	97	138	138	25
Mindanao	2026	11	25	21	92	138	138	25
Mindanao	2026	11	25	22	85	138	138	25
Mindanao	2026	11	25	23	78	138	138	25
Mindanao	2026	11	25	24	74	138	138	25
Mindanao	2026	11	26	1	70	138	138	25
Mindanao	2026	11	26	2	67	138	138	25
Mindanao	2026	11	26	3	66	138	138	25
Mindanao	2026	11	26	4	66	138	138	25
Mindanao	2026	11	26	5	73	138	138	25
Mindanao	2026	11	26	6	76	138	138	25
Mindanao	2026	11	26	7	69	138	138	25
Mindanao	2026	11	26	8	79	138	138	25
Mindanao	2026	11	26	9	91	138	138	25
Mindanao	2026	11	26	10	96	138	138	25
Mindanao	2026	11	26	11	101	138	138	25
Mindanao	2026	11	26	12	99	138	138	25
Mindanao	2026	11	26	13	98	138	138	25
Mindanao	2026	11	26	14	107	138	138	25
Mindanao	2026	11	26	15	106	138	138	25
Mindanao	2026	11	26	16	105	138	138	25
Mindanao	2026	11	26	17	100	138	138	25
Mindanao	2026	11	26	18	110	138	138	25
Mindanao	2026	11	26	19	104	138	138	25
Mindanao	2026	11	26	20	97	138	138	25
Mindanao	2026	11	26	21	95	138	138	25
Mindanao	2026	11	26	22	89	138	138	25
Mindanao	2026	11	26	23	84	138	138	25
Mindanao	2026	11	26	24	79	138	138	25
Mindanao	2026	11	27	1	72	138	138	25
Mindanao	2026	11	27	2	71	138	138	25
Mindanao	2026	11	27	3	68	138	138	25
Mindanao	2026	11	27	4	69	138	138	25
Mindanao	2026	11	27	5	74	138	138	25
Mindanao	2026	11	27	6	77	138	138	25
Mindanao	2026	11	27	7	69	138	138	25
Mindanao	2026	11	27	8	79	138	138	25
Mindanao	2026	11	27	9	95	138	138	25
Mindanao	2026	11	27	10	99	138	138	25
Mindanao	2026	11	27	11	106	138	138	25
Mindanao	2026	11	27	12	105	138	138	25
Mindanao	2026	11	27	13	105	138	138	25
Mindanao	2026	11	27	14	108	138	138	25
Mindanao	2026	11	27	15	106	138	138	25
Mindanao	2026	11	27	16	104	138	138	25
Mindanao	2026	11	27	17	98	138	138	25
Mindanao	2026	11	27	18	104	138	138	25
Mindanao	2026	11	27	19	97	138	138	25
Mindanao	2026	11	27	20	94	138	138	25
Mindanao	2026	11	27	21	90	138	138	25
Mindanao	2026	11	27	22	86	138	138	25
Mindanao	2026	11	27	23	80	138	138	25
Mindanao	2026	11	27	24	74	138	138	25
Mindanao	2026	11	28	1	71	138	138	25
Mindanao	2026	11	28	2	68	138	138	25
Mindanao	2026	11	28	3	65	138	138	25
Mindanao	2026	11	28	4	65	138	138	25
Mindanao	2026	11	28	5	66	138	138	25
Mindanao	2026	11	28	6	69	138	138	25
Mindanao	2026	11	28	7	67	138	138	25
Mindanao	2026	11	28	8	74	138	138	25
Mindanao	2026	11	28	9	80	138	138	25
Mindanao	2026	11	28	10	88	138	138	25
Mindanao	2026	11	28	11	92	138	138	25
Mindanao	2026	11	28	12	90	138	138	25
Mindanao	2026	11	28	13	93	138	138	25
Mindanao	2026	11	28	14	99	138	138	25
Mindanao	2026	11	28	15	98	138	138	25
Mindanao	2026	11	28	16	95	138	138	25
Mindanao	2026	11	28	17	91	138	138	25
Mindanao	2026	11	28	18	106	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	11	28	19	102	138	138	25
Mindanao	2026	11	28	20	97	138	138	25
Mindanao	2026	11	28	21	92	138	138	25
Mindanao	2026	11	28	22	86	138	138	25
Mindanao	2026	11	28	23	81	138	138	25
Mindanao	2026	11	28	24	74	138	138	25
Mindanao	2026	11	29	1	70	138	138	25
Mindanao	2026	11	29	2	68	138	138	25
Mindanao	2026	11	29	3	63	138	138	25
Mindanao	2026	11	29	4	62	138	138	25
Mindanao	2026	11	29	5	62	138	138	25
Mindanao	2026	11	29	6	63	138	138	25
Mindanao	2026	11	29	7	60	138	138	25
Mindanao	2026	11	29	8	62	138	138	25
Mindanao	2026	11	29	9	65	138	138	25
Mindanao	2026	11	29	10	74	138	138	25
Mindanao	2026	11	29	11	77	138	138	25
Mindanao	2026	11	29	12	79	138	138	25
Mindanao	2026	11	29	13	80	138	138	25
Mindanao	2026	11	29	14	84	138	138	25
Mindanao	2026	11	29	15	82	138	138	25
Mindanao	2026	11	29	16	81	138	138	25
Mindanao	2026	11	29	17	81	138	138	25
Mindanao	2026	11	29	18	95	138	138	25
Mindanao	2026	11	29	19	92	138	138	25
Mindanao	2026	11	29	20	90	138	138	25
Mindanao	2026	11	29	21	87	138	138	25
Mindanao	2026	11	29	22	80	138	138	25
Mindanao	2026	11	29	23	74	138	138	25
Mindanao	2026	11	29	24	69	138	138	25
Mindanao	2026	11	30	1	74	138	138	25
Mindanao	2026	11	30	2	72	138	138	25
Mindanao	2026	11	30	3	70	138	138	25
Mindanao	2026	11	30	4	67	138	138	25
Mindanao	2026	11	30	5	67	138	138	25
Mindanao	2026	11	30	6	71	138	138	25
Mindanao	2026	11	30	7	69	138	138	25
Mindanao	2026	11	30	8	69	138	138	25
Mindanao	2026	11	30	9	80	138	138	25
Mindanao	2026	11	30	10	84	138	138	25
Mindanao	2026	11	30	11	89	138	138	25
Mindanao	2026	11	30	12	88	138	138	25
Mindanao	2026	11	30	13	88	138	138	25
Mindanao	2026	11	30	14	90	138	138	25
Mindanao	2026	11	30	15	87	138	138	25
Mindanao	2026	11	30	16	86	138	138	25
Mindanao	2026	11	30	17	89	138	138	25
Mindanao	2026	11	30	18	96	138	138	25
Mindanao	2026	11	30	19	92	138	138	25
Mindanao	2026	11	30	20	85	138	138	25
Mindanao	2026	11	30	21	80	138	138	25
Mindanao	2026	11	30	22	75	138	138	25
Mindanao	2026	11	30	23	70	138	138	25
Mindanao	2026	11	30	24	66	138	138	25
Mindanao	2026	12	1	1	77	138	138	25
Mindanao	2026	12	1	2	74	138	138	25
Mindanao	2026	12	1	3	72	138	138	25
Mindanao	2026	12	1	4	70	138	138	25
Mindanao	2026	12	1	5	75	138	138	25
Mindanao	2026	12	1	6	78	138	138	25
Mindanao	2026	12	1	7	70	138	138	25
Mindanao	2026	12	1	8	80	138	138	25
Mindanao	2026	12	1	9	94	138	138	25
Mindanao	2026	12	1	10	103	138	138	25
Mindanao	2026	12	1	11	108	138	138	25
Mindanao	2026	12	1	12	105	138	138	25
Mindanao	2026	12	1	13	106	138	138	25
Mindanao	2026	12	1	14	110	138	138	25
Mindanao	2026	12	1	15	110	138	138	25
Mindanao	2026	12	1	16	99	138	138	25
Mindanao	2026	12	1	17	96	138	138	25
Mindanao	2026	12	1	18	108	138	138	25
Mindanao	2026	12	1	19	103	138	138	25
Mindanao	2026	12	1	20	101	138	138	25
Mindanao	2026	12	1	21	96	138	138	25
Mindanao	2026	12	1	22	90	138	138	25
Mindanao	2026	12	1	23	84	138	138	25
Mindanao	2026	12	1	24	80	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	2	1	72	138	138	25
Mindanao	2026	12	2	2	68	138	138	25
Mindanao	2026	12	2	3	66	138	138	25
Mindanao	2026	12	2	4	65	138	138	25
Mindanao	2026	12	2	5	72	138	138	25
Mindanao	2026	12	2	6	76	138	138	25
Mindanao	2026	12	2	7	67	138	138	25
Mindanao	2026	12	2	8	76	138	138	25
Mindanao	2026	12	2	9	90	138	138	25
Mindanao	2026	12	2	10	100	138	138	25
Mindanao	2026	12	2	11	104	138	138	25
Mindanao	2026	12	2	12	102	138	138	25
Mindanao	2026	12	2	13	105	138	138	25
Mindanao	2026	12	2	14	110	138	138	25
Mindanao	2026	12	2	15	109	138	138	25
Mindanao	2026	12	2	16	106	138	138	25
Mindanao	2026	12	2	17	103	138	138	25
Mindanao	2026	12	2	18	112	138	138	25
Mindanao	2026	12	2	19	104	138	138	25
Mindanao	2026	12	2	20	101	138	138	25
Mindanao	2026	12	2	21	95	138	138	25
Mindanao	2026	12	2	22	90	138	138	25
Mindanao	2026	12	2	23	83	138	138	25
Mindanao	2026	12	2	24	78	138	138	25
Mindanao	2026	12	3	1	63	138	138	25
Mindanao	2026	12	3	2	64	138	138	25
Mindanao	2026	12	3	3	63	138	138	25
Mindanao	2026	12	3	4	62	138	138	25
Mindanao	2026	12	3	5	67	138	138	25
Mindanao	2026	12	3	6	73	138	138	25
Mindanao	2026	12	3	7	65	138	138	25
Mindanao	2026	12	3	8	75	138	138	25
Mindanao	2026	12	3	9	87	138	138	25
Mindanao	2026	12	3	10	95	138	138	25
Mindanao	2026	12	3	11	101	138	138	25
Mindanao	2026	12	3	12	98	138	138	25
Mindanao	2026	12	3	13	99	138	138	25
Mindanao	2026	12	3	14	103	138	138	25
Mindanao	2026	12	3	15	102	138	138	25
Mindanao	2026	12	3	16	100	138	138	25
Mindanao	2026	12	3	17	98	138	138	25
Mindanao	2026	12	3	18	106	138	138	25
Mindanao	2026	12	3	19	100	138	138	25
Mindanao	2026	12	3	20	97	138	138	25
Mindanao	2026	12	3	21	89	138	138	25
Mindanao	2026	12	3	22	84	138	138	25
Mindanao	2026	12	3	23	79	138	138	25
Mindanao	2026	12	3	24	74	138	138	25
Mindanao	2026	12	4	1	71	138	138	25
Mindanao	2026	12	4	2	66	138	138	25
Mindanao	2026	12	4	3	66	138	138	25
Mindanao	2026	12	4	4	66	138	138	25
Mindanao	2026	12	4	5	70	138	138	25
Mindanao	2026	12	4	6	76	138	138	25
Mindanao	2026	12	4	7	69	138	138	25
Mindanao	2026	12	4	8	77	138	138	25
Mindanao	2026	12	4	9	91	138	138	25
Mindanao	2026	12	4	10	99	138	138	25
Mindanao	2026	12	4	11	105	138	138	25
Mindanao	2026	12	4	12	101	138	138	25
Mindanao	2026	12	4	13	105	138	138	25
Mindanao	2026	12	4	14	108	138	138	25
Mindanao	2026	12	4	15	106	138	138	25
Mindanao	2026	12	4	16	103	138	138	25
Mindanao	2026	12	4	17	99	138	138	25
Mindanao	2026	12	4	18	110	138	138	25
Mindanao	2026	12	4	19	101	138	138	25
Mindanao	2026	12	4	20	100	138	138	25
Mindanao	2026	12	4	21	94	138	138	25
Mindanao	2026	12	4	22	88	138	138	25
Mindanao	2026	12	4	23	81	138	138	25
Mindanao	2026	12	4	24	77	138	138	25
Mindanao	2026	12	5	1	72	138	138	25
Mindanao	2026	12	5	2	70	138	138	25
Mindanao	2026	12	5	3	67	138	138	25
Mindanao	2026	12	5	4	66	138	138	25
Mindanao	2026	12	5	5	66	138	138	25
Mindanao	2026	12	5	6	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	5	7	67	138	138	25
Mindanao	2026	12	5	8	74	138	138	25
Mindanao	2026	12	5	9	83	138	138	25
Mindanao	2026	12	5	10	91	138	138	25
Mindanao	2026	12	5	11	94	138	138	25
Mindanao	2026	12	5	12	96	138	138	25
Mindanao	2026	12	5	13	97	138	138	25
Mindanao	2026	12	5	14	102	138	138	25
Mindanao	2026	12	5	15	101	138	138	25
Mindanao	2026	12	5	16	94	138	138	25
Mindanao	2026	12	5	17	94	138	138	25
Mindanao	2026	12	5	18	108	138	138	25
Mindanao	2026	12	5	19	101	138	138	25
Mindanao	2026	12	5	20	98	138	138	25
Mindanao	2026	12	5	21	96	138	138	25
Mindanao	2026	12	5	22	90	138	138	25
Mindanao	2026	12	5	23	82	138	138	25
Mindanao	2026	12	5	24	76	138	138	25
Mindanao	2026	12	6	1	72	138	138	25
Mindanao	2026	12	6	2	70	138	138	25
Mindanao	2026	12	6	3	66	138	138	25
Mindanao	2026	12	6	4	65	138	138	25
Mindanao	2026	12	6	5	65	138	138	25
Mindanao	2026	12	6	6	66	138	138	25
Mindanao	2026	12	6	7	61	138	138	25
Mindanao	2026	12	6	8	63	138	138	25
Mindanao	2026	12	6	9	67	138	138	25
Mindanao	2026	12	6	10	73	138	138	25
Mindanao	2026	12	6	11	78	138	138	25
Mindanao	2026	12	6	12	81	138	138	25
Mindanao	2026	12	6	13	82	138	138	25
Mindanao	2026	12	6	14	82	138	138	25
Mindanao	2026	12	6	15	81	138	138	25
Mindanao	2026	12	6	16	80	138	138	25
Mindanao	2026	12	6	17	83	138	138	25
Mindanao	2026	12	6	18	97	138	138	25
Mindanao	2026	12	6	19	95	138	138	25
Mindanao	2026	12	6	20	93	138	138	25
Mindanao	2026	12	6	21	89	138	138	25
Mindanao	2026	12	6	22	82	138	138	25
Mindanao	2026	12	6	23	78	138	138	25
Mindanao	2026	12	6	24	74	138	138	25
Mindanao	2026	12	7	1	69	138	138	25
Mindanao	2026	12	7	2	67	138	138	25
Mindanao	2026	12	7	3	64	138	138	25
Mindanao	2026	12	7	4	64	138	138	25
Mindanao	2026	12	7	5	69	138	138	25
Mindanao	2026	12	7	6	74	138	138	25
Mindanao	2026	12	7	7	68	138	138	25
Mindanao	2026	12	7	8	74	138	138	25
Mindanao	2026	12	7	9	87	138	138	25
Mindanao	2026	12	7	10	90	138	138	25
Mindanao	2026	12	7	11	96	138	138	25
Mindanao	2026	12	7	12	93	138	138	25
Mindanao	2026	12	7	13	95	138	138	25
Mindanao	2026	12	7	14	99	138	138	25
Mindanao	2026	12	7	15	100	138	138	25
Mindanao	2026	12	7	16	94	138	138	25
Mindanao	2026	12	7	17	93	138	138	25
Mindanao	2026	12	7	18	106	138	138	25
Mindanao	2026	12	7	19	100	138	138	25
Mindanao	2026	12	7	20	96	138	138	25
Mindanao	2026	12	7	21	92	138	138	25
Mindanao	2026	12	7	22	85	138	138	25
Mindanao	2026	12	7	23	78	138	138	25
Mindanao	2026	12	7	24	72	138	138	25
Mindanao	2026	12	8	1	75	138	138	25
Mindanao	2026	12	8	2	70	138	138	25
Mindanao	2026	12	8	3	69	138	138	25
Mindanao	2026	12	8	4	67	138	138	25
Mindanao	2026	12	8	5	70	138	138	25
Mindanao	2026	12	8	6	73	138	138	25
Mindanao	2026	12	8	7	71	138	138	25
Mindanao	2026	12	8	8	74	138	138	25
Mindanao	2026	12	8	9	82	138	138	25
Mindanao	2026	12	8	10	89	138	138	25
Mindanao	2026	12	8	11	95	138	138	25
Mindanao	2026	12	8	12	93	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	8	13	94	138	138	25
Mindanao	2026	12	8	14	94	138	138	25
Mindanao	2026	12	8	15	92	138	138	25
Mindanao	2026	12	8	16	92	138	138	25
Mindanao	2026	12	8	17	92	138	138	25
Mindanao	2026	12	8	18	103	138	138	25
Mindanao	2026	12	8	19	96	138	138	25
Mindanao	2026	12	8	20	93	138	138	25
Mindanao	2026	12	8	21	89	138	138	25
Mindanao	2026	12	8	22	84	138	138	25
Mindanao	2026	12	8	23	79	138	138	25
Mindanao	2026	12	8	24	74	138	138	25
Mindanao	2026	12	9	1	72	138	138	25
Mindanao	2026	12	9	2	68	138	138	25
Mindanao	2026	12	9	3	66	138	138	25
Mindanao	2026	12	9	4	65	138	138	25
Mindanao	2026	12	9	5	72	138	138	25
Mindanao	2026	12	9	6	76	138	138	25
Mindanao	2026	12	9	7	67	138	138	25
Mindanao	2026	12	9	8	76	138	138	25
Mindanao	2026	12	9	9	90	138	138	25
Mindanao	2026	12	9	10	100	138	138	25
Mindanao	2026	12	9	11	104	138	138	25
Mindanao	2026	12	9	12	102	138	138	25
Mindanao	2026	12	9	13	105	138	138	25
Mindanao	2026	12	9	14	110	138	138	25
Mindanao	2026	12	9	15	109	138	138	25
Mindanao	2026	12	9	16	106	138	138	25
Mindanao	2026	12	9	17	103	138	138	25
Mindanao	2026	12	9	18	112	138	138	25
Mindanao	2026	12	9	19	104	138	138	25
Mindanao	2026	12	9	20	101	138	138	25
Mindanao	2026	12	9	21	95	138	138	25
Mindanao	2026	12	9	22	90	138	138	25
Mindanao	2026	12	9	23	83	138	138	25
Mindanao	2026	12	9	24	78	138	138	25
Mindanao	2026	12	10	1	75	138	138	25
Mindanao	2026	12	10	2	72	138	138	25
Mindanao	2026	12	10	3	69	138	138	25
Mindanao	2026	12	10	4	69	138	138	25
Mindanao	2026	12	10	5	72	138	138	25
Mindanao	2026	12	10	6	76	138	138	25
Mindanao	2026	12	10	7	70	138	138	25
Mindanao	2026	12	10	8	78	138	138	25
Mindanao	2026	12	10	9	91	138	138	25
Mindanao	2026	12	10	10	99	138	138	25
Mindanao	2026	12	10	11	104	138	138	25
Mindanao	2026	12	10	12	101	138	138	25
Mindanao	2026	12	10	13	100	138	138	25
Mindanao	2026	12	10	14	106	138	138	25
Mindanao	2026	12	10	15	104	138	138	25
Mindanao	2026	12	10	16	103	138	138	25
Mindanao	2026	12	10	17	100	138	138	25
Mindanao	2026	12	10	18	107	138	138	25
Mindanao	2026	12	10	19	101	138	138	25
Mindanao	2026	12	10	20	97	138	138	25
Mindanao	2026	12	10	21	93	138	138	25
Mindanao	2026	12	10	22	87	138	138	25
Mindanao	2026	12	10	23	80	138	138	25
Mindanao	2026	12	10	24	76	138	138	25
Mindanao	2026	12	11	1	70	138	138	25
Mindanao	2026	12	11	2	68	138	138	25
Mindanao	2026	12	11	3	67	138	138	25
Mindanao	2026	12	11	4	66	138	138	25
Mindanao	2026	12	11	5	71	138	138	25
Mindanao	2026	12	11	6	76	138	138	25
Mindanao	2026	12	11	7	69	138	138	25
Mindanao	2026	12	11	8	77	138	138	25
Mindanao	2026	12	11	9	88	138	138	25
Mindanao	2026	12	11	10	96	138	138	25
Mindanao	2026	12	11	11	102	138	138	25
Mindanao	2026	12	11	12	97	138	138	25
Mindanao	2026	12	11	13	98	138	138	25
Mindanao	2026	12	11	14	103	138	138	25
Mindanao	2026	12	11	15	99	138	138	25
Mindanao	2026	12	11	16	100	138	138	25
Mindanao	2026	12	11	17	97	138	138	25
Mindanao	2026	12	11	18	104	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	11	19	100	138	138	25
Mindanao	2026	12	11	20	96	138	138	25
Mindanao	2026	12	11	21	91	138	138	25
Mindanao	2026	12	11	22	85	138	138	25
Mindanao	2026	12	11	23	78	138	138	25
Mindanao	2026	12	11	24	74	138	138	25
Mindanao	2026	12	12	1	69	138	138	25
Mindanao	2026	12	12	2	67	138	138	25
Mindanao	2026	12	12	3	66	138	138	25
Mindanao	2026	12	12	4	64	138	138	25
Mindanao	2026	12	12	5	66	138	138	25
Mindanao	2026	12	12	6	69	138	138	25
Mindanao	2026	12	12	7	66	138	138	25
Mindanao	2026	12	12	8	73	138	138	25
Mindanao	2026	12	12	9	82	138	138	25
Mindanao	2026	12	12	10	89	138	138	25
Mindanao	2026	12	12	11	95	138	138	25
Mindanao	2026	12	12	12	94	138	138	25
Mindanao	2026	12	12	13	95	138	138	25
Mindanao	2026	12	12	14	98	138	138	25
Mindanao	2026	12	12	15	97	138	138	25
Mindanao	2026	12	12	16	98	138	138	25
Mindanao	2026	12	12	17	94	138	138	25
Mindanao	2026	12	12	18	108	138	138	25
Mindanao	2026	12	12	19	101	138	138	25
Mindanao	2026	12	12	20	96	138	138	25
Mindanao	2026	12	12	21	93	138	138	25
Mindanao	2026	12	12	22	87	138	138	25
Mindanao	2026	12	12	23	79	138	138	25
Mindanao	2026	12	12	24	74	138	138	25
Mindanao	2026	12	13	1	68	138	138	25
Mindanao	2026	12	13	2	65	138	138	25
Mindanao	2026	12	13	3	61	138	138	25
Mindanao	2026	12	13	4	60	138	138	25
Mindanao	2026	12	13	5	62	138	138	25
Mindanao	2026	12	13	6	64	138	138	25
Mindanao	2026	12	13	7	64	138	138	25
Mindanao	2026	12	13	8	64	138	138	25
Mindanao	2026	12	13	9	71	138	138	25
Mindanao	2026	12	13	10	77	138	138	25
Mindanao	2026	12	13	11	82	138	138	25
Mindanao	2026	12	13	12	83	138	138	25
Mindanao	2026	12	13	13	83	138	138	25
Mindanao	2026	12	13	14	85	138	138	25
Mindanao	2026	12	13	15	84	138	138	25
Mindanao	2026	12	13	16	83	138	138	25
Mindanao	2026	12	13	17	84	138	138	25
Mindanao	2026	12	13	18	101	138	138	25
Mindanao	2026	12	13	19	99	138	138	25
Mindanao	2026	12	13	20	95	138	138	25
Mindanao	2026	12	13	21	94	138	138	25
Mindanao	2026	12	13	22	85	138	138	25
Mindanao	2026	12	13	23	80	138	138	25
Mindanao	2026	12	13	24	75	138	138	25
Mindanao	2026	12	14	1	71	138	138	25
Mindanao	2026	12	14	2	66	138	138	25
Mindanao	2026	12	14	3	65	138	138	25
Mindanao	2026	12	14	4	64	138	138	25
Mindanao	2026	12	14	5	70	138	138	25
Mindanao	2026	12	14	6	72	138	138	25
Mindanao	2026	12	14	7	65	138	138	25
Mindanao	2026	12	14	8	77	138	138	25
Mindanao	2026	12	14	9	92	138	138	25
Mindanao	2026	12	14	10	103	138	138	25
Mindanao	2026	12	14	11	108	138	138	25
Mindanao	2026	12	14	12	106	138	138	25
Mindanao	2026	12	14	13	108	138	138	25
Mindanao	2026	12	14	14	113	138	138	25
Mindanao	2026	12	14	15	112	138	138	25
Mindanao	2026	12	14	16	110	138	138	25
Mindanao	2026	12	14	17	106	138	138	25
Mindanao	2026	12	14	18	114	138	138	25
Mindanao	2026	12	14	19	109	138	138	25
Mindanao	2026	12	14	20	107	138	138	25
Mindanao	2026	12	14	21	102	138	138	25
Mindanao	2026	12	14	22	94	138	138	25
Mindanao	2026	12	14	23	88	138	138	25
Mindanao	2026	12	14	24	82	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	15	1	77	138	138	25
Mindanao	2026	12	15	2	75	138	138	25
Mindanao	2026	12	15	3	73	138	138	25
Mindanao	2026	12	15	4	71	138	138	25
Mindanao	2026	12	15	5	75	138	138	25
Mindanao	2026	12	15	6	79	138	138	25
Mindanao	2026	12	15	7	72	138	138	25
Mindanao	2026	12	15	8	82	138	138	25
Mindanao	2026	12	15	9	98	138	138	25
Mindanao	2026	12	15	10	107	138	138	25
Mindanao	2026	12	15	11	112	138	138	25
Mindanao	2026	12	15	12	110	138	138	25
Mindanao	2026	12	15	13	111	138	138	25
Mindanao	2026	12	15	14	113	138	138	25
Mindanao	2026	12	15	15	113	138	138	25
Mindanao	2026	12	15	16	110	138	138	25
Mindanao	2026	12	15	17	103	138	138	25
Mindanao	2026	12	15	18	110	138	138	25
Mindanao	2026	12	15	19	103	138	138	25
Mindanao	2026	12	15	20	103	138	138	25
Mindanao	2026	12	15	21	100	138	138	25
Mindanao	2026	12	15	22	92	138	138	25
Mindanao	2026	12	15	23	86	138	138	25
Mindanao	2026	12	15	24	81	138	138	25
Mindanao	2026	12	16	1	77	138	138	25
Mindanao	2026	12	16	2	75	138	138	25
Mindanao	2026	12	16	3	71	138	138	25
Mindanao	2026	12	16	4	72	138	138	25
Mindanao	2026	12	16	5	74	138	138	25
Mindanao	2026	12	16	6	79	138	138	25
Mindanao	2026	12	16	7	71	138	138	25
Mindanao	2026	12	16	8	78	138	138	25
Mindanao	2026	12	16	9	91	138	138	25
Mindanao	2026	12	16	10	101	138	138	25
Mindanao	2026	12	16	11	106	138	138	25
Mindanao	2026	12	16	12	101	138	138	25
Mindanao	2026	12	16	13	103	138	138	25
Mindanao	2026	12	16	14	106	138	138	25
Mindanao	2026	12	16	15	108	138	138	25
Mindanao	2026	12	16	16	104	138	138	25
Mindanao	2026	12	16	17	103	138	138	25
Mindanao	2026	12	16	18	111	138	138	25
Mindanao	2026	12	16	19	104	138	138	25
Mindanao	2026	12	16	20	102	138	138	25
Mindanao	2026	12	16	21	98	138	138	25
Mindanao	2026	12	16	22	90	138	138	25
Mindanao	2026	12	16	23	85	138	138	25
Mindanao	2026	12	16	24	79	138	138	25
Mindanao	2026	12	17	1	75	138	138	25
Mindanao	2026	12	17	2	72	138	138	25
Mindanao	2026	12	17	3	69	138	138	25
Mindanao	2026	12	17	4	69	138	138	25
Mindanao	2026	12	17	5	72	138	138	25
Mindanao	2026	12	17	6	76	138	138	25
Mindanao	2026	12	17	7	70	138	138	25
Mindanao	2026	12	17	8	78	138	138	25
Mindanao	2026	12	17	9	91	138	138	25
Mindanao	2026	12	17	10	99	138	138	25
Mindanao	2026	12	17	11	104	138	138	25
Mindanao	2026	12	17	12	101	138	138	25
Mindanao	2026	12	17	13	100	138	138	25
Mindanao	2026	12	17	14	106	138	138	25
Mindanao	2026	12	17	15	104	138	138	25
Mindanao	2026	12	17	16	103	138	138	25
Mindanao	2026	12	17	17	100	138	138	25
Mindanao	2026	12	17	18	107	138	138	25
Mindanao	2026	12	17	19	101	138	138	25
Mindanao	2026	12	17	20	97	138	138	25
Mindanao	2026	12	17	21	93	138	138	25
Mindanao	2026	12	17	22	87	138	138	25
Mindanao	2026	12	17	23	80	138	138	25
Mindanao	2026	12	17	24	76	138	138	25
Mindanao	2026	12	18	1	73	138	138	25
Mindanao	2026	12	18	2	69	138	138	25
Mindanao	2026	12	18	3	68	138	138	25
Mindanao	2026	12	18	4	67	138	138	25
Mindanao	2026	12	18	5	70	138	138	25
Mindanao	2026	12	18	6	75	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	18	7	72	138	138	25
Mindanao	2026	12	18	8	79	138	138	25
Mindanao	2026	12	18	9	88	138	138	25
Mindanao	2026	12	18	10	95	138	138	25
Mindanao	2026	12	18	11	102	138	138	25
Mindanao	2026	12	18	12	99	138	138	25
Mindanao	2026	12	18	13	101	138	138	25
Mindanao	2026	12	18	14	108	138	138	25
Mindanao	2026	12	18	15	105	138	138	25
Mindanao	2026	12	18	16	104	138	138	25
Mindanao	2026	12	18	17	99	138	138	25
Mindanao	2026	12	18	18	110	138	138	25
Mindanao	2026	12	18	19	103	138	138	25
Mindanao	2026	12	18	20	99	138	138	25
Mindanao	2026	12	18	21	95	138	138	25
Mindanao	2026	12	18	22	91	138	138	25
Mindanao	2026	12	18	23	84	138	138	25
Mindanao	2026	12	18	24	79	138	138	25
Mindanao	2026	12	19	1	74	138	138	25
Mindanao	2026	12	19	2	71	138	138	25
Mindanao	2026	12	19	3	69	138	138	25
Mindanao	2026	12	19	4	67	138	138	25
Mindanao	2026	12	19	5	67	138	138	25
Mindanao	2026	12	19	6	70	138	138	25
Mindanao	2026	12	19	7	70	138	138	25
Mindanao	2026	12	19	8	73	138	138	25
Mindanao	2026	12	19	9	83	138	138	25
Mindanao	2026	12	19	10	90	138	138	25
Mindanao	2026	12	19	11	94	138	138	25
Mindanao	2026	12	19	12	93	138	138	25
Mindanao	2026	12	19	13	95	138	138	25
Mindanao	2026	12	19	14	100	138	138	25
Mindanao	2026	12	19	15	99	138	138	25
Mindanao	2026	12	19	16	95	138	138	25
Mindanao	2026	12	19	17	93	138	138	25
Mindanao	2026	12	19	18	107	138	138	25
Mindanao	2026	12	19	19	102	138	138	25
Mindanao	2026	12	19	20	98	138	138	25
Mindanao	2026	12	19	21	94	138	138	25
Mindanao	2026	12	19	22	89	138	138	25
Mindanao	2026	12	19	23	84	138	138	25
Mindanao	2026	12	19	24	77	138	138	25
Mindanao	2026	12	20	1	73	138	138	25
Mindanao	2026	12	20	2	69	138	138	25
Mindanao	2026	12	20	3	68	138	138	25
Mindanao	2026	12	20	4	66	138	138	25
Mindanao	2026	12	20	5	66	138	138	25
Mindanao	2026	12	20	6	68	138	138	25
Mindanao	2026	12	20	7	65	138	138	25
Mindanao	2026	12	20	8	66	138	138	25
Mindanao	2026	12	20	9	71	138	138	25
Mindanao	2026	12	20	10	78	138	138	25
Mindanao	2026	12	20	11	82	138	138	25
Mindanao	2026	12	20	12	82	138	138	25
Mindanao	2026	12	20	13	83	138	138	25
Mindanao	2026	12	20	14	84	138	138	25
Mindanao	2026	12	20	15	83	138	138	25
Mindanao	2026	12	20	16	81	138	138	25
Mindanao	2026	12	20	17	79	138	138	25
Mindanao	2026	12	20	18	94	138	138	25
Mindanao	2026	12	20	19	89	138	138	25
Mindanao	2026	12	20	20	87	138	138	25
Mindanao	2026	12	20	21	85	138	138	25
Mindanao	2026	12	20	22	80	138	138	25
Mindanao	2026	12	20	23	73	138	138	25
Mindanao	2026	12	20	24	70	138	138	25
Mindanao	2026	12	21	1	67	138	138	25
Mindanao	2026	12	21	2	63	138	138	25
Mindanao	2026	12	21	3	63	138	138	25
Mindanao	2026	12	21	4	63	138	138	25
Mindanao	2026	12	21	5	63	138	138	25
Mindanao	2026	12	21	6	68	138	138	25
Mindanao	2026	12	21	7	69	138	138	25
Mindanao	2026	12	21	8	75	138	138	25
Mindanao	2026	12	21	9	86	138	138	25
Mindanao	2026	12	21	10	94	138	138	25
Mindanao	2026	12	21	11	97	138	138	25
Mindanao	2026	12	21	12	93	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	21	13	93	138	138	25
Mindanao	2026	12	21	14	97	138	138	25
Mindanao	2026	12	21	15	99	138	138	25
Mindanao	2026	12	21	16	98	138	138	25
Mindanao	2026	12	21	17	96	138	138	25
Mindanao	2026	12	21	18	105	138	138	25
Mindanao	2026	12	21	19	99	138	138	25
Mindanao	2026	12	21	20	94	138	138	25
Mindanao	2026	12	21	21	90	138	138	25
Mindanao	2026	12	21	22	85	138	138	25
Mindanao	2026	12	21	23	78	138	138	25
Mindanao	2026	12	21	24	73	138	138	25
Mindanao	2026	12	22	1	69	138	138	25
Mindanao	2026	12	22	2	66	138	138	25
Mindanao	2026	12	22	3	64	138	138	25
Mindanao	2026	12	22	4	65	138	138	25
Mindanao	2026	12	22	5	65	138	138	25
Mindanao	2026	12	22	6	70	138	138	25
Mindanao	2026	12	22	7	69	138	138	25
Mindanao	2026	12	22	8	76	138	138	25
Mindanao	2026	12	22	9	89	138	138	25
Mindanao	2026	12	22	10	95	138	138	25
Mindanao	2026	12	22	11	101	138	138	25
Mindanao	2026	12	22	12	97	138	138	25
Mindanao	2026	12	22	13	101	138	138	25
Mindanao	2026	12	22	14	105	138	138	25
Mindanao	2026	12	22	15	104	138	138	25
Mindanao	2026	12	22	16	101	138	138	25
Mindanao	2026	12	22	17	99	138	138	25
Mindanao	2026	12	22	18	107	138	138	25
Mindanao	2026	12	22	19	100	138	138	25
Mindanao	2026	12	22	20	96	138	138	25
Mindanao	2026	12	22	21	91	138	138	25
Mindanao	2026	12	22	22	85	138	138	25
Mindanao	2026	12	22	23	79	138	138	25
Mindanao	2026	12	22	24	73	138	138	25
Mindanao	2026	12	23	1	71	138	138	25
Mindanao	2026	12	23	2	69	138	138	25
Mindanao	2026	12	23	3	65	138	138	25
Mindanao	2026	12	23	4	64	138	138	25
Mindanao	2026	12	23	5	66	138	138	25
Mindanao	2026	12	23	6	68	138	138	25
Mindanao	2026	12	23	7	70	138	138	25
Mindanao	2026	12	23	8	75	138	138	25
Mindanao	2026	12	23	9	88	138	138	25
Mindanao	2026	12	23	10	95	138	138	25
Mindanao	2026	12	23	11	101	138	138	25
Mindanao	2026	12	23	12	100	138	138	25
Mindanao	2026	12	23	13	101	138	138	25
Mindanao	2026	12	23	14	106	138	138	25
Mindanao	2026	12	23	15	105	138	138	25
Mindanao	2026	12	23	16	104	138	138	25
Mindanao	2026	12	23	17	99	138	138	25
Mindanao	2026	12	23	18	108	138	138	25
Mindanao	2026	12	23	19	103	138	138	25
Mindanao	2026	12	23	20	99	138	138	25
Mindanao	2026	12	23	21	95	138	138	25
Mindanao	2026	12	23	22	87	138	138	25
Mindanao	2026	12	23	23	80	138	138	25
Mindanao	2026	12	23	24	76	138	138	25
Mindanao	2026	12	24	1	72	138	138	25
Mindanao	2026	12	24	2	68	138	138	25
Mindanao	2026	12	24	3	66	138	138	25
Mindanao	2026	12	24	4	64	138	138	25
Mindanao	2026	12	24	5	63	138	138	25
Mindanao	2026	12	24	6	65	138	138	25
Mindanao	2026	12	24	7	65	138	138	25
Mindanao	2026	12	24	8	68	138	138	25
Mindanao	2026	12	24	9	75	138	138	25
Mindanao	2026	12	24	10	78	138	138	25
Mindanao	2026	12	24	11	82	138	138	25
Mindanao	2026	12	24	12	83	138	138	25
Mindanao	2026	12	24	13	83	138	138	25
Mindanao	2026	12	24	14	85	138	138	25
Mindanao	2026	12	24	15	83	138	138	25
Mindanao	2026	12	24	16	82	138	138	25
Mindanao	2026	12	24	17	82	138	138	25
Mindanao	2026	12	24	18	91	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	24	19	81	138	138	25
Mindanao	2026	12	24	20	78	138	138	25
Mindanao	2026	12	24	21	75	138	138	25
Mindanao	2026	12	24	22	73	138	138	25
Mindanao	2026	12	24	23	71	138	138	25
Mindanao	2026	12	24	24	68	138	138	25
Mindanao	2026	12	25	1	65	138	138	25
Mindanao	2026	12	25	2	60	138	138	25
Mindanao	2026	12	25	3	58	138	138	25
Mindanao	2026	12	25	4	56	138	138	25
Mindanao	2026	12	25	5	56	138	138	25
Mindanao	2026	12	25	6	55	138	138	25
Mindanao	2026	12	25	7	56	138	138	25
Mindanao	2026	12	25	8	56	138	138	25
Mindanao	2026	12	25	9	57	138	138	25
Mindanao	2026	12	25	10	60	138	138	25
Mindanao	2026	12	25	11	61	138	138	25
Mindanao	2026	12	25	12	63	138	138	25
Mindanao	2026	12	25	13	62	138	138	25
Mindanao	2026	12	25	14	59	138	138	25
Mindanao	2026	12	25	15	61	138	138	25
Mindanao	2026	12	25	16	62	138	138	25
Mindanao	2026	12	25	17	64	138	138	25
Mindanao	2026	12	25	18	75	138	138	25
Mindanao	2026	12	25	19	73	138	138	25
Mindanao	2026	12	25	20	70	138	138	25
Mindanao	2026	12	25	21	67	138	138	25
Mindanao	2026	12	25	22	63	138	138	25
Mindanao	2026	12	25	23	59	138	138	25
Mindanao	2026	12	25	24	57	138	138	25
Mindanao	2026	12	26	1	74	138	138	25
Mindanao	2026	12	26	2	71	138	138	25
Mindanao	2026	12	26	3	69	138	138	25
Mindanao	2026	12	26	4	67	138	138	25
Mindanao	2026	12	26	5	67	138	138	25
Mindanao	2026	12	26	6	70	138	138	25
Mindanao	2026	12	26	7	70	138	138	25
Mindanao	2026	12	26	8	73	138	138	25
Mindanao	2026	12	26	9	83	138	138	25
Mindanao	2026	12	26	10	90	138	138	25
Mindanao	2026	12	26	11	94	138	138	25
Mindanao	2026	12	26	12	93	138	138	25
Mindanao	2026	12	26	13	95	138	138	25
Mindanao	2026	12	26	14	100	138	138	25
Mindanao	2026	12	26	15	99	138	138	25
Mindanao	2026	12	26	16	95	138	138	25
Mindanao	2026	12	26	17	93	138	138	25
Mindanao	2026	12	26	18	107	138	138	25
Mindanao	2026	12	26	19	102	138	138	25
Mindanao	2026	12	26	20	98	138	138	25
Mindanao	2026	12	26	21	94	138	138	25
Mindanao	2026	12	26	22	89	138	138	25
Mindanao	2026	12	26	23	84	138	138	25
Mindanao	2026	12	26	24	77	138	138	25
Mindanao	2026	12	27	1	73	138	138	25
Mindanao	2026	12	27	2	69	138	138	25
Mindanao	2026	12	27	3	68	138	138	25
Mindanao	2026	12	27	4	66	138	138	25
Mindanao	2026	12	27	5	66	138	138	25
Mindanao	2026	12	27	6	68	138	138	25
Mindanao	2026	12	27	7	65	138	138	25
Mindanao	2026	12	27	8	66	138	138	25
Mindanao	2026	12	27	9	71	138	138	25
Mindanao	2026	12	27	10	78	138	138	25
Mindanao	2026	12	27	11	82	138	138	25
Mindanao	2026	12	27	12	82	138	138	25
Mindanao	2026	12	27	13	83	138	138	25
Mindanao	2026	12	27	14	84	138	138	25
Mindanao	2026	12	27	15	83	138	138	25
Mindanao	2026	12	27	16	81	138	138	25
Mindanao	2026	12	27	17	79	138	138	25
Mindanao	2026	12	27	18	94	138	138	25
Mindanao	2026	12	27	19	89	138	138	25
Mindanao	2026	12	27	20	87	138	138	25
Mindanao	2026	12	27	21	85	138	138	25
Mindanao	2026	12	27	22	80	138	138	25
Mindanao	2026	12	27	23	73	138	138	25
Mindanao	2026	12	27	24	70	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	28	1	54	138	138	25
Mindanao	2026	12	28	2	53	138	138	25
Mindanao	2026	12	28	3	51	138	138	25
Mindanao	2026	12	28	4	51	138	138	25
Mindanao	2026	12	28	5	52	138	138	25
Mindanao	2026	12	28	6	54	138	138	25
Mindanao	2026	12	28	7	55	138	138	25
Mindanao	2026	12	28	8	59	138	138	25
Mindanao	2026	12	28	9	65	138	138	25
Mindanao	2026	12	28	10	71	138	138	25
Mindanao	2026	12	28	11	73	138	138	25
Mindanao	2026	12	28	12	73	138	138	25
Mindanao	2026	12	28	13	72	138	138	25
Mindanao	2026	12	28	14	74	138	138	25
Mindanao	2026	12	28	15	74	138	138	25
Mindanao	2026	12	28	16	76	138	138	25
Mindanao	2026	12	28	17	78	138	138	25
Mindanao	2026	12	28	18	88	138	138	25
Mindanao	2026	12	28	19	83	138	138	25
Mindanao	2026	12	28	20	79	138	138	25
Mindanao	2026	12	28	21	74	138	138	25
Mindanao	2026	12	28	22	69	138	138	25
Mindanao	2026	12	28	23	65	138	138	25
Mindanao	2026	12	28	24	61	138	138	25
Mindanao	2026	12	29	1	58	138	138	25
Mindanao	2026	12	29	2	56	138	138	25
Mindanao	2026	12	29	3	55	138	138	25
Mindanao	2026	12	29	4	54	138	138	25
Mindanao	2026	12	29	5	56	138	138	25
Mindanao	2026	12	29	6	59	138	138	25
Mindanao	2026	12	29	7	60	138	138	25
Mindanao	2026	12	29	8	65	138	138	25
Mindanao	2026	12	29	9	76	138	138	25
Mindanao	2026	12	29	10	82	138	138	25
Mindanao	2026	12	29	11	85	138	138	25
Mindanao	2026	12	29	12	85	138	138	25
Mindanao	2026	12	29	13	85	138	138	25
Mindanao	2026	12	29	14	88	138	138	25
Mindanao	2026	12	29	15	87	138	138	25
Mindanao	2026	12	29	16	86	138	138	25
Mindanao	2026	12	29	17	87	138	138	25
Mindanao	2026	12	29	18	93	138	138	25
Mindanao	2026	12	29	19	85	138	138	25
Mindanao	2026	12	29	20	82	138	138	25
Mindanao	2026	12	29	21	76	138	138	25
Mindanao	2026	12	29	22	70	138	138	25
Mindanao	2026	12	29	23	64	138	138	25
Mindanao	2026	12	29	24	61	138	138	25
Mindanao	2026	12	30	1	68	138	138	25
Mindanao	2026	12	30	2	65	138	138	25
Mindanao	2026	12	30	3	63	138	138	25
Mindanao	2026	12	30	4	60	138	138	25
Mindanao	2026	12	30	5	61	138	138	25
Mindanao	2026	12	30	6	64	138	138	25
Mindanao	2026	12	30	7	62	138	138	25
Mindanao	2026	12	30	8	64	138	138	25
Mindanao	2026	12	30	9	71	138	138	25
Mindanao	2026	12	30	10	77	138	138	25
Mindanao	2026	12	30	11	82	138	138	25
Mindanao	2026	12	30	12	83	138	138	25
Mindanao	2026	12	30	13	83	138	138	25
Mindanao	2026	12	30	14	86	138	138	25
Mindanao	2026	12	30	15	85	138	138	25
Mindanao	2026	12	30	16	84	138	138	25
Mindanao	2026	12	30	17	83	138	138	25
Mindanao	2026	12	30	18	95	138	138	25
Mindanao	2026	12	30	19	92	138	138	25
Mindanao	2026	12	30	20	89	138	138	25
Mindanao	2026	12	30	21	86	138	138	25
Mindanao	2026	12	30	22	81	138	138	25
Mindanao	2026	12	30	23	76	138	138	25
Mindanao	2026	12	30	24	69	138	138	25
Mindanao	2026	12	31	1	64	138	138	25
Mindanao	2026	12	31	2	61	138	138	25
Mindanao	2026	12	31	3	59	138	138	25
Mindanao	2026	12	31	4	59	138	138	25
Mindanao	2026	12	31	5	58	138	138	25
Mindanao	2026	12	31	6	60	138	138	25

Note: RR Requirement is equivalent to 4% of Demand projection based Plexos Profiles using DOE's 2020-2040 Annual Peak Demand Forecast for Luzon, Visayas, and Mindanao Grid dated August 24, 2020. While CR and DR are based on Gross Capacity of highest generating unit for the succeeding years.

ANNEX F Three Year Projected Hourly Levels of AS Requirement for Mindanao

GRID	YEAR	MONTH	DAY	HOUR	REGULATING RESERVE (MW)	CONTINGENCY RESERVE (MW)	DISPATCHABLE RESERVE (MW)	BLACK START (Min MW per Restoration Highway)
Mindanao	2026	12	31	7	60	138	138	25
Mindanao	2026	12	31	8	62	138	138	25
Mindanao	2026	12	31	9	68	138	138	25
Mindanao	2026	12	31	10	73	138	138	25
Mindanao	2026	12	31	11	77	138	138	25
Mindanao	2026	12	31	12	79	138	138	25
Mindanao	2026	12	31	13	81	138	138	25
Mindanao	2026	12	31	14	83	138	138	25
Mindanao	2026	12	31	15	81	138	138	25
Mindanao	2026	12	31	16	80	138	138	25
Mindanao	2026	12	31	17	81	138	138	25
Mindanao	2026	12	31	18	90	138	138	25
Mindanao	2026	12	31	19	85	138	138	25
Mindanao	2026	12	31	20	80	138	138	25
Mindanao	2026	12	31	21	78	138	138	25
Mindanao	2026	12	31	22	76	138	138	25
Mindanao	2026	12	31	23	75	138	138	25
Mindanao	2026	12	31	24	75	138	138	25