

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



**IN THE MATTER OF THE
APPLICATION FOR APPROVAL OF
THE AMENDED MEMORANDUM OF
AGREEMENT BETWEEN THE
NATIONAL TRANSMISSION
CORPORATION AND AVON RIVER
POWER HOLDINGS CORPORATION,
WITH PRAYER FOR PROVISIONAL
AUTHORITY**

ERC CASE NO. 2008-059 RC

**NATIONAL TRANSMISSION
CORPORATION (TRANSCO) [NOW
NATIONAL GRID CORPORATION OF
THE PHILIPPINES (NGCP)] AND
AVON RIVER POWER HOLDINGS
CORPORATION (AVON) [NOW
PANAY POWER CORPORATION
(PPC)],**

Applicants.

x-----x

D O C K E T E D
Date: **SEP 24 2008**
By: *[Signature]*

DECISION

Before the Commission for resolution is the joint application filed on November 24, 2008 by the National Transmission Corporation (TRANSCO) and the Avon River Power Holdings Corporation (AVON) for approval of their amended Memorandum of Agreement (MOA), with prayer for provisional authority.

In the said application, TRANSCO and AVON alleged, among others, that:

THE PARTIES

1. TRANSCO is a government-owned and controlled corporation created and existing by virtue of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA),

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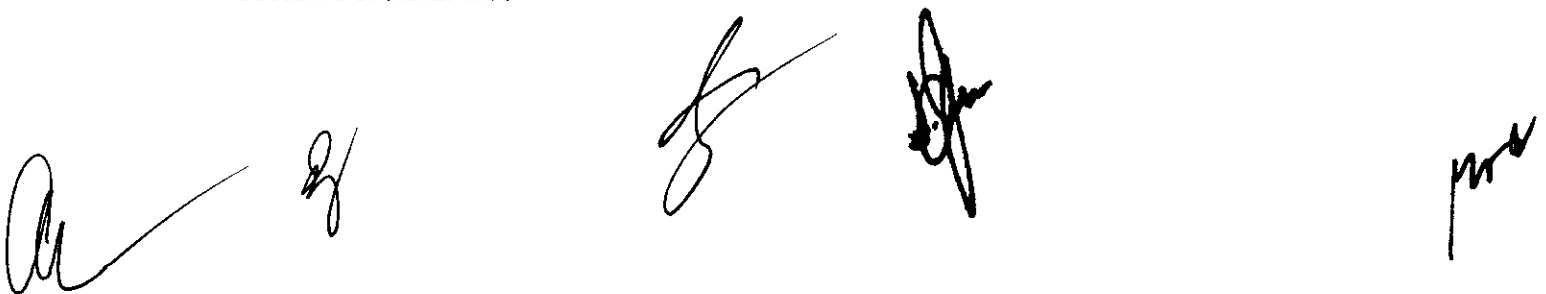
with principal office address at Power Center, Quezon Avenue corner BIR Road, Diliman, Quezon City;

2. AVON is a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines with business address at 20th Floor, GT Tower International, 6813 Ayala Avenue corner H.V. Dela Costa Street, Salcedo Village, Makati City. Avon owns and operates three (3) plants, including a 12.5 MW Diesel Fired Power Plant located in Nabas, Aklan;

THE APPLICATION

3. On October 2, 2007, TRANSCO and AVON filed an application with the Commission to secure the approval of a Memorandum of Agreement (MOA) between the parties for the supply of voltage support to the Island of Panay. Said case was docketed as ERC Case No. 2007-150 RC entitled "*In the Matter of the Application for Approval of the Memorandum of Agreement Between the National Transmission Corporation and Avon River Power Holdings Corporation with Prayer for Provisional Authority*";
4. The MOA was brought about by the precarious system condition of the Visayas Grid. The Cebu-Negros-Panay (CNP) Grid was previously highly dependent on geothermal power from Leyte with only a minimal generation capacity added across the Islands of Cebu, Negros and Panay. However, due to generation-deficiency problems, the entire Visayas Grid has become dependent on power coming from Luzon as well as through the Leyte-Luzon HVDC link. In contrast, an unprecedented growth in the demand for electricity has occurred in the Visayas which is projected to rise further in the coming years;
5. Created to assume the electric transmission functions of the National Power Corporation (NPC), and the authority and responsibility of NPC for the planning, construction and centralized operation and maintenance of its high voltage transmission line facilities, including grid interconnections and ancillary services¹, TRANSCO is mandated, among others, to *"(a)ct as system operator of the nationwide electrical transmission and subtransmission system, to be transferred to it by NPC; (e)nsure and maintain the reliability, adequacy, security, stability and integrity of the nationwide electrical grid in accordance with the performance and standards for the operation and maintenance of the grid, as set forth in a Grid Code to be adopted and promulgated by the ERC within six (6) months from the effectivity of this Act; and (i)mprove 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***

¹ Section 8 of the EPIRA



transmission system.² Likewise, as System Operator, TRANSCO is “responsible for determining, acquiring, and dispatching the capacity needed to supply the required Grid Ancillary Services and for developing and proposing Wheeling Charges and Ancillary Service tariff to the ERC”³;

6. In the fulfillment of its mandate under the EPIRA and the Grid Code as above-discussed, TRANSCO filed an application for the approval of its proposed Ancillary Services Procurement Plan (ASPP) with the Commission docketed as ERC Case No. 2002-253. Under the said ASPP, TRANSCO shall procure ancillary services from various power plants in the Philippine Grid essential in maintaining power quality, reliability, and security in the Philippine Grid;
7. In an Order dated March 9, 2006, the Commission approved TRANSCO's proposed ASPP. Section 5 of the ASPP was directed to be filed as a separate case entitled the “*Ancillary Services-Cost Recovery Mechanism (AS-CRM)*,” and docketed as ERC Case No. 2006-049 RC;
8. In its Order dated October 11, 2006, the Commission granted a provisional authority for the AS-CRM of the ASPP, allowing TRANSCO to procure ancillary services from Independent Power Producers (IPPs). In the said Order, the provisional authority was conditioned on the submission by TRANSCO of any Ancillary Services Procurement Agreement with the Commission for approval;
9. With the approval of the ASPP and the provisional authority to recover the cost of the procurement of these ancillary services, TRANSCO commenced consultations with the various IPPs to provide the much needed ancillary services for the Cebu-Negros-Panay Grid;
10. To address future power requirements corresponding to the continuing rise in demand in the CNP Grid and avert the possible supply deficiency in the Visayas for the years when no major plants are expected to be on-line, all possible suppliers of Ancillary Services to the grid were invited to attend and submit their respective price offers in a series of meetings conducted by TRANSCO. In addition, the said suppliers' generation facilities were tested in order to confirm their capability and availability to deliver the required ancillary services;
11. AVON submitted the only definite and firm offer; its Plant was also found qualified to provide the following ancillary services: (a) Contingency (Spinning) Reserve; (b) Reactive Power Support Service; (c) Back-Up Reserve Service; and (d) Black Start Service.

² Section 9 of the EPIRA, reiterated in Sections 7 and 9 of Rule 6 of the Implementing Rules and Regulations (IRR) of the EPIRA

³ Grid Code, Sec. 7.3.1.2



Consequently, the subject MOA was executed by the Joint Applicants for the provision of voltage support and submitted to the Commission for approval, with prayer for provisional authority;

12. Thereafter, on December 17, 2007, the Commission issued an order provisionally approving the subject application;
13. During trial on the merits, relevant issues were raised which led the Commission to require the applicants to submit an amended MOA;
14. In compliance therewith, TRANSCO and AVON submitted for the consideration and approval of the Commission the amended MOA between the parties for the provision of: (a) Contingency (Spinning) Reserve; (b) Reactive Power Support Service; and (c) Black Start Service. Attached to the subject amended MOA are four (4) Schedules, to wit:

Schedule 1: Ancillary Services Provided under the Agreement;
Schedule 2: Dispatch Protocol;
Schedule 3: Testing Procedure;
Schedule 4: Applicable Rates and Billing Mechanics, as follows:

14.1 Electricity Fees:

For Net Generation less than or equal to Net Guaranteed Energy (NGE)

Capacity Fee:

Capacity Recovery Fee (CRF)	=	PhP1.2764/kWh
WACC	=	PhP3.8292/kWh
Fixed O & M (FOM)	=	PhP0.5548/kWh*
Capacity Fee (CF)	=	CRF + WACC + FOM
	=	PhP5.6604/kWh
Energy Fee (EF)	=	PhP0.5331/kWh*

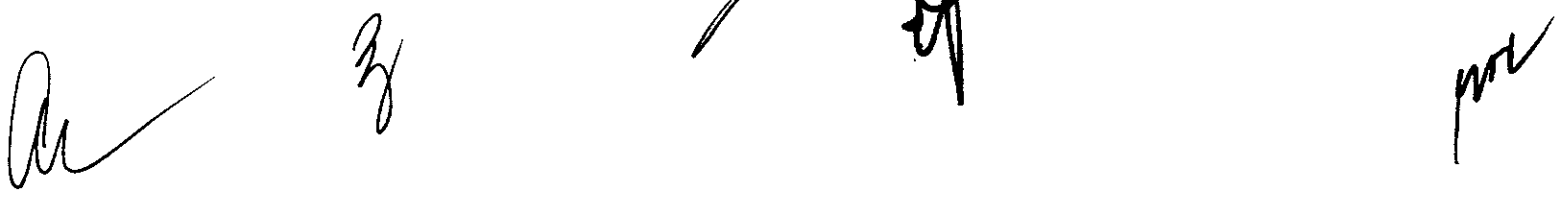
Pass through of fuel and lube oil costs for consumption with generation only

For Net Generation in excess of NGE

Energy Fee (EF)	=	PhP0.5331/kwh *
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Pass through of fuel and lube oil costs for consumption with generation only

* Subject to monthly Consumers Price Index (CPI) adjustment with base CPI of June 2008



14.2 Computation of NGE

Let:

GAE_m = Guaranteed Available Energy for a month
= 12 hours per day x 6,000 kW x 26 days
= 1,872,000 kWh
GAE = Guaranteed Available Energy per hour from
1000h to 2100h on weekdays and Saturdays
except Sundays, New Year's Day, Holy
Thursday, Good Friday, Black Saturday and
Christmas Day
= 6,000 kWh

Then:

NGE = $GAE_m - \sum_{i=1}^{Bh} CFA_i$
CFA = DEO + AEA
AEA = GAE - DET
= zero (0) if GAE is less than DET

Where:

NGE = Net Guaranteed Energy for a month
CFA = Capacity Fee Adjustment per hour
AEA = Available Energy Adjustment per hour
DET = Delivered Energy to TRANSCO per hour
DEO = Delivered Energy to Others per hour
Bh = Number of hours for a billing month

Subscript **m** stands for one (1) month value

14.3 Computation of fuel and lube oil rate (PhP/kWh)

Heavy Fuel Oil Rate (HFR) = HFCR x Actual HF cost/liter
Light Fuel Oil Rate (LFR) = LFCR x Actual LF cost/liter
Lube Oil Rate (LOR) = LCR x Actual LO cost/liter
Fuel and Lube Oil Rate (FLR) = HFR + LFR + LOR

Let:

AED = Actual Energy Delivered
= DET + DEO

Where:

HFCR = Heavy fuel oil consumption rate in liter/kWh
= HFO consumption / AED_m



- = 0.2396 or actual whichever is higher, for AEDm > GAEm
- or*
- = Actual, for AEDm <= GAEm

- LFCR = Light fuel oil consumption rate in liter/kWh
- = LFO consumption / AEDm
- = 0.0351 or actual whichever is lower, for AEDm > GAEm
- or*
- = Actual for AEDm <= GAEm

- LCR = Lube oil consumption rate in liter/kWh
- = Lube oil consumption / AEDm
- = 0.0017 liter/kwh or actual whichever is lower, for AEDm > GAEm
- or*
- = Actual, for AEDm <= GAEm

Note: Consumption shall mean actual fuel/oil utilization with generation only

14.4 Actual cost/liter of Fuel and Lube oil

The monthly actual cost/liter of fuel and lube oil shall be based on the weighted average cost/liter of fuel/lube oil deliveries as of date indicated.

14.5 Computation of Total Ancillary Services Charges per Month

Total Ancillary Services Charges (TAC) =

$$CF \times NGE + (EF + FLR) \times DET_m - \sum_{i=1}^{Bh} [DET_i \times TOU \text{ rates}_i]$$

Where:

TOU rates_i = NPC's TOU rates per hour for the billing month

15. Consistent with the AS-CRM and with the intention of the Business Separation and Unbundling Plan, TRANSCO, in order to avoid its transmission business subsidizing the cost of ancillary services, shall recover from benefiting load customers, for whom the contracted ancillary services, all relative and incidental expenses (not included in the Second Regulatory Period - Final Determination) that TRANSCO will incur in relation with the procurement and operation of the ancillary services for the grid requirement. These expenses may include, but not limited, to the following: filing fees, publications (Application, Notices, Orders and etc.), interest on account for delayed payment attributable to customers' failure to pay the amount due on ancillary services, and others;

ALLEGATIONS IN SUPPORT OF THE
PRAYER FOR PROVISIONAL AUTHORITY

16. It is a declared policy of the State to ensure the quality, reliability, security and affordability of the supply of electric power.⁴ With this end in view, there is a need to ensure compliance with the Grid Code requirements, in terms of reserve capacities to ensure system reliability;
17. The Grid Code provides that power quality is determined by the quality of the voltage, including its frequency and the resulting current, which are measured in the Grid during normal conditions.⁵ It goes on further to state that a power quality problem exists when at least one of the following conditions is present and significantly affects the normal operation of the system:
 - 17.1 The System Frequency has deviated from the nominal value of 60 Hz;
 - 17.2 Voltage magnitudes are outside their allowable range of variation;
 - 17.3 Harmonic Frequencies are present in the System;
 - 17.4 There is an imbalance in the magnitude of the phase voltages;
 - 17.5 The phase displacement between the voltages is not equal to 120 degrees;
 - 17.6 Voltage Fluctuations cause Flicker that is outside the allowable Flicker Severity limits; or
 - 17.7 High Frequency Overvoltages are present in the Grid.⁶
18. Currently, in the Island of Panay, there is a problem with power quality;
19. On several occasions, the Panay grid has experienced Manual Load Dropping due to low system voltage as indicated in Annex "B" of the original Joint Application;
20. As a result of the voltage fluctuations, some establishments have relied on self-generation (e.g. resorts in Boracay) to ensure the stability of the voltage. Furthermore, the problems in the voltage have, in the past, resulted in manual load shedding in the Island of Panay so as to maintain stability in the system;

⁴ R.A. 9136, Section 2(b)

⁵ The Grid Code Section 3.2.1

⁶ The Grid Code Section 3.2.1.2



21. Needless to state, the problem of the quality of the electricity in the Island of Panay has a negative impact on the island, as it discourages the inflow of investments (such as manufacturing etc.);
22. Since the last quarter of 2006 and up to now, October of 2008, the Visayas grid, particularly the CNP grid, experienced a low power reserve. The reserve which the system maintained was way below the level required in the Philippine Grid Code (PGC). The PGC provides the minimum requirement to maintain a reliable and stable power system in any electrical grid. The island of Panay, being at the tail end of the Visayas Grid, is the island most affected by the deficiency of supply in the Visayas Grid;
23. Hence, to ensure compliance with the Grid Code and protect system reliability which is greatly affected by power quality, there is an urgent need to add additional spinning reserve and to correct the voltage situation. However, inasmuch as the Panay Island is at the tail end of the CNP Grid, the voltage in the Island may be corrected by in land generation, such as that being offered by AVON;

PRAYER

24. They pray for the immediate issuance of a provisional authority to include the costs for the provision of Ancillary Services by AVON in the Transmission Charge of TRANSCO to the Generation Companies in the CNP Grid, in accordance with the formula and computations of the amended MOA;
25. After due hearing, the Commission will render judgment approving the amended MOA between TRANSCO and AVON and accordingly, include the costs thereof in the Ancillary Services Charges of TRANSCO in accordance with the terms and conditions of the amended MOA and the Ancillary Services Cost Recovery Mechanism (AS-CRM); and
26. Consistent with the AS-CRM and with the intention of the Business Separation and Unbundling Plan, TRANSCO, in order to avoid its transmission business subsidizing the cost of ancillary services, shall recover from benefiting load customers, for whom the contracted ancillary services, all relative and incidental expenses (not included in the Second Regulatory Period - Final Determination) that TRANSCO will incur in relation with the procurement and operation of the ancillary services for the grid requirement. These expenses may include, but not limited, to the following: filing fees, publications (Application, Notices, Orders and etc.), interest on account for delayed payment attributable to customers' failure to pay the amount due on ancillary services, and others.

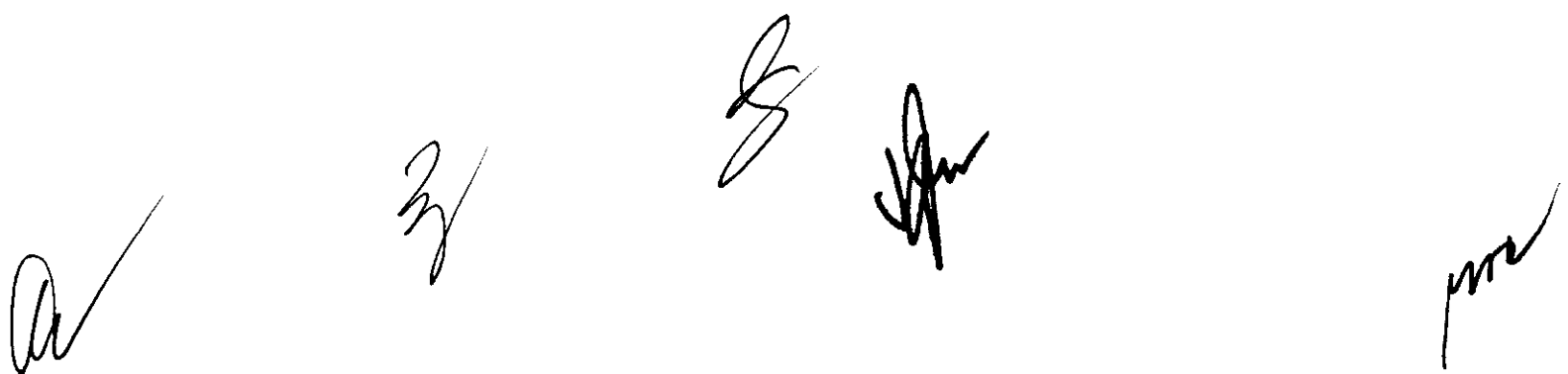


Having found said application sufficient in form and in substance with the required fees having been paid, an Order and a Notice of Public Hearing, both dated December 15, 2008, were issued setting the case for initial hearing, pre-trial conference, expository presentation and evidentiary hearing on January 13, 2009.

TRANSCO and AVON were directed to cause the publication of the attached 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 said publication to be made not later than ten (10) days before the scheduled date of initial hearing. They were also directed to inform the consumers within the CNP Grid, by any other means available and appropriate, of the filing of the instant application, their 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 Offices of the Mayors of Quezon City, Kalibo and Malay, and the Provincial Governor of Aklan were furnished with copies of the Order and the Notice of Public Hearing for the appropriate posting thereof on their respective bulletin boards.



On January 9, 2009, TRANSCO filed its "Pre-Trial Brief".

During the January 13, 2009 initial hearing of this case, the following entered their appearances: a) Atty. Jose Jesus Moreno for TRANSCO; b) Attys. Norberto Manjares, Jr. and Norberto Manjares, III for AVON; and c) Mr. Lorenzo S. Laserna for Aklan Electric Cooperative, Incorporated (AKELCO). No other intervenors/oppositors appeared nor were there any interventions/oppositions registered.

AKELCO's manifestation of its intention to intervene in the instant case was provisionally allowed by the Commission subject to the submission of the required formal petition for intervention within five (5) days from said date of hearing.

At the said hearing, TRANSCO and AVON presented their proofs of compliance with the Commission's posting and publication of notice requirements which were duly marked as Exhibits "A" to "M", inclusive. Thereafter, they made an expository presentation, for the benefit of the consumers and other concerned parties, on what the application is all about and the reasons and justifications cited in support thereof.

At the conclusion of the expository presentation, TRANSCO and AVON moved for a declaration of general default. The same was granted. The Commission then conducted a pre-trial conference.



Subsequently, TRANSCO and AVON presented the following witnesses:

a) Mr. Crispin D. Lamayan, Assistant Vice-President for Visayas Systems Operation of TRANSCO, who testified, among others, on the current situation of the Visayas Grid Transmission System, the actions taken by TRANSCO to address said situation, the execution of MOA and amended MOA with AVON for AS and the necessity for the issuance of a provisional authority for TRANSCO to recover AS; b) Ms. Ma. Cynthia Y. Manrique, Manager for Tariff Design and Administration Division, Strategic Planning Department, Corporate Planning Group of TRANSCO, who testified, among others, on the full implementation of the AS-CRM, the entitlement of TRANSCO for full recovery of AS cost from load customers which shall be one hundred percent (100%) and the rate impact of said AS to the CNP customers; and c) Mr. Jaime T. Azurin, Senior Vice-President for Finance and Business Development of Global Business Power Corporation (GBPC), who testified, among others, on the capacity of AVON's plant to provide AS.

In the course of their respective direct examinations, the witnesses identified various documents in support of the application. Said documents were duly marked as exhibits.

The said witnesses were lengthily cross-examined by AKELCO. They were, likewise, required to address the clarificatory questions propounded by the Commission.

TRANSCO and AVON were then directed to submit their respective formal offers of exhibits, within ten (10) days from said date of hearing.



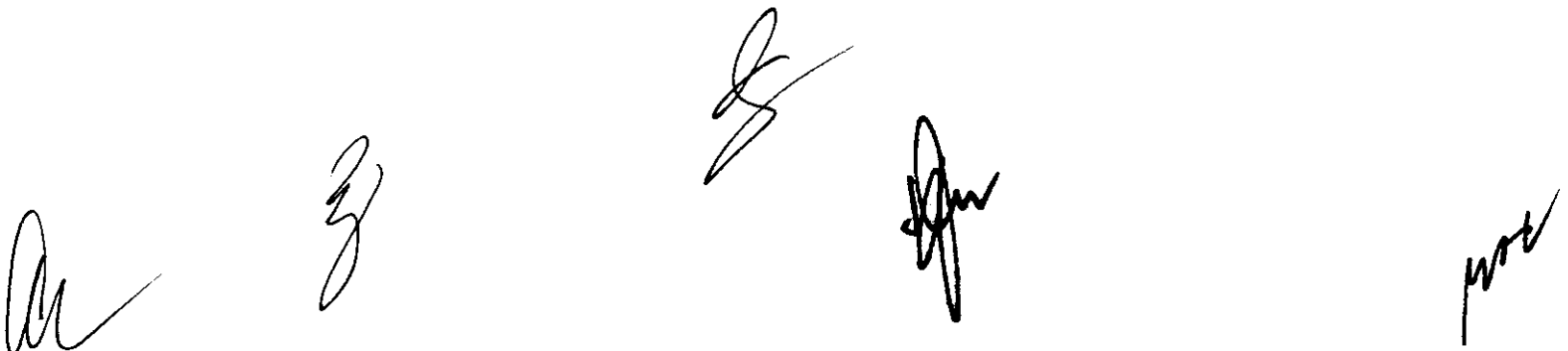
On January 27, 2009, AKELCO filed its "Petition to Intervene" praying that: a) it be allowed to intervene in the instant case; b) its attached Declaration of Willingness to adjust the pricing of electricity rates contained in its Electric Power Purchase Agreement (EPPA) with AVON be admitted; c) the Minimum-Energy-Off-Take (MEOT) of two million kWh per month provision contained in the said EPPA be cancelled; and d) it be allowed to buy the energy in kWh generated by AVON in this application at the National Power Corporation Time-of-Use (NPC-TOU) rate, free of transmission charges considering that the generated energy is only a part of the ancillary services.

On March 9, 2009, the National Grid Corporation of the Philippines (NGCP), the concessionaire of TRANSCO, filed its "Comment (On the Petition to Intervene of AKELCO)".

Subsequently, on March 12, 2009, Panay Power Corporation (PPC) formerly AVON, filed its "Comment (To the Petition to Intervene of AKELCO)".

On March 30, 2009, NGCP and PPC filed their joint "Formal Offer of Evidence" which is hereby admitted for being relevant and material to the resolution of this application.

Inasmuch as AKELCO has filed its petition for intervention beyond the reglementary period, the Commission considers the allegations therein as issues that have to be resolved.



DISCUSSION

1. Parties to the Agreement

NGCP is a corporation duly organized and existing under the laws of the Republic of the Philippines, at least sixty percent (60%) of its capital is owned by Philippine nationals, with principal office at the Power Center, Quezon Avenue corner BIR Road, Diliman, Quezon City. Pursuant to the public bidding conducted by the Power Sector Assets and Liabilities Management Corporation (PSALM) under the EPIRA, it was awarded the concession to assume the transmission functions of TRANSCO.

PPC is a corporation duly organized and existing under and by virtue of the laws of the Republic of the Philippines with business address at the 20th Floor, GT Tower International, 6813 Ayala Avenue corner H.V. Dela Costa Street, Salcedo Village, Makati City. It is a generation company which operates a 12.5 MW generating facility situated in Barangay Unidos, Nabas, Aklan.

2. Ancillary Service Requirement

The instant application was filed on November 24, 2008 pursuant to the Commission's directive in ERC Case No. 2007-150 RC for NGCP and TPC to file a joint amended MOA.

Due to the lack of generation capacity in the Panay Island, NGCP customers in the Grid have experienced power interruption and low voltage problems during peak hours. It conducted consultations with various owners and operators of generating facilities to provide much needed AS for the CNP Grid.



Among the possible suppliers, PPC submitted its offer to provide AS. Subsequently, NGCP conducted a test on PPC's facility to determine its capability to provide said AS.

On November 22, 2006, NGCP issued an Accreditation Certificate No. 2006-V0017 to PPC signifying that the Nabas Power Plant is qualified to provide the following AS:

- a. Contingency (Spinning) Reserve – Manual;
- b. Reactive Support Service;
- c. Back-up Reserved Service; and
- d. Black Start Service.

The 12.5 MW capacity of the said plant, as agreed upon by NGCP and PPC, will provide Contingency (Spinning) Reserve to the Grid to improve the reliability and power quality of the Panay Grid as stated in the amended MOA.

3. Summary of the Application

PPC shall provide the Contingency (Spinning) Reserve AS to the Grid by operating its Nabas Power Plant based on the scheduling and dispatch provisions of the amended MOA. As manifested by PPC during the hearing, the capacity to be contracted will be 12.5 MW or the total capacity of the Nabas Power Plant. The agreement will take effect upon approval or grant of a provisional authority for its implementation for three (3) years and will be subject to annual review. It may be extended upon mutual agreement between the parties.



3.1 Proposed Rate Schedule

The Nabas Power Plant's billing for Contingency (Spinning)

Reserve shall be based on the following cost components:

3.1.1 Electricity Fees

For Net Generation less than or equal to Net Guaranteed Energy (NGE)

Capacity Fee:

Capacity Recovery Fee (CRF)	=	PhP1.2764/kWh
WACC	=	PhP3.8292/kWh
Fixed O&M (FOM)	=	PhP0.5548/kWh ⁷
Capacity Fee (CF)	=	CRF + WACC + FOM
	=	PhP5.6604/kWh
Energy Fee (EF)	=	PhP0.5331/kWh ⁸

Pass through of fuel and lube oil costs for consumption with generation only.

For Net Generation in excess of NGE

Energy Fee (EF) = PhP0.5331kWh⁸

Pass through of fuel and lube oil costs for consumption with generation only.

3.1.2 Computation of Net Guaranteed Energy (NGE)

Let:

GAE _m	=	Guaranteed Available Energy per month
	=	12hrs per day X 6,000kW x 26 days
	=	1,872,000kWh
GAE	=	Guaranteed available energy per hour from 1000h to 2200h on weekdays and Saturdays except Sundays, New Year's day, Holy Thursday, Good Friday, Black Saturday and Christmas day
	=	6,000kwh

⁷ Subject to monthly CPI adjustments with base CPI of June 2008

⁸ Subject to monthly CPI adjustments with base CPI of June 2008



Then:

$$\begin{aligned} \text{NGE} &= \text{GAEm} - \sum_{i=1}^{\text{Bh}} \text{CFA}_i \\ \text{CFA} &= \text{DEO} + \text{AEA} \\ \text{AEA} &= \text{GAE} - \text{DET} \\ &= \text{zero if GAE is less than DET} \end{aligned}$$

Where:

NGE = Net Guaranteed Energy per month
 CFA = Capacity Fee Adjustment per hour
 AEA = Available Energy Adjustment per hour
 DET = Delivered Energy to NGCP per hour
 DEO = Delivered Energy to Others per hour
 Bh = Number of hours for a billing month

Subscript *m* stands for one (1) month value

3.1.3 Computation of Fuel and Lube Oil Rate (PhP/kWh)

Heavy fuel oil rate (HFR) = HFCR x Actual HF cost per liter
 Light fuel oil rate (LFR) = LFCR x Actual LF cost per liter
 Lube oil rate (LOR) = LCR x Actual LO cost per liter
 Fuel and lube oil rate (FLR) = HFR + LFR + LOR

Let:

AED = Actual energy demand
 = DET + DEO

Where:

HFCR = Heavy fuel oil consumption rate in liter/kWh
 = Total HFO consumption / AEDm
 = 0.2396 li/kWh or actual whichever is higher,
 for AEDm > GAEm

or

= Actual, for AEDm ≤ GAEm

LFCR = Light fuel oil consumption rate in liter/kwh
 = Total LFO consumption / AEDm
 = 0.0350 li/kWh or actual whichever is lower,
 for AEDm > GAEm

or

= Actual, for AEDm ≤ GAEm

LCR = Lube oil consumption rate in liter/kwh
 = Total Lube oil consumption / AEDm

$$\begin{aligned} &= 0.00162 \text{ li/kWh or actual whichever is lower,} \\ &\quad \text{for AEDm} > \text{GAEm} \\ &= \text{Actual, for AEDm} \overset{\text{or}}{\leq} \text{GAEm} \end{aligned}$$

Consumption shall mean actual fuel/oil utilization with generation only.

3.1.4 Actual Cost/Liter of Fuel and Lube Oil

The monthly actual cost/liter of fuel and lube oil shall be based on the weighted average cost/liter of fuel/lube oil deliveries as of date indicated.

3.1.5 Computation of Total Ancillary Services Charges per Month

$$\begin{aligned} &\text{Total Ancillary Services Charges (TAC)} \\ &= \text{CF} \times \text{NGE} + (\text{EF} + \text{FLR}) \times \text{DETm} - \sum_{i=1}^{Bh} (\text{DET}_i \times \text{TOU rates}_i) \end{aligned}$$

Where:

TOU rates_i = NPC's TOU rates per hour for the billing month

4. Proposed Rate

4.1 Capacity Fee

4.1.1 Capital Recovery Fee (CRF)

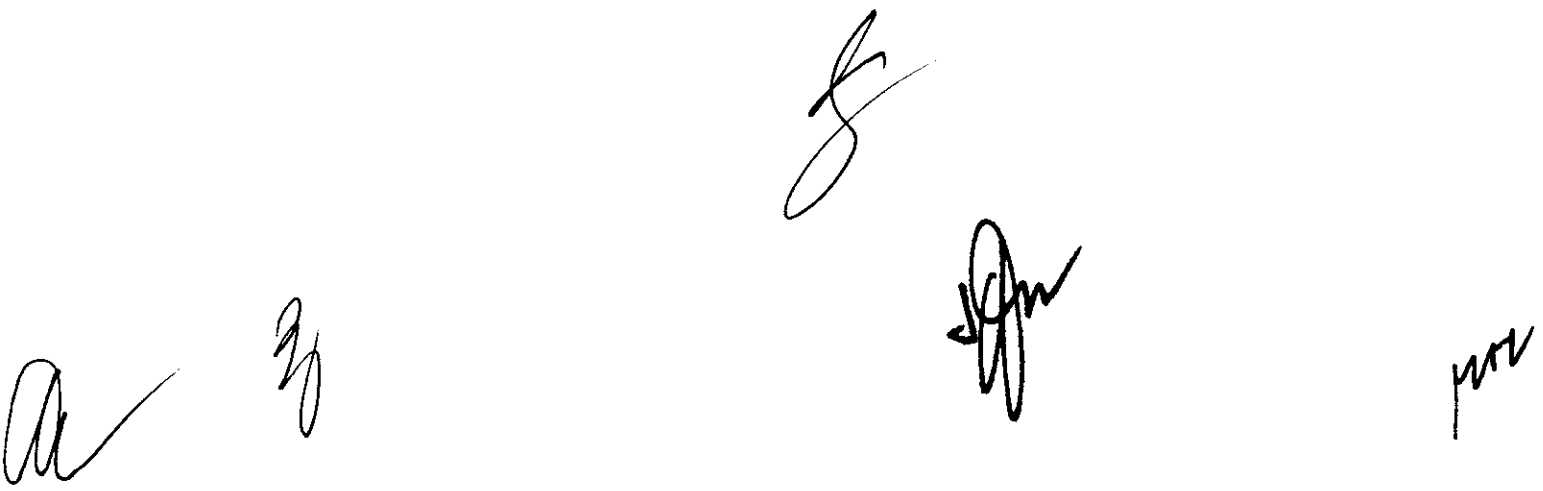
There are two (2) fixed cost components in the derivation of the PPC Base price: the capital cost associated with the construction of the power plant (Project Cost) and the annual fixed operating and maintenance cost. This covers fixed costs incurred independently from electricity generation.



PPC's fixed assets were based on a Decision dated August 2, 2006 in ERC Case No. 2005-013 RC [In the Matter of the Petition for Approval of the Inclusion to AKELCO's Retail Rate of Costs From the 5 MW and 12.5 MW Electric Power Purchase Agreements (EPPA), as Amended, with Mirant Global Corporation (Mirant), AKELCO – Petitioner] and the 2005 Audited Financial Statement (AFS) of Avon River. Based on the aforementioned Decision, the asset cost of Nabas Power Plant is PhP573,439,944.00 with a total contract of twenty (20) years. This will translate to a capital recovery fee of PhP28,671,997/year or PhP2,389,333/month.

PPC is proposing for a CRF of PhP1.2764/kWh. In computing the CRF, PPC used a Guaranteed Available Energy (GAE) per month of 1,872,000kWh derived from the minimum capacity of 6,000kW (i.e. Nabas Power Plant's minimum capacity to deliver Contingency Reserve without financial loss), multiplied by twelve (12) hours per day, twenty-six (26) days a month.

The Commission deems it more appropriate to translate the capacity related cost (fixed cost) on a per kW per month basis as NGCP will pay the standby contracted capacity whether or not this will be utilized as long as the power plant is available for dispatch.

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4.1.2 Weighted Average Cost of Capital (WACC)

PPC used a fifteen percent (15%) WACC resulting to a Return on Capital of PhP7,167,999.30 per month. Using PPC's GAE per month of 1,872,000kWh, this will translate to PhP3.2891/kWh. The Commission finds the same to be reasonable. In computing the said WACC, PPC used the 12.15% cost of debt or the actual interest rate of its loan and the 18.32% cost of equity, similar to what was approved by the Commission in ERC Case No. 2005-043 RC [In the Matter of the Application for Approval of the Amendment Agreement to the Power Purchase Agreement Between Panay Electric Company, Incorporated and Panay Power Corporation, with Prayer for Provisional Authority, Panay Electric Company, Incorporated (PECO) – Applicant].

However, the Commission noted that the above computation of Return on Capital did not consider the depreciated cost of asset which may result to overstated recovery of WACC as the Asset Base will be the same throughout the economic life of the asset. The Commission believes that the WACC should be based on declining cost of asset as the fraction of cost (represented by depreciation) being tied up is recovered annually through the CRF. Thus, the cost of money should only be based on the unrecovered amount of investment.

Further, the Commission deems it appropriate to include a working capital (WC) in the asset base that should be subject to return. Thus, the Commission grants a one (1) month operation & maintenance expense and one (1) month fuel cost as WC.



4.1.3 Capacity Fee (Capital Recovery Fee plus WACC)

For purposes of deriving the Capacity Fee, the Commission considered in its computation the aforementioned declining asset cost, as follows:

Year	CF excluding WC PhP/kW/mo.	Return on WC PhP/kW/mo.	Total PhP/kW/mo.
1 st year	764.59	17.55	782.14
2 nd year	735.91	17.55	753.46
3 rd year	707.24	17.55	724.79
4 th year	678.57	17.55	696.12
5 th year	649.90	17.55	667.45
6 th year	621.23	17.55	638.78
7 th year	592.55	17.55	610.10
8 th year	563.88	17.55	581.43
9 th year	535.21	17.55	552.76
10 th year	506.54	17.55	524.09
11 th year	477.87	17.55	495.42
12 th year	449.19	17.55	466.74
13 th year	420.52	17.55	438.07
14 th year	391.85	17.55	409.40
15 th year	363.18	17.55	380.73
16 th year	334.51	17.55	352.06
17 th year	305.83	17.55	323.38
18 th year	277.16	17.55	294.71
19 th year	248.49	17.55	266.04
20 th year	219.82	17.55	237.37

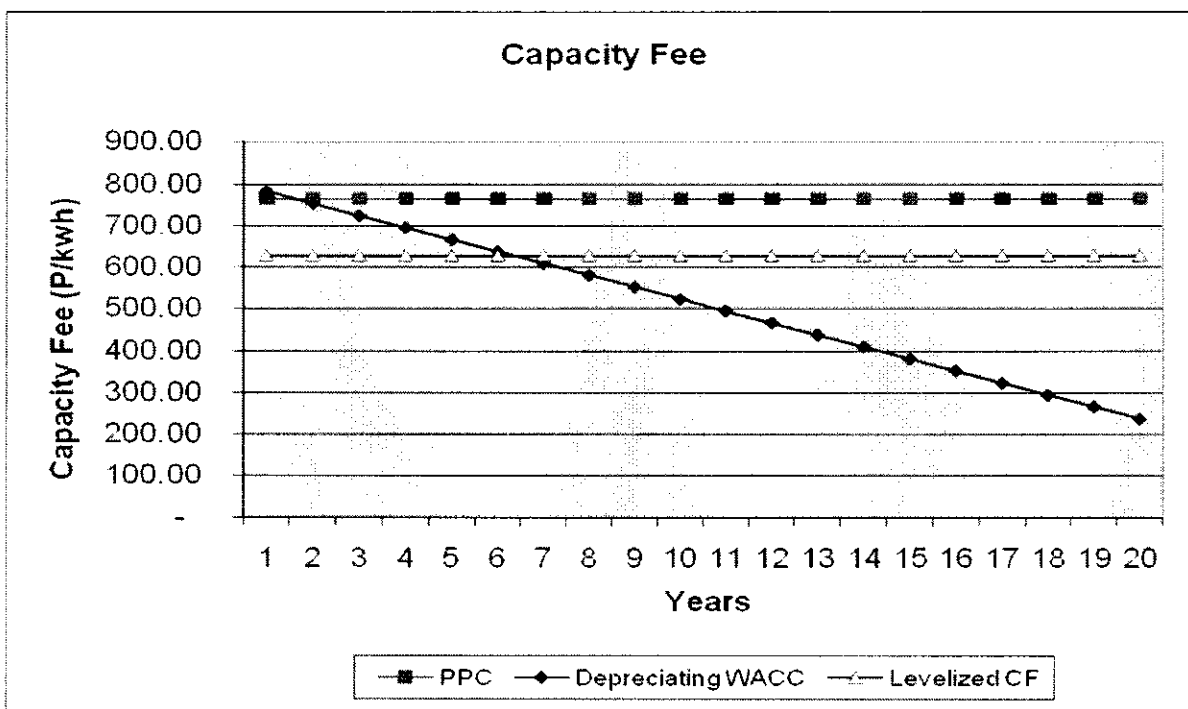
From the foregoing table, it can be gleaned that the Capacity Fee decreases every year due to decreasing WACC since the asset reference is based on depreciated cost of asset.

The Commission, likewise, made a computation levelizing the above-mentioned varying Capacity Fee by setting a rate that will result to a constant annual cash flow over the useful life of the asset, and at the same time, yield a Rate of Return equivalent to

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fifteen percent (15%) WACC. As a result thereof, the Commission derived a levelized Capacity Fee of PhP628.31/kW/month.

The graph below is a comparison of the different Capacity Fees based on PPC's proposed rate, the Commission's computation using a depreciating WACC and the levelized Capacity Fee resulting from the depreciating WACC:



4.2 Fixed Operation and Maintenance Cost (Fixed O&M Cost)

PPC proposed a Fixed O&M of PhP12,463,019.00 equivalent to PhP0.5548/kWh based on its GAE per month of 1,872,000kWh. It, likewise, proposed to adopt an Energy Fee of PhP0.5331/kWh, as previously discussed. However, the Commission found that the proposed Energy Fee already comprises the Fixed and Variable O&M. Thus, the Commission deems it necessary to exclude the Fixed O&M in the computation of Capacity Fee.

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4.3 Energy Fee

Based on PPC's 2007 unaudited Financial Statement, it was disclosed that the actual operating expenses (Variable Cost) and total energy delivered were as follows:

Variable O&M	=	PhP8,262,600.00
kWh deliveries	=	2,646,900

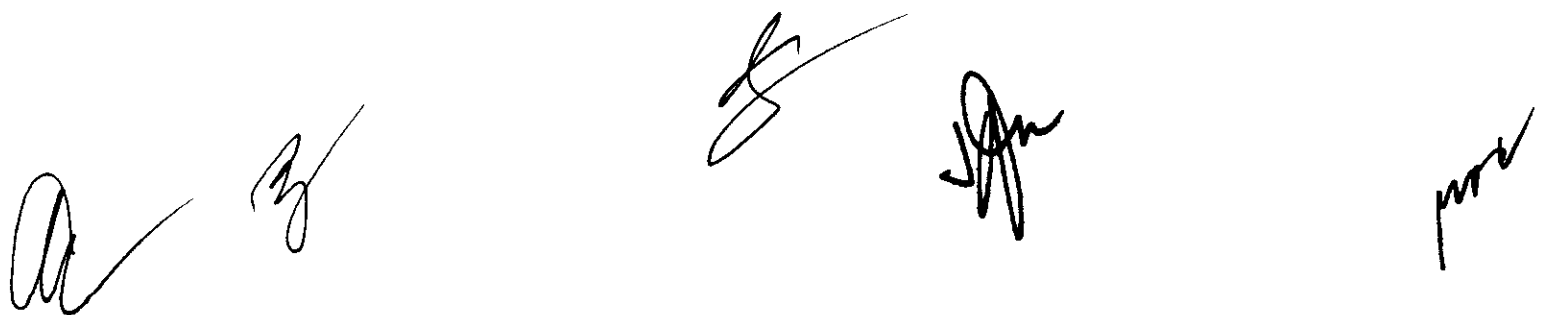
Thus,

Energy Fee	=	PhP8,262,600 / 2,646,900
	=	PhP3.1216/kWh

PPC acknowledged that this amount is skewed due to the minimal running hours of the Nabas Power Plant in 2007.

To validate the same, the Commission directed PPC to submit its 2008 Financial Statement. In compliance therewith, PPC submitted its 2008 unaudited Financial Statement and income statement for the Nabas Power Plant. Based on the said documents, it was disclosed that the Variable O&M and kWh sold to AKELCO were PhP3,816,772.88 and 6,201,215.00 kWh, respectively. Thus, the computed Energy Fee of PhP0.62/kWh was way below the computed 2007 Energy Fee as shown above.

PPC proposed to use the Energy Fee of PhP0.5331. This is the same Energy Fee approved in ERC Case No. 2005-013 RC and the result of benchmarking conducted by the Commission on the O&M of other



power plants with similar technology, inclusive of both Fixed and Variable O&M charges.

Based on the foregoing, the Commission deems it necessary for PPC to use the Energy Fee of PhP0.5331/kWh, as proposed, subject to the monthly Consumer Price Index (CPI) adjustment with a base CPI as of December 2005. The said Energy Fee is not only the lowest among the Energy Fees, as previously discussed, but is also consistent with the Commission's Decision in ERC Case No. 2005-013 RC.

4.4 Fuel Cost Fee

The Fuel and Lube Oil Cost constitutes about 0.3% of the Variable O&M Cost.

PPC proposed to pass-through only the said cost for consumption with generation only.

PPC further proposed a consumption rate in liter/kWh of fuel and lube, as follows:

Fuel / Lube Oil	Consumption Rate in liter/kWh
Heavy Fuel Oil	0.2396 or actual, whichever is higher, for AEDm > GAEm or actual, for AEDm ≤ GAEm
Light Fuel Oil	0.0350 or actual, whichever is lower, for AEDm > GAEm or actual, for AEDm ≤ GAEm
Lube Oil	0.00162 liter/kWh or actual, whichever is lower, for AEDm > GAEm or actual, for AEDm ≤ GAEm

The Commission considered its previous pronouncements in its Decision in ERC Case No. 2005-013RC (AKELCO – Avon EPPA) wherein the approved Fuel Cost was based on actual delivered price of fuel, subject to a cap of 0.25918 liter/ kWh. This is the same for Lube Oil cost wherein the Commission approved a cap of 0.00168 liter/kWh.

However, the Commission believes that the phrase “whichever is higher” stated for Heavy Fuel Oil should be modified to “whichever is lower” since a lower consumption rate means lower cost.

Hence, the Commission approves the following consumption rate of Fuel and Oil, without the condition precedents of Actual Energy Delivered (AEDm) greater or lower than GAEm:

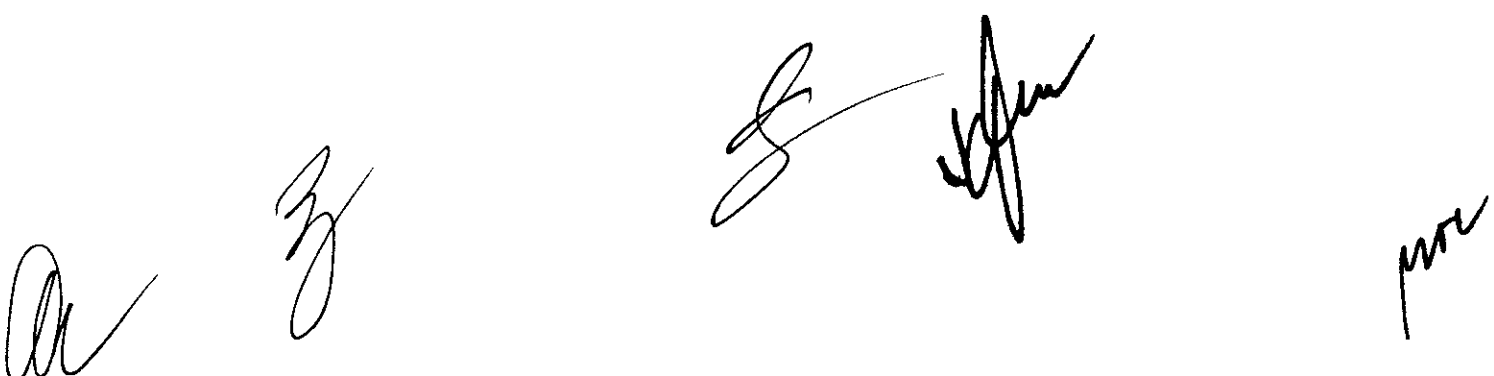
Fuel / Lube Oil	Consumption Rate in liter/kWh
Heavy Fuel Oil	0.2396 or actual whichever is lower
Light Fuel Oil	0.0350 or actual whichever is lower
Lube Oil	0.00162 or actual whichever is lower

4.5 Formula for Computing the Total Ancillary Services Charge

The proposed formula for computing the total Ancillary Services Charge is as follows:

Total Ancillary Services Charges (TAC)

$$= CF \times NGE + (EF + FLR) \times DETm - \sum_{i=1}^{Bh} (DET_i \times TOU \text{ rates}_i)$$



Where:

TOU rates_i = NPC's TOU rates per hour for the billing month

As shown in the above-mentioned formula, the Capacity Fee (CF) is capped at Net Guaranteed Energy (NGE). The NGE is similar to the Minimum Energy Off-Take (MEOT) being used in regular electric power purchase agreements wherein the contracted power producer will be guaranteed of its return without any financial loss. The said formula will guarantee the financial viability of Nabas Power Plant.

It is necessary, in the meantime, to adopt a Capacity Fee of PhP628.31/kW/month that is based on the Capital Recovery Fee and WACC as computed above and excluding PPC's proposed Fixed O&M. Thus, the Commission deems it more appropriate to approve the following formula for computing the Total Ancillary Service Charge:

Total Ancillary Services Charges (TAC) per month:

$$= CF \times 12,500 \text{ kW} + (EF + FLR) \times DET_m - \sum_{i=1}^{Bh} (DET_i \times TOU \text{ rates}_i)$$

Where:

TOU rates_i = NPC's TOU rates per hour for the billing month

As regards the concerns of AKELCO that NGCP should no longer charge it with transmission charges once the ASPA takes effect, the Commission finds the same to be devoid of merit as this will not prevent NGCP from collecting the



approved Maximum Allowable Revenue (MAR) for the 2nd Regulatory Period. Any avoided transmission charges of AKELCO will only be subsidized by other customers of NGCP within the Visayas Grid. Moreover, the Nabas Power Plant is not an embedded generator of AKELCO and that all generation of the plant goes directly to the grid and will be delivered to load customers, including AKELCO, through the lines of NGCP. It is worth mentioning that AKELCO is using the line of NGCP to get its power requirements from the grid. Hence, it is only proper for AKELCO to pay NGCP the appropriate transmission charges consistent with the provisions of the Open Access Transmission Rules (OATS).

Anent the issues on the cancellation of the Minimum Energy Off-Take (MEOT) under the approved EPPA between AKELCO and PPC subject of ERC Case No. 2005-013 RC, the Commission deems it necessary to suspend the same during the effectivity of the ASPA.

After a thorough evaluation of the documents submitted and the testimonies of the witnesses presented, the Commission finds that Ancillary Services are necessary to maintain the integrity of the Cebu-Negros-Panay Grid and will be beneficial to the load consumers thereof by way of reliable, continuous and sufficient supply of power within the grid at reasonable costs.

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WHEREFORE, the foregoing premises considered, the joint application for approval of the Amended Memorandum of Agreement (MOA), with prayer for provisional authority, filed by the National Grid Corporation of the Philippines (NGCP) and Panay Power Corporation (PPC) is hereby **APPROVED WITH MODIFICATION**, subject to the following conditions:

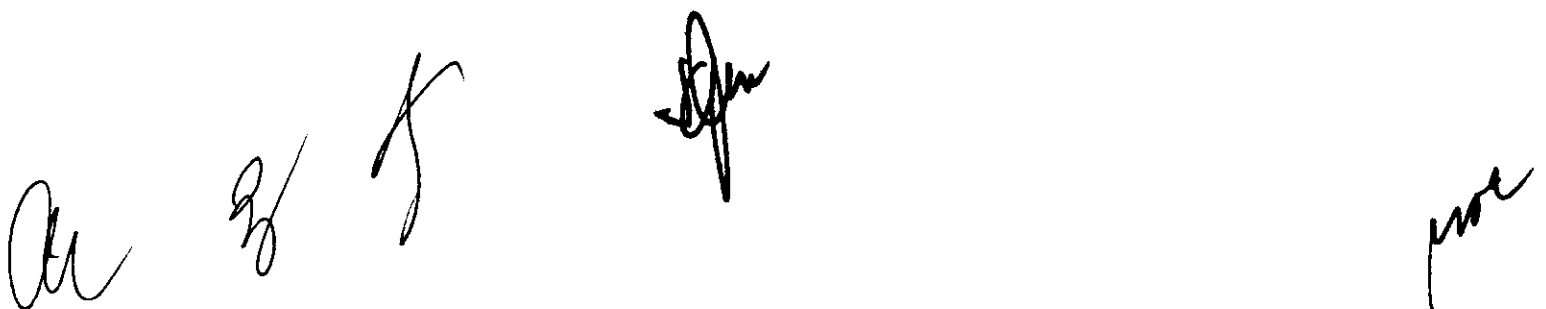
Particular	Approved Rates
Capacity Fee	PhP628.31/kW
Energy Fee *	PhP0.5331/kWh
Fuel Cost Fee **	Pass through of fuel and lube oil costs for consumption with generation

Note: * Subject to monthly Consumer Price Index (CPI) adjustment with a base CPI as of December 2005

** Generation limited to fuel rate as follows:
Heavy Fuel Oil - 0.2396 liter/kWh or actual, whichever is lower
Light Fuel Oil - 0.0350 liter/kWh or actual, whichever is lower
Lube Oil - 0.00162 liter/kWh or actual whichever is lower

Relative thereto, the Minimum Energy Off-Take (MEOT) of 2,000,000 kWh per month for the Nabas Plant and the approved base rate of PhP2.4375/kWh in the Commission's Decision dated August 2, 2006 in ERC Case No. 2005-013 RC [In the Matter of the Petition for Approval of the Inclusion to AKELCO's Retail Rate of Costs From the 5 MW and 12.5 MW Electric Power Purchase Agreements (EPPA), as Amended, with Mirant Global Corporation (Mirant), AKELCO – Petitioner] are hereby **SUSPENDED** during the effectivity of this Decision or for a period of three (3) years from receipt hereof.

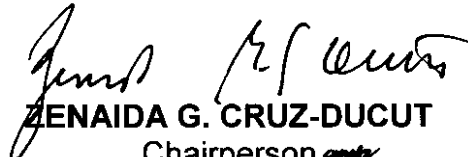
Finally, the provisional authority granted to TRANSCO and AVON in the Order dated December 17, 2007 in ERC Case No. 2007-150 RC [In the Matter of the Application for Approval of the Memorandum of Agreement Between the



National Transmission Corporation and Avon River Power Holdings Corporation with Prayer for Provisional Authority, TRANSCO and AVON – Applicants] is hereby **REVOKED** accordingly.

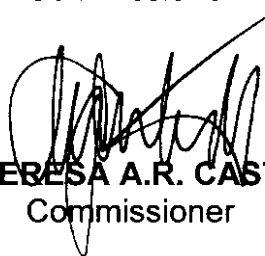
SO ORDERED.


Pasig City, August 10, 2009.


ZENAIDA G. CRUZ-DUCUT
Chairperson *gpc*


RAUF A. TAN
Commissioner


ALEJANDRO Z. BARIN
Commissioner


MARIA TERESA A.R. CASTAÑEDA
Commissioner


JOSE C. REYES
Commissioner

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