


Republic of the Philippines
ENERGY REGULATORY COMMISSION
San Miguel Avenue, Pasig City

2011 AUG 23 11:30:05

IN THE MATTER OF THE
APPLICATION FOR THE
APPROVAL OF THE STA.
BARBARA 230 KV SUBSTATION
PROJECT, WITH PRAYER FOR THE
ISSUANCE OF A PROVISIONAL
AUTHORITY

ERC CASE NO. 2011-107 RC

NATIONAL GRID CORPORATION OF
THE PHILIPPINES (NGCP),
Applicant.
x-----x

DOCKETED
Date: AUG 23 2011
By: 

ORDER

On August 1, 2011, the National Grid Corporation of the Philippines (NGCP) filed an application for the approval of the Santa Barbara 230 kV Substation Project, with prayer for the issuance of a provisional authority.

In the said application, NGCP alleged, among others, that:

1. It is a corporation created and existing under the laws of the Philippines. It has its principal office address at NGCP Building, Quezon Avenue corner BIR Road, Diliman, Quezon City. It is the corporate vehicle of the consortium awarded with the concession to assume the power transmission functions of the National Transmission Corporation (TRANSCO) pursuant to Republic Act No. (R.A.) 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA);
2. One of its functions and responsibilities enumerated in Section 9 of the EPIRA is to *“improve and expand its transmission facilities, consistent with the Grid Code and the Transmission Development Plan (TDP) to be promulgated pursuant to this Act, to adequately serve generation companies, distribution utilities and suppliers requiring transmission service and/or ancillary services through the transmission system: Provided, That TRANSCO shall submit any plan for expansion or improvement of its facilities for approval by the ERC.”* (Emphasis by the NGCP);

3. In accordance with its mandate to ensure and maintain the quality, reliability, adequacy, security, stability and integrity of the Grid, it seeks authority from the Commission to implement the Sta. Barbara 230 kV Substation Project (Project);
4. In January 2010, Central Pangasinan Electric Cooperative, Inc. (CENPELCO), Dagupan Electric Corporation, Inc. (DECORP) and Pangasinan III Electric Cooperative, Inc. (PANELCO III) jointly requested applicant to construct a drawdown substation near the load centers in Pangasinan as these Distribution Utilities (DUs) are merely served by a 69 kV facility from its San Manuel and Labrador Substations;
5. In view of such request, it conducted a study to determine whether the construction of a substation in the area may: (i) complement future 69 kV lines which will be constructed by DUs for their future expansion; (ii) provide better reliability and supply; (iii) provide operational flexibility in the 69 kV facilities in the area; and (iv) address the concerns on the difficulty in maintaining and upgrading the existing 69 kV lines from San Manuel and Labrador Substations;
6. Due to the positive result thereof, it included the Project as part of its ongoing preparation of the 2011 Transmission Development Plan (TDP) Report. The results of the re-evaluation are discussed below;

Assessment of Scenarios With and Without the Sta. Barbara 230 kV Substation

7. It conducted an assessment of the impact of the project on the loading of the transformers at San Manuel and Labrador Substations. Attached hereto is the table that shows the existing capacities and peak loads (in MW) of San Manuel and Labrador Substations as Annex "A";
8. Upon completion of the Project at 2x100 MVA capacity by 2014, it will accommodate portions of the existing loads of Labrador and San Manuel Substations. The Calasiao Substation of DECORP, the San Carlos and Malasiqui Substations of CENPELCO and the Urdaneta Substation of PANELCO III are the 69 kV substations that will be normally sourcing power from Sta. Barbara. Attached hereto is the table that shows the San Manuel and Labrador Substations peak loadings in MW with Sta. Barbara Substation as Annex "B.";
9. Further, the Project will serve as an N-1 contingency provision for the Labrador Substation. Thus, during outage of the 100 MVA unit, the DECORP Dagupan Substation can be shifted to Sta. Barbara Substation thereby relieving the loading of the remaining 50 MVA transformer;

69 kV Line Loading of the Labrador and San Manuel Substations for scenarios without and with Sta. Barbara 230 kV Substation

10. The Labrador-Calasiao and San Manuel-Mangaldan Lines will be heavily loaded by 2016 to 2020. Attached hereto are maps with figures showing the projected loading of the 69 kV lines without and with Sta. Barbara 230 kV Substation as Annex "C.";
11. It will be noted that the implementation of Sta. Barbara 230 kV Substation and its associated new 69 kV lines will result in significant reduction in the loading of the existing 69 kV lines coming from Labrador and San Manuel Substations. This could prolong the need to upgrade the capacity of the existing 69 kV lines and at the same time provide operational flexibility even when an existing 69 kV line is out of service or under maintenance;

Options Considered for the Project Components and Cost Estimates

12. It considered two (2) options for the implementation of the Project. Option 1 involves the installation of two (2) 100 MVA transformers at Sta. Barbara Substation. Option 2, on the other hand, involves only one (1) 100 MVA initial capacity only for Sta. Barbara in order to reduce the overall cost. In Option 2, the substation, which is also at bus-in scheme, is initially at ring bus configuration but with provision for the ultimate breaker-and-a-half configuration. Attached hereto is the comparison of the single line diagrams and the cost estimates of Options 1 and 2 as Annexes "D" and "E";

Recommended Scheme

13. Due to its lower cost, Option 2 is recommended with a project estimate of PhP691.794Mn. The Project will have an initial capacity of 1-100 MVA but with provision for installation of additional transformer units and full development of a breaker-and-a-half scheme substation. In the event of outage of the 1-100 MVA transformer unit to be installed at proposed substation, the connected loads can be shifted back to their original connections to Labrador and San Manuel Substation.

Project Benefits

14. If implemented, the Project :
 - a. Will meet the growing demand in Pangasinan and address the expected heavy loading of the existing 69 kV lines serving Dagupan City, San Carlos City and Urdaneta City;
 - b. Will provide more reliable supply to the load centers in the long term and can provide flexibility in the operation of the 69 kV facilities in the area during planned or unplanned outages of the 69 kV lines;
 - c. Will provide better voltage regulation in the 69 kV delivery points in the area;
 - d. Can defer/delay the upgrading of the capacities of the existing 69 kV lines;

Prayer for Provisional Authority

15. Moreover, NGCP moves for the issuance of a provisional authority in order for the project to be immediately implemented. Copies of the Judicial Affidavits of Mr. Vicente N. Loria, Manager of its Project Planning and Development Division, and Mr. Redi Allan Remoroza, Head of its Luzon System Planning Division attached hereto as Annexes "H" and "I"; and
16. It prays that the Commission grant it provisional authority, upon the filing of the application, to implement the Sta. Barbara 230 kV Substation Project, and after notice and hearing, render judgment making the provisional approval permanent.

Finding the said application to be sufficient in form and in substance with the required fees having been paid, the same is hereby set for initial hearing, expository presentation, pre-trial conference and evidentiary hearing on **September 20, 2011 (Tuesday) at three o'clock in the afternoon (3:00 P.M.) at the ERC Hearing Room, 15th Floor, Pacific Center Building, San Miguel Avenue, Pasig City.**

NGCP is hereby directed to cause the publication of the attached Notice of Public Hearing, at its own expense, twice (2x) for two (2) successive weeks in two (2) newspapers of general circulation in the Philippines, with the date of the last publication to be made not later than ten (10) days before the date of the scheduled initial hearing. It is also directed to inform the consumers, by any other means available and appropriate, of the filing of the instant application, its reasons therefor, and of the scheduled hearing thereon.

Let copies of the application, this Order, and the attached Notice of Public Hearing be furnished the Office of the Solicitor General (OSG), the Commission on Audit (COA) and the Committees on Energy of both Houses of Congress. They are hereby requested, if they so desire, to send their duly authorized representatives at the scheduled hearing.

Likewise, let copies of this Order and the attached Notice of Public Hearing be furnished the Offices of the Governors of Pangasinan and the Mayors of Quezon City and Cities/Municipalities within the franchise area of Dagupan Electric Corporation, Inc. (DECORP), Central Pangasinan Electric Cooperative, Inc. (CENPELCO) and Pangasinan III Electric Cooperative, Inc. (PANELCO III) for the appropriate posting thereof on their respective bulletin boards.

NGCP is hereby directed to furnish all those making requests therefor with copies of the application and its attachments, subject to reimbursement of reasonable photocopying costs.

On the date of the initial hearing, NGCP must submit to the Commission its written Compliance with the jurisdictional requirements attaching therewith, methodically arranged and duly marked, the evidences of the actual posting and publication of the Notice of Public Hearing consisting of certifications issued to that effect, signed by the afore-mentioned Governors and Mayor or their duly authorized representatives, bearing the seal of their offices, and the affidavits of the Editors or Business Managers of the newspapers where said Notice of Public Hearing were published together with the complete issues of the said newspapers, and such other proofs of compliance with the requirements of the Commission.

NGCP and all interested parties are directed to submit, at least five (5) days before the date of initial hearing and pre-trial conference, their respective Pre-Trial Briefs containing, among others:

- (a) A summary of admitted facts and proposed stipulation of facts;
- (b) The issues to be tried or resolved;
- (c) The documents or exhibits to be presented, stating the purposes thereof and proposed markings thereon; and
- (d) The number and names of the witnesses, with their written testimonies in an individual affidavit form, to be attached to the Pre-Trial Brief.

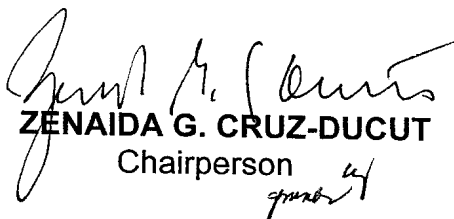
Failure of NGCP to submit the required Pre-Trial Brief and Judicial Affidavits of its witnesses within the prescribed period shall be a ground for cancellation of the scheduled hearing, and the resetting of which shall be six (6) months from said date of cancellation.

As part of the pre-trial conference, NGCP must also be prepared to make an expository presentation of its application, aided by whatever communication medium that it may deem appropriate for the purpose, in order to put in plain words and explain, for the benefit of the consumers and other concerned parties, what the application is all about and the reasons and justifications being cited in support thereof.

SO ORDERED.

Pasig City, August 16, 2011.

FOR AND BY AUTHORITY
OF THE COMMISSION:


ZENAIDA G. CRUZ-DUCUT
Chairperson

Copy Furnished:

1. **THE NATIONAL GRID CORPORATION OF THE PHILIPPINES (NGCP)**
Attention: Attys. LUIS MANUEL U. BUGAYONG, RONALD DYLAN P. CONCEPCION, MARK ANTHONY S. ACTUB and RAYCELL D. BALDOVINO
Counsels for NGCP
NGCP Building, Quezon Avenue corner BIR Road
Diliman, Quezon City
2. **The Office of the Solicitor General**
134 Amorsolo Street, Legaspi Village
Makati City, Metro Manila
3. **The Commission on Audit**
Commonwealth Avenue
Quezon City, Metro Manila
4. **The Senate Committee on Energy**
GSIS Bldg., Roxas Blvd., Pasay City
Metro Manila
5. **The House Committee on Energy**
Batasan Hills, Quirino City, Metro Manila
6. **Office of the President of PCCI**
Philippine Chamber of Commerce and Industry (PCCI)
3rd Floor, ECC Building, 355 Sen. Gil Puyat Ave., Makati City
7. **Office of the Governor**
Province of Pangasinan
8. **Office of the City Mayor**
Quezon City
9. **DAGUPAN ELECTRIC CORPORATION, INC. (DECORP)**
Attention: **MS. ISABELITA L. LLAMES**
President
Veria II Building, AB Fernandez West
Dagupan City
Province of Pangasinan
10. **Office of the City Mayor**
Dagupan City
Province of Pangasinan
11. **Office of the City Mayor**
San Carlos City
Province of Pangasinan
12. **Office of the City Mayor**
City of Urdaneta
Province of Pangasinan

13. **Office of the Municipal Mayor**
Municipality of Manaoag
Province of Pangasinan
14. **Office of the Municipal Mayor**
Municipality of San Fabian
Province of Pangasinan
15. **Office of the Municipal Mayor**
Municipality of San Jacinto
Province of Pangasinan
16. **Office of the Municipal Mayor**
Municipality of Calasiao
Province of Pangasinan
17. **Office of the Municipal Mayor**
Municipality of Sta. Barbara
Province of Pangasinan
18. **Office of the Punong Barangay**
Barangay Cruz, San Carlos City
Province of Pangasinan
19. **Office of the Punong Barangay**
Barangay Bolingit, San Carlos City
Province of Pangasinan
20. **Office of the Punong Barangay**
Barangay Bolingit, San Carlos City
Province of Pangasinan
21. **CENTRAL PANGASINAN ELECTRIC COOPERATIVE, INC.**
(CENPELCO)
Attention: **MS. JOSEFINA D. MANDAPAT**
General Manager
Padilla Street, San Carlos City, Pangasinan
22. **Office of the Municipal Mayor**
Municipality of Sual
Province of Pangasinan
23. **Office of the Municipal Mayor**
Municipality of Labrador
Province of Pangasinan
24. **Office of the Municipal Mayor**
Municipality of Bugallon
Province of Pangasinan
25. **Office of the Municipal Mayor**
Municipality of Lingayen
Province of Pangasinan

26. **Office of the Municipal Mayor**
Municipality of Binmaley
Province of Pangasinan
27. **Office of the Municipal Mayor**
Municipality of Mangatarem
Province of Pangasinan
28. **Office of the Municipal Mayor**
Municipality of Aguilar
Province of Pangasinan
29. **Office of the Municipal Mayor**
Municipality of Urbiztondo
Province of Pangasinan
30. **Office of the Municipal Mayor**
Municipality of Basista
Province of Pangasinan
31. **Office of the Municipal Mayor**
Municipality of Bayambang
Province of Pangasinan
32. **Office of the Municipal Mayor**
Municipality of Malasiqui
Province of Pangasinan
33. **Office of the Municipal Mayor**
Municipality of Alcala
Province of Pangasinan
34. **Office of the Municipal Mayor**
Municipality of Bautista
Province of Pangasinan
35. **PANGASINAN III ELECTRIC COOPERATIVE, INC. (PANELCO III)**
Attention: **ENGR. FERDINAND M. CEREZO**
General Manager
Barangay Nancayasan, City of Urdaneta
Province of Pangasinan
36. **Office of the Municipal Mayor**
Municipality of Pozzorubio
Province of Pangasinan
37. **Office of the Municipal Mayor**
Municipality of Binalonan
Province of Pangasinan
38. **Office of the Municipal Mayor**
Municipality of San Manuel
Province of Pangasinan

39. **Office of the Municipal Mayor**
Municipality of San Nicolas
Province of Pangasinan
40. **Office of the Municipal Mayor**
Municipality of Laoac
Province of Pangasinan
41. **Office of the Municipal Mayor**
Municipality of Asingan
Province of Pangasinan
42. **Office of the Municipal Mayor**
Municipality of Natividad
Province of Pangasinan
43. **Office of the Municipal Mayor**
Municipality of Mapandan
Province of Pangasinan
44. **Office of the Municipal Mayor**
Municipality of Santa Maria
Province of Pangasinan
45. **Office of the Municipal Mayor**
Municipality of San Quintin
Province of Pangasinan
46. **Office of the Municipal Mayor**
Municipality of Villasis
Province of Pangasinan
47. **Office of the Municipal Mayor**
Municipality of Sto. Tomas
Province of Pangasinan
48. **Office of the Municipal Mayor**
Municipality of Rosales
Province of Pangasinan
49. **Office of the Municipal Mayor**
Municipality of Balungao
Province of Pangasinan
50. **Office of the Municipal Mayor**
Municipality of Umingan
Province of Pangasinan

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
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NATIONAL GRID CORPORATION OF
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Applicant.

x-----x

D O C K E T E D
Date: AUG 23 2011
By: 

NOTICE OF PUBLIC HEARING

TO ALL INTERESTED PARTIES:

Notice is hereby given that on August 1, 2011, the National Grid Corporation of the Philippines (NGCP) filed an application for the approval of the Santa Barbara 230 kV Substation Project, with prayer for the issuance of a provisional authority.

In the said application, NGCP alleged, among others, that:

1. It is a corporation created and existing under the laws of the Philippines. It has its principal office address at NGCP Building, Quezon Avenue corner BIR Road, Diliman, Quezon City. It is the corporate vehicle of the consortium awarded with the concession to assume the power transmission functions of the National Transmission Corporation (TRANSCO) pursuant to Republic Act No. (R.A.) 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA);

2. One of its functions and responsibilities enumerated in Section 9 of the EPIRA is to *“improve and expand its transmission facilities, consistent with the Grid Code and the Transmission Development Plan (TDP) to be promulgated pursuant to this Act, to adequately serve generation companies, distribution utilities and suppliers requiring transmission service and/or ancillary services through the transmission system: Provided, That TRANSCO shall submit any plan for expansion or improvement of its facilities for approval by the ERC.”* (Emphasis by the NGCP);
3. In accordance with its mandate to ensure and maintain the quality, reliability, adequacy, security, stability and integrity of the Grid, it seeks authority from the Commission to implement the Sta. Barbara 230 kV Substation Project (Project);
4. In January 2010, Central Pangasinan Electric Cooperative, Inc. (CENPELCO), Dagupan Electric Corporation, Inc. (DECORP) and Pangasinan III Electric Cooperative, Inc. (PANELCO III) jointly requested applicant to construct a drawdown substation near the load centers in Pangasinan as these Distribution Utilities (DUs) are merely served by a 69 kV facility from its San Manuel and Labrador Substations;
5. In view of such request, it conducted a study to determine whether the construction of a substation in the area may: (i) complement future 69 kV lines which will be constructed by DUs for their future expansion; (ii) provide better reliability and supply; (iii) provide operational flexibility in the 69 kV facilities in the area; and (iv) address the concerns on the difficulty in maintaining and upgrading the existing 69 kV lines from San Manuel and Labrador Substations;
6. Due to the positive result thereof, it included the Project as part of its ongoing preparation of the 2011 Transmission Development Plan (TDP) Report. The results of the re-evaluation are discussed below;

Assessment of Scenarios With and Without the Sta. Barbara 230 kV Substation

7. It conducted an assessment of the impact of the project on the loading of the transformers at San Manuel and Labrador Substations. Attached hereto is the table that shows the existing capacities and peak loads (in MW) of San Manuel and Labrador Substations as Annex “A”;
8. Upon completion of the Project at 2x100 MVA capacity by 2014, it will accommodate portions of the existing loads of Labrador and San Manuel Substations. The Calasiao Substation of DECORP, the San Carlos and Malasiqui Substations of CENPELCO and the Urdaneta Substation of PANELCO III are the 69 kV substations that will be normally sourcing power from Sta. Barbara. Attached hereto is the table that shows the San Manuel and Labrador Substations peak loadings in MW with Sta. Barbara Substation as Annex “B.”;

9. Further, the Project will serve as an N-1 contingency provision for the Labrador Substation. Thus, during outage of the 100 MVA unit, the DECORP Dagupan Substation can be shifted to Sta. Barbara Substation thereby relieving the loading of the remaining 50 MVA transformer;

69 kV Line Loading of the Labrador and San Manuel Substations for scenarios without and with Sta. Barbara 230 kV Substation

10. The Labrador-Calasiao and San Manuel-Mangaldan Lines will be heavily loaded by 2016 to 2020. Attached hereto are maps with figures showing the projected loading of the 69 kV lines without and with Sta. Barbara 230 kV Substation as Annex "C.";
11. It will be noted that the implementation of Sta. Barbara 230 kV Substation and its associated new 69 kV lines will result in significant reduction in the loading of the existing 69 kV lines coming from Labrador and San Manuel Substations. This could prolong the need to upgrade the capacity of the existing 69 kV lines and at the same time provide operational flexibility even when an existing 69 kV line is out of service or under maintenance;

Options Considered for the Project Components and Cost Estimates

12. It considered two (2) options for the implementation of the Project. Option 1 involves the installation of two (2) 100 MVA transformers at Sta. Barbara Substation. Option 2, on the other hand, involves only one (1) 100 MVA initial capacity only for Sta. Barbara in order to reduce the overall cost. In Option 2, the substation, which is also at bus-in scheme, is initially at ring bus configuration but with provision for the ultimate breaker-and-a-half configuration. Attached hereto is the comparison of the single line diagrams and the cost estimates of Options 1 and 2 as Annexes "D" and "E";

Recommended Scheme

13. Due to its lower cost, Option 2 is recommended with a project estimate of PhP691.794Mn. The Project will have an initial capacity of 1-100 MVA but with provision for installation of additional transformer units and full development of a breaker-and-a-half scheme substation. In the event of outage of the 1-100 MVA transformer unit to be installed at proposed substation, the connected loads can be shifted back to their original connections to Labrador and San Manuel Substation.

Project Benefits

14. If implemented, the Project :
 - a. Will meet the growing demand in Pangasinan and address the expected heavy loading of the existing 69 kV lines serving Dagupan City, San Carlos City and Urdaneta City;
 - b. Will provide more reliable supply to the load centers in the long term and can provide flexibility in the operation of the 69 kV facilities in the area during planned or unplanned outages of the 69 kV lines;
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 - d. Can defer/delay the upgrading of the capacities of the existing 69 kV lines;

Prayer for Provisional Authority

15. Moreover, NGCP moves for the issuance of a provisional authority in order for the project to be immediately implemented. Copies of the Judicial Affidavits of Mr. Vicente N. Loria, Manager of its Project Planning and Development Division, and Mr. Redi Allan Remoroza, Head of its Luzon System Planning Division attached hereto as Annexes "H" and "I"; and
16. It prays that the Commission grant it provisional authority, upon the filing of the application, to implement the Sta. Barbara 230 kV Substation Project, and after notice and hearing, render judgment making the provisional approval permanent.

The Commission has set the application for initial hearing, expository presentation, pre-trial conference and evidentiary hearing on **September 20, 2011 (Tuesday) at three o'clock in the afternoon (3:00 P.M.) at the ERC Hearing Room, 15th Floor, Pacific Center Building, San Miguel Avenue, Pasig City.**

All persons who have an interest in the subject matter of the proceeding may become a party by filing, at least five (5) days prior to the initial hearing and subject to the requirements in the ERC's Rules of Practice and Procedure, a verified petition with the Commission giving the docket number and title of the proceeding and stating: (1) the petitioner's name and address; (2) the nature of petitioner's interest in the subject matter of the proceeding, and the way and manner in which such interest is affected by the issues involved in the proceeding; and (3) a statement of the relief desired.

All other persons who may want their views known to the Commission with respect to the subject matter of the proceeding may file their opposition to the application or comment thereon at any stage of the proceeding before the applicant concludes the presentation of its evidence. No particular form of opposition or comment is required, but the document, letter or writing should contain the name and address of such person and a concise statement of the opposition or comment and the grounds relied upon.

All such persons who may wish to have a copy of the application may request the applicant, prior to the date of the initial hearing, that they be furnished with a copy of the application. The applicant is hereby directed to furnish all those making a request with copies of the application and its attachments, subject to reimbursement of reasonable photocopying costs. Likewise, any such person may examine the application and other pertinent records filed with the Commission during the usual office hours.

WITNESS, the Honorable Chairperson, **ZENAIDA G. CRUZ-DUCUT**, and the Honorable Commissioners, **MARIA TERESA A.R. CASTAÑEDA** and **JOSE C. REYES**, Energy Regulatory Commission, this 16th day of August 2011 at Pasig City.


ATTY. FRANCIS SATURNINO C. JUAN
Executive Director III