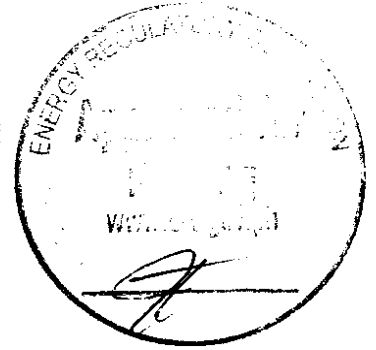


Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City



**IN THE MATTER OF THE  
APPLICATION FOR THE APPROVAL  
OF THE PROCUREMENT OF A 300  
MVA TRANSFORMER FOR  
ARANETA SUBSTATION OF THE  
NATIONAL TRANSMISSION  
CORPORATION, WITH PRAYER  
FOR PROVISIONAL AUTHORITY**

**ERC CASE NO. 2008-113 MC**

**NATIONAL TRANSMISSION  
CORPORATION (TRANSCO) NOW  
NATIONAL GRID CORPORATION  
OF THE PHILIPPINES (NGCP),  
Applicant.**

**x-----x**

**DOCKETED**  
Date: JUN 08 2009  
By: [Signature]

**DECISION**

Before this Commission for resolution is the application filed on December 15, 2008 by the National Transmission Corporation (TRANSCO) for the approval of the procurement of a 300 MVA transformer for its Araneta Substation, with prayer for 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 January 12, 2009, were issued setting the case for initial hearing on February 10, 2009.

In the same Order, TRANSCO was directed to cause the publication of the Notice of Public Hearing, at its own expense, once (1x) in a newspaper of

*[Handwritten signatures of four individuals]*

general circulation in the Philippines, at least ten (10) days before the scheduled date of initial hearing. It was also directed to inform the consumers, within its franchise area, by any other means available and appropriate, of the filing of the instant application, its reasons therefor, and of the scheduled hearing thereon.

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 Mayor of Quezon City was furnished with copies of the Order and the Notice of Public Hearing for the appropriate posting thereof on its bulletin board.

On February 6, 2009, the National Grid Corporation of the Philippines (NGCP), concessionaire company of TRANSCO, filed its "*Pre-trial Brief*".

During the February 10, 2009 initial hearing, only NGCP appeared. No intervenor/oppositor appeared nor was there any intervention/opposition registered.

In the said hearing, NGCP adduced proofs of its compliance with the Commission's posting and publication of notice requirements which were duly marked as Exhibits "A" to "F-1", inclusive. Thereafter, it conducted an expository presentation of its application and presented its lone witness, Mr. Jorge C. Paguio, its Department Manager for Power System Maintenance, who testified in



support of the application. The direct examination having been terminated, the Commission propounded clarificatory questions on the said witness and directed NGCP to submit various documents.

On February 25, 2009, NGCP filed its "*Ex-Parte Motion for Extension*" and "*Formal Offer of Evidence*" which are hereby admitted for being relevant and material to the final resolution of the case.

On March 6, 2009, NGCP submitted its "*Compliance*".

## DISCUSSION

TRANSCO sought the Commission's approval of the following projects:

### 1. Procurement of a 300 MVA Power Transformer for the Araneta Substation

#### a. Project Description:

- Procurement of a 300 MVA Power Transformer with the following specifications:

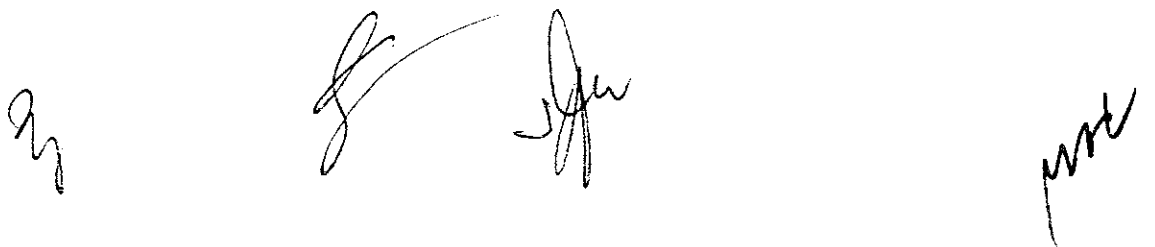
Rated Power MVA	:	300/300/60 MVA
Rated Voltage	:	230/115/13.8kV, OLTC, IEC 60076
Number of Phases	:	Three-Phases
Connection Symbol	:	YNa0d 11

#### b. Project Rationale

- To maintain the security and reliability of the grid
- To ensure the reliability of operation of the substation

#### c. Project Cost Estimate:

**Php245.895 Million**



TRANSCO through its Power System Maintenance Department (PSMD) conducted a Dissolved Gas Analysis (DGA) on the oil samples taken from the three transformers at the Araneta Substation. The result of the analysis shows that there is an oil rapid oxidation and core abnormal heating on transformer no. 3 (T3). To corroborate the said analysis, on November 15, 2007, TRANSCO requested Asia Brown Boveri (ABB), the manufacturer of the subject transformer, to conduct further assessment on the condition of T3 and confirmed the findings of PSMD relative to the existence of oil rapid oxidation and core abnormal heating of transformer no. 3 (T3).

With the current condition of T3, it is expected that there will be a dropping of load of more than 200 MW within the franchise area of Manila Electric Company (MERALCO) should there be a transformer failure at the Araneta Substation. Inasmuch as there is no available spare/replacement for any of the transformers, it is imperative that the purchase of a new 300 MVA transformer be approved. The replacement will ensure the reliability of operation of the substation and will pave the way for the rehabilitation of the critical transformer. Upon rehabilitation, T3 will then be used as a replacement unit for the other existing transformers at the Araneta Substation as Transformers No.1 and No. 2 will also have to be reconditioned one at a time.

#### **TECHNICAL ANALYSIS**

NGCP proposed that one of the three 300 MVA transformers at the Araneta Substation be replaced with a brand new transformer of the same rating/specification.



The proposed replacement of T3 is necessary in order to ensure the reliability of operation of the substation while the other transformers (i.e. T1 and T2) of the Araneta Substation are being reconditioned one at a time.

### **COST ANALYSIS**

The implementation of the proposed project will cost NGCP about Five Million US dollars (US\$5.07Million) equivalent to PhP245.895Million<sup>1</sup>. However, the procurement of the required transformer will still undergo bidding process. In line with its mode of procurement, NGCP will invite only those bidders, manufacturers and/or suppliers which have proven track record of supplying 500kV equipment with the National Power Corporation (NPC) and TRANSCO/NGCP.

The procurement of the required transformer for the Araneta Substation is not included in the computation of the Annual Revenue Requirement (ARR) of TRANSCO for the 2nd Regulatory Period. Thus, the cost of procuring the transformers, if approved by the Commission, will not be automatically included in the Maximum Allowable Revenue (MAR) for the current Regulatory Period. Instead, it will be included in the 3rd Regulatory Period subject to optimization process and further evaluation following the procedure prescribed under the Transmission Wheeling Rate Guidelines (TWRG).

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<sup>1</sup> Based on exchange rate of PhP48.5/US\$

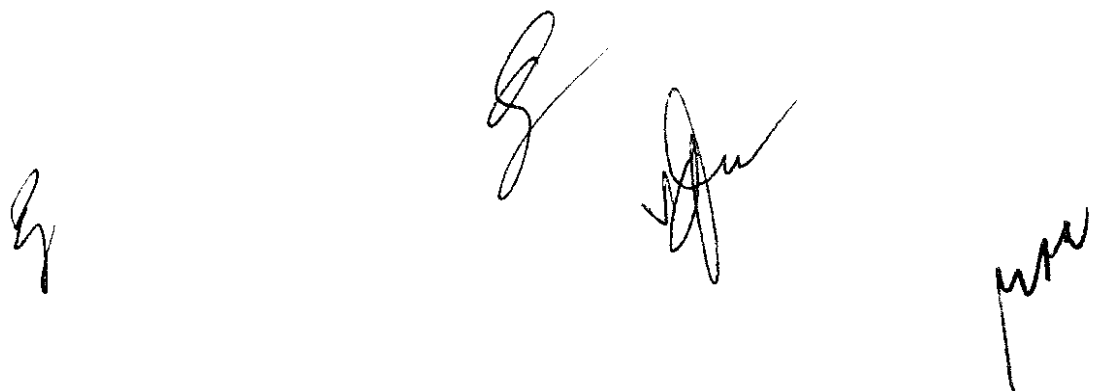


A perusal of the evidence presented herein showed that the completion of the aforesaid project will redound to the benefit of NGCP's consumers in terms of continuous, reliable and efficient power supply as mandated by Republic Act No. 9136, or the *Electric Power Industry Reform Act of 2001 (Section 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 application for approval of the procurement of 300 MVA transformer for the Araneta Substation, with prayer for provisional authority, filed by the National Transmission Corporation (TRANSCO) / National Grid Corporation of the Philippines (NGCP) is hereby **APPROVED** subject to the following conditions:

1. The proposed project cost of PhP245.895 Million will not be automatically included in the Maximum Allowable Revenue (MAR) for the current Regulatory Period; and
2. The proposed project will be further optimized based on its actual use during the Reset Process for the 3<sup>rd</sup> Regulatory Period following the procedure stated in the TWRG and other relevant issuances of the Commission.

Relative thereto, NGCP is hereby directed to pay a permit fee in the amount of One Million Eight Hundred Forty-Four Thousand Two Hundred Twelve Pesos and Fifty Centavos (PhP1,844,212.50.) within fifteen (15) days from receipt hereof, which will be included as part of its Regulatory Compliance Cost for the 3<sup>rd</sup> Regulatory Period, computed as follows:



$$\frac{\text{PhP}245,895,000.00}{\text{PhP}100.00} \times \text{PhP}0.75 = \text{PhP}1,844,212.50$$

**SO ORDERED.**

Pasig City, May 11, 2009.

  
**ZENAIDA G. CRUZ-DUCUT**  
Chairperson *quies*

  
**RAUF A. TAN**  
Commissioner

  
**ALEJANDRO Z. BARIN**  
Commissioner

(Took No Part)  
**MARIA TERESA A.R. CASTAÑEDA**  
Commissioner

  
**JOSE C. REYES**  
Commissioner

**Copy Furnished:**

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6. **The City Mayor**  
Quezon City, Metro Manila