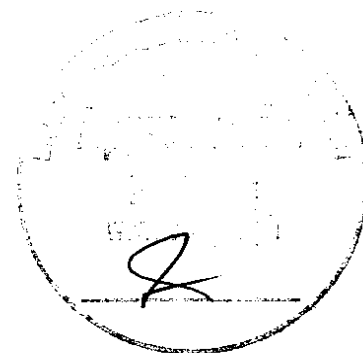


Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City



IN THE MATTER OF THE  
APPLICATION FOR APPROVAL OF  
THE IMPLEMENTATION OF THE  
CONSTRUCTION OF THE  
CONNECTION ASSETS  
ASSOCIATED WITH THE 2 X 300  
MW COAL FIRED POWER PLANT  
OF GNPOWER MARIVELES COAL  
PLANT LIMITED COMPANY  
(GNPOWER), WITH PRAYER FOR  
PROVISIONAL AUTHORITY

ERC CASE NO. 2010-009 RC

NATIONAL GRID CORPORATION  
OF THE PHILIPPINES (NGCP) AND  
GNPOWER MARIVELES COAL  
PLANT LIMITED COMPANY  
(GNPOWER),

Applicants.

x-----x

**D O C K E T E D**

Date: APR 29 2010

By: [Signature]

**DECISION**

Before this Commission for resolution is the joint application filed on January 25, 2010 by the National Grid Corporation of the Philippines (NGCP) and GNPOWER Mariveles Coal Plant Limited Company (GNPOWER) for approval of the construction of the connection assets associated with the 2 X 300 MW coal fired power plant of the GNPOWER, with prayer for the issuance of provisional authority.

Having found said application sufficient in form and in substance with the required fees having been paid, an Order and a Notice of Public Hearing, both dated February 1, 2010, were issued setting the case for initial hearing on February 23, 2010.

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A handwritten signature in black ink.

Two handwritten signatures in black ink, one above the other.

In the same Order, NGCP and GNPOWER were directed to cause the publication of the Notice of Public Hearing, at their 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 scheduled date of initial hearing.

The Office of the Solicitor General (OSG), the Commission on Audit (COA) and the Committees on Energy of both Houses of Congress were furnished with copies of the Order and the Notice of Public Hearing and were requested to have their respective duly authorized representatives present at the initial hearing.

Likewise, the Office of the Provincial Governor of Bataan and the Offices of the Mayors of Quezon City and the Municipalities of Mariveles and Limay were furnished with copies of the Order and Notice of Public Hearing for the appropriate posting thereof on their respective bulletin boards.

On February 18, 2010, NGCP and GNPOWER filed their "Joint Pre-Trial Brief".

During the February 23, 2010 initial hearing of this case, only NGCP and GNPOWER appeared. No intervenor/oppositor appeared nor was there any intervention/opposition registered.

At the said hearing, NGCP and GNPOWER presented their proofs of compliance with the Commission's posting and publication of notice requirements which were duly marked as Exhibits "A" to "D-3", inclusive. Thereafter, they conducted an expository presentation.



At the termination of the expository presentation, NGCP and GNPOWER presented their witnesses: a) Mr. Steve C. Varberg, GNPOWER's Manager for Project Development, who testified, among others, on his involvement in the development of the design of the power plant, its ancillary facilities and various transmission or connection components including the negotiation of the Power Purchase and Sale Agreements (PPSAs) with several distribution utilities (DUs); and b) Mr. Vicente N. Loria, NGCP's Manager of the Project Planning and Development Division, who testified, among others, on the Connection Asset Construction and Maintenance Agreement between NGCP and GNPOWER and the total cost of the construction of the connection assets. In the course of their testimonies, several documents were presented and marked as exhibits.

The direct examinations having been terminated, the Commission propounded clarificatory questions on the said witnesses. Thereafter, NGCP and GNPOWER were directed to file their formal offer of evidence.

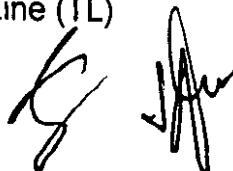
On February 26, 2010, NGCP and GNPOWER filed their "Joint Formal Offer of Exhibits and Compliance", which is hereby admitted for being relevant and material to the final resolution of the case.

## DISCUSSION

NGCP and GNPOWER sought the Commission's approval of the following projects:

a. Project Description:

- Upgrading of the Limay B substation and construction of a connection asset consisting of: 1) nineteen (19) kilometers 230 kV transmission line to connect the generation facility to the grid at the Limay B substation; and 2) three (3) kilometers of Temporary Line (TL)



b. Rationale of the Project:

- To connect the proposed Mariveles Coal-Fired Power Plant (CFPP) to the Luzon Grid
- To support the Power Development Program (PDP) of the Department of Energy (DOE)

c. Project Cost:

**PhP918,749,185.00**

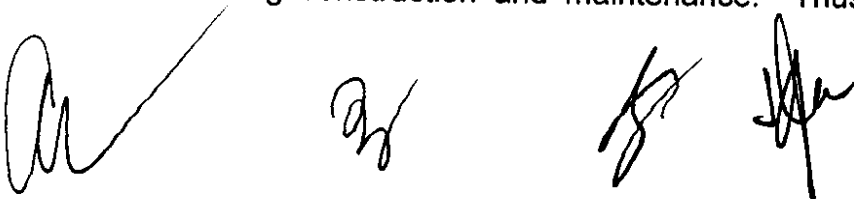
**TECHNICAL ANALYSIS**

**Result of Grid Impact Study (GIS) conducted by the National Transmission Corporation (TRANSCO)**

On August 28, 2006, GNPOWER and the National Transmission Corporation (TRANSCO) executed an "Offer of Service" for the conduct of a GIS on the proposed connection of Mariveles CFPP to the Grid. In the said study, the parties considered the following options:

- Option 1 - Using the Right of Way (ROW) of the existing Mariveles-Limay 230 kV TL to construct a new line with higher capacity. NGCP will dismantle the existing 230 kV Transmission Line. Thereafter, it will construct a new 17 kilometers ST-DC, 230 kV Transmission Line and 3 kilometers ERS-DC, 230 kV Temporary "by-pass" Line
- Option 2 - Construction of a new 230 kV ST-DC TL on a more accessible and new route. A 19 kilometers 230 kV TL to connect the generation facility to the Grid at the Limay B substation

A comparison of both options revealed that Option 2 is more beneficial in terms of total project cost in the amount of PhP918,749,185.00. Option 2 is lesser as compared to Option 1 by about PhP14.173 Million. Moreover, Option 2 is more advantageous not only in terms of cost but also in terms of accessibility during construction and maintenance. Thus, the applicants are proposing to



adopt Option 2 for the construction of a 19 km. 230 kV TL to connect the Generation Facility to the Grid at the Limay B substation.

As stated in the application and as manifested during the hearing, the connection facilities for GNPowr's proposed 2 X 300 MW Coal-Fired Power Plant in Mariveles, Bataan will be completed in August of 2012. The Connection Assets are essential to the delivery of power from the Generation Facility to the Luzon Grid.


### **Technical Configuration**

On the basis of the documents presented, the Commission believes that the installation of a 4-795 Multigraph Computational Model-Aluminum Cable Steel Reinforced (MCM-ACSR) is capable of accommodating and at the same time providing N-1 contingency for the generation of Mariveles CFPP of about 600 MW.

The GIS submitted by the applicants also shows that the proposed project is more economical and prudent for NGCP to undertake without sacrificing the integrity of the Grid. Hence, the Commission finds acceptable the option chosen by the applicants.

### **COST ANALYSIS**

The capital investment for the proposed projects and activities to be implemented amounted to PhP918,749,185.00. The contract for the supply of materials for the proposed projects will be assigned to qualified suppliers and



contractors following a competitive bidding and selection process. The funding will be sourced through NGCP's Internal Cash Generated (ICG) fund.

The proposed projects will be subject to optimization following the principles found in the Rules in Setting the Transmission Wheeling Rates (RTWR).

### **Connection Charges**

GNPOWER shall pay the Connection Charges in accordance with the Open Access Transmission Service (OATS) Rules. NGCP submitted an indicative Connection Charge (*excluding Operation and Maintenance [O & M] portion*) computation based on the formula provided in the OATS Rules and arrived at an estimated Connection Asset charge amounting to PhP10 Million per month. It considered the "Actual Verifiable Cost" in calculating the estimated Connection Charge for GNPOWER. It must be emphasized that these charges shall be subject to verification and confirmation by the Commission on the annual application of NGCP's Connection Charges and Residual Subtransmission Charges.

A perusal of the evidence presented herein showed that the completion and acquisition of the aforesaid projects will redound to the benefit of NGCP, GNPOWER and their consumers in terms of continuous, reliable and efficient power supply as mandated by Republic Act No. 9136, or the Electric Power Industry Reform Act of 2001 (Section 2. Declaration of Policy – (b) "*to ensure the quality, reliability, security and affordability of the supply of electric power*").



**WHEREFORE**, the foregoing premises considered, the joint application for the approval of the construction of the connection assets associated with the 2 X 300 MW coal fired power plant of the GNPOWER filed by the National Grid Corporation of the Philippines (NGCP) and GNPOWER Mariveles Coal Plant Limited Company (GNPOWER) is hereby **APPROVED** subject to the following conditions:

1. The proposed Connection Charges that NGCP shall impose to GNPOWER will be subject to verification and confirmation by the Commission on the annual application of NGCP's Connection Charges and Residual Subtransmission Charges; and
2. The proposed projects will be further optimized based on its actual use during the reset process for the next Regulatory Period following the procedures stated in the RTWR and other relevant issuances of the Commission.

Relative thereto, NGCP is hereby directed to pay a permit fee, within fifteen (15) days from receipt hereof, in the amount of **Six Million Eight Hundred Ninety Thousand Six Hundred Eighteen Pesos and Eighty Nine Centavos (PhP6,890,618.89)**, computed as follows:

$$\frac{\text{PhP}918,749,185.00}{\text{PhP}100.00} \times \text{PhP}0.75 = \text{PhP}6,890,618.89$$

**SO ORDERED.**

Pasig City, April 12, 2010.

  
**ZENAIDA G. CRUZ-DUCUT**  
Chairperson

(On Official Travel)  
**RAUF A. TAN**  
Commissioner

  
**MARIA TERESA A. R. CASTAÑEDA**  
Commissioner

  
**ALEJANDRO Z. BARIN**  
Commissioner

  
**JOSE C. REYES**  
Commissioner

**Copy Furnished:**

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5. **Commission on Audit**  
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Quezon City, Metro Manila
  
6. **Senate Committee on Energy**  
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Metro Manila
  
7. **House Committee on Energy**  
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8. **Office of the President**  
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9. **Office of the City Mayor**  
Quezon City
  
10. **Office of the Provincial Governor**  
Province of Bataan
  
11. **Office of the Municipal Mayor**  
Municipality of Mariveles  
Province of Bataan
  
12. **Office of the Municipal Mayor**  
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Province of Bataan