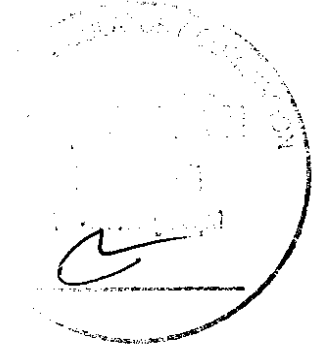


Republic of the Philippines  
**ENERGY REGULATORY COMMISSION**  
San Miguel Avenue, Pasig City

IN THE MATTER OF THE  
APPLICATION FOR THE  
APPROVAL OF THE  
COMMISSIONING POWER SALES  
CONTRACT BETWEEN KEPCO-  
SPC POWER CORPORATION  
(KSPC) AND CENTRAL NEGROS  
ELECTRIC COOPERATIVE, INC.  
(CENECO), WITH MOTION FOR THE  
ISSUANCE OF PROVISIONAL  
AUTHORITY



ERC CASE NO. 2011-012 RC

KEPCO SPC POWER  
CORPORATION (KSPC) AND  
CENTRAL NEGROS ELECTRIC  
COOPERATIVE, INC. (CENECO),  
Applicants.

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D O C K E T E D

Date: JAN 09 2012

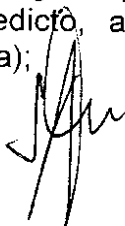
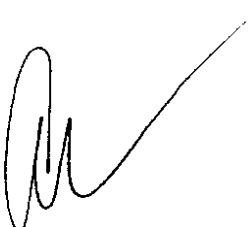
By: 

## DECISION

Before this Commission for resolution is the application filed by KEPCO-SPC Power Corporation (KSPC) and Central Negros Electric Cooperative, Inc. (CENECO) on February 7, 2011 for approval of their Commissioning Power Sales Contract (CPSC), with motion for the issuance of a provisional authority.

In the said application, KSPC and CENECO alleged, among others, that:

1. KSPC is a duly authorized generation company and existing under and by virtue of the laws of the Republic of the Philippines, with principal address at 7<sup>th</sup> Floor, Cebu Holdings Center, Cebu Business Park, Cebu City;
2. CENECO is a franchised electric cooperative organized and existing under the laws of the Republic of the Philippines with principal office at Mabini corner Gonzaga Streets, Bacolod City, Negros Occidental. It has been granted a franchise by the National Electrification Commission (NEC) to distribute electric service in Bacolod City, Bago City, Silay City, Talisay City, Murcia and Don Salvador Benedicto, all in the province of Negros Occidental (Franchise Area);



9. Pursuant to the JSA, KSPC entered into Power Sales Contracts with various Distribution Utilities (DUs), to wit: a) Central Negros Electric Cooperative, Inc. (CENECO), b) Cebu I Electric Cooperative, Inc. (CEBECO I), c) Cebu II Electric Cooperative, Inc. (CEBECO II), d) Negros Oriental I Electric Cooperative, Inc. (NORECO I), e) Negros Oriental II Electric Cooperative, Inc. (NORECO II), f) VMC Rural Electric Service Cooperative, Inc. (VRESCO), g) Mactan Electric Company (MECO), and h) Negros Occidental Electric Cooperative, Inc. (NOCECO);
10. On various dates, KSPC applied with the Commission for the approval of its Power Supply Contracts (PSCs) with the DUs mentioned above;

#### ERC DECISION OF KSPC RATE

11. The Commission approved the various PSCs of KSPC with the DUs with a KSPC Rate of **PhP4.2511/kWh** in its Decisions dated: August 21, 2008 for NOCECO; December 8, 2008 for CEBECO I, CEBECO II, NORECO I, NORECO II, and VRESCO; and September 10, 2009 for MECO;
12. They hereby quote and adopt the relevant portion of the Decisions of the Commission in the above-mentioned Applications to form part of the instant Application, thus:

*(From the KSPC-CENECO Decision dated February 26, 2009 – ERC Case No. 2007-138 RC)*

“xxx

#### DISCUSSION

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#### B. THE KSPC CEBU POWER PLANT

Under the PSC and other similar contracts, KSPC will build, own and operate a 2x100 MW CFBC Boiler Coal-Fired based load power generation facility to be located in the City of Naga, Province of Cebu, for the purpose of supplying power to its contracted customers. The construction of the Power Plant, however, is yet to commence and will depend on the approval of the instant application and its amendments. Upon the commercial operation of the power plant, KSPC is expected to deliver energy to its customers by 2011.

The energy contracted quantity meets CENECO's 2006 kWh requirements and its projected demand by 2011. The annual contract quantity shall be 470,400,000 kWh/year comprising of 350,400,000 kWh/year from KSPC and 120,000,000 kWh/year to be sourced by KSPC from NPC.



### NATURE OF THE APPLICATION

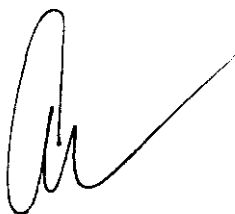
3. Pursuant to Rule 20 (B) of the *ERC's Rules of Practice and Procedure*, approved by the Commission on June 22, 2006 in Resolution No. 38, Series of 2006, the instant application is submitted to the Commission for the approval of their CPSC. Moreover, their motion for the issuance of provisional authority is made pursuant to Rule 14 of the same Rules of Practice and Procedure mentioned above;

### COMPLIANCE WITH THE PRE-FILING REQUIREMENTS

4. In compliance with Rule 6 of the *ERC's Rules of Practice and Procedure* approved by the Commission on June 22, 2006 in Resolution No. 38, Series of 2006, copies of the instant application with all its annexes were furnished to the respective legislative bodies of the Local Government Unit (LGU) of Negros Occidental and Bacolod City where CENECO principally operates, as well as the Sangguniang Panlalawigan of Negros Occidental
5. Furthermore, they have caused the publication of the present application in its entirety in the *Visayan Daily Star*, a newspaper of general circulation within the franchise area of CENECO;

### STATEMENT OF FACTS

6. On August 18, 2006, to address the looming power shortage in the Visayas, the National Power Corporation (NPC), Power Sector Assets and Liabilities Management Corporation (PSALM), KEPCO Philippines Corporation (KEPHILCO), Salcon Power Corporation (SPC) and the National Transmission Corporation (now the National Grid Corporation of the Philippines or NGCP), executed a Memorandum of Agreement (MOA), which provides that KEPHILCO and SPC will build a 2 x 100 MW Circulating Fluidized Bed Combustor Boiler Coal-Fired base load power plant (the Cebu Power Plant) in Naga, Cebu. The Cebu Power Plant is expected to meet the growing power needs of the Visayas area and to provide a stable and reliable supply;
7. KEPHILCO and SPC thereafter incorporated the KSPC as the joint venture entity which shall undertake the construction, ownership, operation, management and maintenance of the Cebu Power Plant;
8. NPC and KSPC subsequently executed a Joint Sales Agreement (JSA) dated November 16, 2006, which outlines the various duties and obligations of NPC and KSPC relative to the construction and continued operation of the Cebu Power Plant;



At present, CENECO buys most of its power requirements from NPC.

**C. The PSC and its Amendments**

Due to the foregoing changes in the circumstances affecting the original agreement or the first PSC of July 5, 2007, the parties agreed to amend the terms of the PSC and execute a document called Amendment to Power Sales Contract on March 29, 2008 which amended the PSC and now the subject of this application.

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**D. KSPC's Pricing Structure**

CENECO shall pay electricity fee to KSPC each billing month during the cooperation period based on the following formula:

$$\text{GCmonth} = K + N + R + \text{AE}$$

Where:

GCmonth = the generation charge or Monthly Payment  
K = KSPC Generation Charge for the Month  
N = NPC Generation Charge for the Month  
R = Replacement Power Charge for the Month  
AE = Alternate Energy Charge for the Month.

KSPC Base Price - PhP4.2798/kWh  
NPC TOU Rate - PhP4.30/kWh (daily average)

The KSPC Base Price and the NPC price shall be subject to adjustments based on fuel cost, foreign exchange and local and foreign consumer price indices.

The KSPC Base Price was determined using the LRAC. The average LRAC rate is the sum of the weighted return on capital, fixed operating and maintenance costs, variable operating expenses, and fuel costs divided by the number of kilowatt-hours generated by the plant.

The KSPC Base Price of PhP4.2798/kWh is broken down as follows:

Fixed	Capital Recovery Fee (CRF)	PhP2.3245
	Operations and Maintenance (Fixed)	0.4944
Variable	Operations and Maintenance (Variable)	0.1648
	Fuel	1.2961
	Total	PhP4.2798



**E. Comparison of the Original and Amended Contract Price**

The Commission simulated the rates in the original and the amended PSCs to show the increase/(decrease) of the KSPC rate component as of January 2008, to wit:

Cost Component	Original PSC (PhP/kWh)	Amended PSC (PhP/kWh)	Difference
Capital Fee	2.1281	2.3245	0.1964
Foreign O&M Fee	0.2837	0.2782	(0.0055)
Local O&M Fee	0.4792	0.3809	(0.0983)
Fuel Fee	0.8785	1.2962	0.4177
<b>Total KSPC Price</b>	<b>3.7695</b>	<b>4.2798</b>	<b>0.5103</b>

The above table shows that the KSPC price under the amended PSC is higher by PhP0.5103 compared to the original KSPC price. The increase was caused by the adjustment of the Capacity Fee and Fuel Fee in the amount of PhP0.1964/kWh and PhP0.4177/kWh, respectively. In the original PSC, the adjustment in Fuel Fee is limited only to a 30% increase. As such, if the actual fuel cost increases by 100%, only 30% will be allowed to be passed on to KSPC's customer. However, in the amended PSC, the total fuel cost adjustment is passed-on to KSPC's customer.

**F. Capital Recovery Fee (CRF)**

There are two (2) fixed cost components in the derivation of the KSPC CRF: a) the capital cost associated with the construction of the power plant (Project Cost); and b) the WACC. This fixed rate covers costs which are incurred independent from electricity generation.

**F.1. KSPC Amended Contract Price Evaluation**

**F.1.1 Total Capital Cost and Determination of KSPC's Capital Fee**

The total capital cost of the project was derived by taking into account the following: a) engineering, procurement and construction cost; b) the interest during construction; c) total site cost; d) Advisory Fee; e) project cost; and f) contingency fees.

The table below shows the capital cost component of the original PSC and the proposed amendment to the PSC, to wit:

Cost Component	Original PSC (US\$'000)	Amended PSC (US\$'000)	Increase (US\$'000)
EPC Cost	272,314	312,304	39,990
Interest During Construction (IDC)	102,956	120,057	17,099

Site Cost	4,104	4,886	782
Advisory Fee	3,000	13,000	10,000
Project Cost	45,062	56,683	11,621
Contingency Fees	10,893	12,492	1,599
<b>Total Capital Cost (TCC)</b>	<b>438,329</b>	<b>519,422</b>	<b>81,092</b>

The total cost used in determining the Capacity Fee is increased by US\$81.092 Million

#### **F.1.1.1 Engineering Procurement and Construction (EPC) Cost**

The EPC is for the design, engineering, procurement, construction, erection, commissioning, testing and related services of the two (2) unit coal fired power plants. The EPC contract was procured by KSPC through international bidding. Having undergone the proper international bidding, the Commission may consider the EPC Price as the best available cost that KSPC could obtain in the international market.

The original Capacity Fee was determined using the Engineering, Procurement and Construction ("EPC") Contract price of US\$272,314 Million procured by KSPC through international public bidding. After the bid validity period on April 20, 2007, KSPC has agreed to enter into an EPC Contract amendments and accepted final re-quotations of the bid price at an EPC Price of US\$312.304 Million due to the sharp increase of prices affecting the EPC cost.

#### **F.1.1.2 Interest During Construction (IDC)**

The IDC is the cost of capital incurred during the construction of the power plant and usually capitalized as part of the power plant cost. The project construction is four (4) years which started in the last quarter of 2007.

#### **F.1.1.3 Site Cost**

The land lease (site cost) is the same with the original project cost. The project cost will be paid through local currency. The variance of the site cost from the original contract to be amended is due to the use of exchange rate in converting the site cost in Philippine Peso to US Dollar.

#### **F.1.1.4 Advisory Fee**

The Advisory Fee stands for the financing advisory fees and other related expenses. The project requires an Advisory and Consulting Service due to more complicated negotiations. Moreover, in order for KSPC to be able to encourage Export Credit Agencies (ECAs) to accept its proposal for funding, higher level of representations and documentation by qualified financial advisors should be made which translates to higher advisory fees. KSPC will also have to pay for the advisory fee for the lenders.



KSPC submitted and made reference to the advisory fee of the previously approved KEPCO-Ilijan Project Case which showed that the total legal advisory fee is about 5% of the total project cost equivalent to US\$24Million.

KEPCO-SPC proposed to set an advisory fee of US\$13Million which is equivalent to 2.5% of the TCC of US\$519Million based on its previous experience on the Ilijan Project, which was funded through project finance and in conformity with the requirements of potential financial arranger to secure the viability and feasibility of the project.

However, the Commission disallowed a portion of the proposed advisory fee equivalent to US\$4.357 Million for being excessive and allowed only an advisory fee of US\$8.643Million or about 2.5% of the 245.751 (70% of the TCC) excluding contingency fee. The 70% of the TCC is the amount to be funded through borrowings.

#### **F.1.1.5 Project Cost**

The project cost includes soft costs such as Insurance during construction, cash related cost, financing fee and working capital. The working capital represents Operation and Maintenance (O&M) cost and fuel cost which will be used for operating the plant until the first collection of power sales from the customers. The main reason for the adjustment is the increase in fuel cost representing a major portion of the project cost.

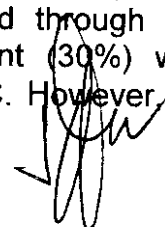
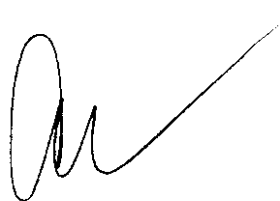
The Commission believes that the working capital for O&M and fuel cost should be removed from the capital recovery fee (recovery of cost) because such cost is already incorporated in the O&M Fee and Fuel Fee. However, the cost of money of the working capital should be allowed to be recovered considering that it is tied up in the inventory and/or the company's need to raise money to finance its initial operations.

#### **F.1.1.6 Contingency Fees**

The Commission disallowed the proposed increase in the Contingency Fee amounting to US\$1.599 Million as it has already allowed the proposed increase in the other components of the project cost that may cover any increase in contingency fee.

#### **F.2. The Weighted Average Cost of Capital (WACC)**

In the original application, KSPC used a WACC of 14.5625% in computing the interest of the investment. In deriving the WACC of 14.5625%, KSPC considered a cost of debt of 6.51% and cost of equity of 18.78%. The seventy percent (70%) of the total capital cost was assumed to be funded through debt financing while the remaining thirty percent (30%) will be sourced from equity invested by KSPC. However, KSPC decreased its WACC from 14.56%



(original) to 13.27% (amended to mitigate the rate impact due to price increases.

The Commission believes that the WACC of 13.27% of KSPC, as amended, is fair and reasonable considering the attendant business risk involved and competitive forces in the generation sector.

#### **Derivation of the Amended Capacity Fee**

The proposed annual recovery of the TCC including return was derived after considering the time value of money. The computed annuity for the required recovery on the capital cost was US\$72,132,413.23 using a rate of return of 13.27% (WACC) and 25-year recovery period.

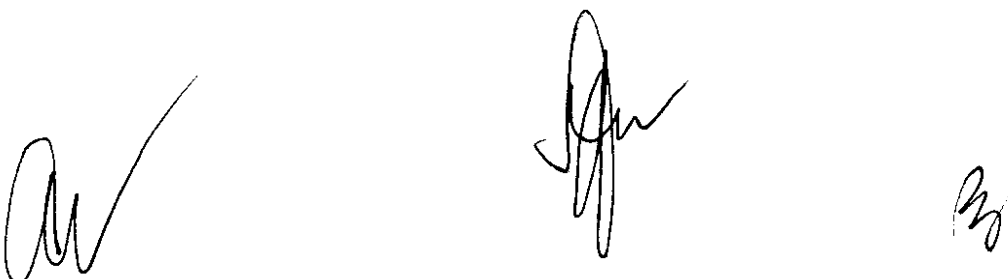
To determine the PhP/kWh for the annual capital recovery, a billing determinant should be established. Billing determinant is the number of kWh that a power plant can produce and sell to its customers. The billing determinant used by KSPC was 1,261,440,000 kWh. This was derived by multiplying the 80% (plant capacity factor) to the 180 MW generation capacity, net of auxiliary load, and multiplied further by 8,760 hours.

The net generation used was only 180MW instead of the 200MW capacity of the plant because 10% of the 200MW plant capacity will be used as an auxiliary load. The auxiliary load is the portion of the gross generating capacity (200MW) representing the in-house consumption of the power plant for its auxiliary components when the power plant is dispatched at full load. Thus, KSPC cannot contract for the 20 MW allocated for its in-house consumption because such is not available for sale.

The proposed capital recovery rate of US\$.0572/kWh was computed using the annual required capital recovery of US\$72,132,413.23 divided by the annual generation of 1,261,440,000 kWh. This was then converted to PhP2.3245/kWh using the exchange rate of PhP40.65 is to 1 US\$.

The Commission recomputed the Capacity Fee considering the adjustment made on the Advisory Fee and the disallowance on the proposed increase in contingency fee which resulted to a Capacity Fee of PhP2.2958/kWh.

The table below shows the breakdown and comparison of the proposed KSPC Capacity Fee and the Commission's computation, to wit:



Cost Component	Amended PSC (US\$'000)	Commission's Final Adjustment (US\$'000)
EPC Cost	312,304	312,304
IDC	120,057	120,057
Site Cost	4,886	4,886
Advisory Fee	13,000	8,643
Other Project Cost	56,843	56,843
Contingency Fee	12,492	10,893
<b>Total Capital Cost</b>	<b>519,422</b>	<b>513,466</b>

As shown below, the adjustment to the Advisory Fee and disallowance of the proposed Contingency Fee resulted to a Capacity Fee of PhP2.2958/kWh or a difference of PhP0.0287/kWh equivalent to PhP36,203,328.00 per year.

	Per KSPC	Per the Commission	Difference
Total Capacity Cost, US\$	519,422,000	513,466,000	5,956,000
Capacity Fee (PhP/kWh)	2.3245	2.2958	0.0287

### F.3 Operation and Maintenance (O&M) Fee

The O&M fee of KSPC was classified into two: Fixed O&M and Variable O&M. Fixed O&M covers 75% of the annual O&M while variable O&M covers 25% of the annual O&M. The annual O&M of KSPC includes maintenance and labor cost, general and administrative expense and taxes.

The Commission noted that the proposed amended O&M Fee is decreased from the original O&M Fee of PhP0.7629/kWh to an O&M Fee of PhP0.6591/kWh.

One of the major amendments in the O&M cost is the removal of the JSA Fee. The said JSA Fee was intended to cover NPC's costs and loss of revenue as a result of its obligation to reserve capacity to service the peak and intermediate requirements of CENECO and other customers of KSPC and for replacement power during planned outage of KSPC.

The Commission commends NPC's decision to remove the JSA Fee to maintain the competitiveness of the KSPC's price and to minimize the increase in the price of power that shall be delivered from the Cebu Power Plant of KSPC due to the increase in the EPC and coal cost. With the removal of the JSA Fee, KSPC is expected to pass-on the benefit to CENECO's customers.

Although NPC is no longer firmly committed to supply the peaking and intermediate requirements of CENECO with the removal of the JSA Fee, it is still obligated to supply the

balance of the power requirements. Since the renewal/extension of the Transition Supply Contract (TSC) is at the sole discretion of CENECO, it may source its peak and intermediate requirements from other Independent Power Producers (IPPs). NPC, however, signified that it may renew/extend the TSC even beyond 2011 to cover for the intermediate and peak requirements of CENECO.

Below is the comparison between the original and amended O & M costs, to wit:

Particulars	O & M Cost (PhP'000)
Original O & M	963,393*
Amended O & M	831,505
Difference	130,888

\* Cost as of 2008, derived from the original O & M cost of PhP1,003 Million as of 2006 and adjustment based on the adjustment factor provided in the PSC in order to be comparable to the amended O&M.

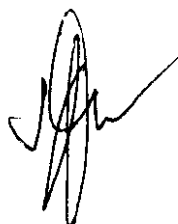
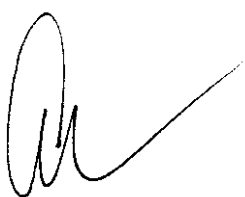
The amended O&M Fee of PhP0.6591/kWh was derived by dividing the O&M Cost of PhP831,505,000 to the annual generation of 1,261,440,000 kWh.

Thus, the Commission adopted the amended O&M Fee which decreased from the original O& M Fee of PhP0.7629/kWh to O& M Fee of PhP0.6591/kWh due mainly to the removal of the JSA Fee.

#### F.4. Fuel Cost

The 2006 LRAC Price in the PSC was determined using a coal price of US\$31.12/ton. Also, the initial Base Index Price (globalCOAL FOB Newcastle) to be used in the price adjustment mechanism was pegged at US\$47.62/ton (3<sup>rd</sup> Quarter average, 2005). Under the original PSC, it provides for maximum allowable adjustments to the base price of +/- 30% initially and +/- 10% for subsequent adjustments. However, after the execution of the original PSC, global coal prices increased. As of the last quarter of 2007, global coal price index reached US\$83.23/ton which is almost twice the initial US\$47.62/ton. (The globalCOAL physical index, FOB Newcastle, is the reference for the Base Index Price in the PSC).

Also, marine diesel oil prices have risen sharply since the execution of the PSC. The price of marine diesel oil significantly affects the cost of coal, particularly the transport cost. In the first PSC, changes in the price of marine diesel oil affected only fifteen percent (15%) of the adjustment of the Transportation Base Price.



Further, the initial Bunker Basis Price was pegged at US\$53.30 cents/liter (3<sup>rd</sup> Quarter, 2005). However, as of the 4<sup>th</sup> Quarter, 2007, the price index of marine diesel oil increased to US\$80.18 cents/liter.

For the initial computation of Transportation Base Price (TBP), which takes into account fixed and variable costs of fuel prices as part of total freight costs, only 15% was allotted for the variable portion of the fuel costs out of the total costs with a cap of 10% adjustment or limit for the TBP. But due to the recent unprecedented increase in oil prices, this 15% variable portion was increase to almost 51%. However, despite the removal of the allowable adjustment to Base price ceiling for the recovery of fuel cost, KSPC decided to reflect only 25% to account for the adjustment in oil prices.

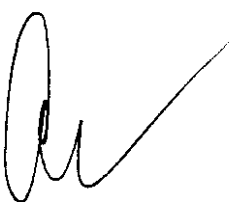
KSPC procured two (2) Coal Supply Contracts through international public bidding, one for 420,000 metric tons annually and the other for 180 metric tons annually, for a period of ten (10) years. Due to the drastic increase of fuel cost and the limitation to recover only up to 30% of such increase, KSPC's coal supplier for 420,000 metric tons terminated the contract. Thus, KSPC was forced to conduct another international public bidding for additional supply. The prices of the new supplier (US\$51.90/ton) and that of the earlier remaining supplier (US\$54.76/ton) have a weighted coal price of US\$52.57/ton, about twice the price of US\$31.12/ton used in determining the 2006 LRAC price. This new coal price is incorporated in the determination of the new KSPC price in the Amended PSC.

The Commission concurs that the actual fuel cost utilized in generating electricity should be passed on to the customers. There should be no cap on the fuel cost to be passed on to the customers as long as within the efficiency set by the Commission. Thus, any inefficiency in the coal quality and plant heat rate (2,526/kcal/kg) previously approved by the Commission shall not be passed on to the customers.

The fuel cost shall also be subject to adjustment to account for its upward/downward changes as well as transportation cost.

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**WHEREFORE**, the foregoing premises considered, the application filed by Central Negros Electric Cooperative, Inc. (CENECO) and KEPCO-SPC Power Corporation (KSPC) on August 31, 2007 for the approval of their Power Supply Contract (PSC) and the "Motion for the Approval of the Amendments to the Power Sales Contract" filed on May 15, 2008 is hereby **APPROVED WITH MODIFICATION**.



Accordingly, the amended Power Supply Contract shall be subject to the following base rate:

Cost Component	(PhP/kWh)
Capacity Fee <sup>1</sup>	2.2958
Foreign O & M Fee <sup>2</sup>	0.2782
Local O & M Fee <sup>3</sup>	0.3809
Fuel Fee <sup>4</sup>	1.2962
<b>Total KSPC Price</b>	<b>4.2511</b>

<sup>1</sup>Not subject to indexation but subject to foreign exchange fluctuation

<sup>2</sup>Subject to US CPI, PPI and foreign exchange fluctuation

<sup>3</sup>Subject to Philippine CPI and GWPI adjustments

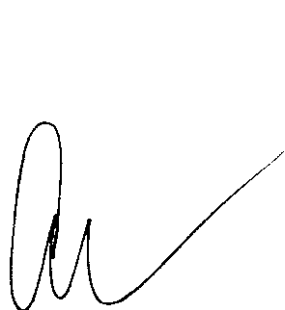
<sup>4</sup>Subject to Fuel cost indexation and foreign exchange fluctuation

xxx.”

13. They adopt all the documentary evidence submitted to the Commission in support of their previous applications to form part of the instant application insofar as the documents relates to them. KSPC submits that the Commission may take judicial notice of all documents submitted in the previous applications to warrant and prevent unnecessary duplications of documentary evidence;

#### COMMISSIONING OF THE KSPC CEBU POWER PLANT

14. KSPC's power plant is a 2 x 100 MW Circulating Fluidized Bed Combustor Boiler Coal-Fired base load power plant located in Naga, Cebu. It is expected to meet the growing power needs in the Visayas area and to provide a stable and reliable supply. A copy of the power plant Technical Specification Summary indicating the Operation Condition, Performance Guarantee, Boiler and Auxiliaries Descriptions, Draft System, Ash Handling System, Coal Handling System, Turbine and Generator Specification, is attached to the instant application;
15. On October 8, 2010, KSPC started the commissioning of its Cebu Power Plant which will end a day before the Commercial Operations Date of each unit;
16. Pursuant to the expected generation of electricity brought about by the commissioning of KSPC's Cebu Power Plant, they entered into a Memorandum of Agreement (MOA) on August 3, 2010 for the sale of the Commissioning Power and the execution of a Commissioning Power Sales Contract for the purpose;



**ABSTRACT OF THE COMMISSIONING POWER SUPPLY CONTRACT  
AND RELATED INFORMATION**

17. **Executive Summary.** The CPSC is a “non-firm” contract. KSPC shall allocate its Commissioning Power Quantity (CPQ) to its buyers (DUs) in a proportionate method depending on the Buyer’s percentage share on the total capacity cap stated in the PSCs of all the Buyers. A copy of the distribution scheme for KSPC’s Commissioning Power is attached to the instant application;
18. **Term.** The CPSC shall become valid and binding upon the date of its execution until the Commercial Operations Date of the Cebu Power Plant. If the Commercial Operations Date of Unit 1 has occurred and Unit 2 is in its Commissioning Period, the power during Commercial Operations Date of Unit 1 will be sold first to the DUs before the Commissioning Power produced by Unit 2;
19. **Delivery of Commissioning Power.** KSPC will submit to the DUs the allocated quantity on or before 9:00 AM two (2) days before the trading day. CENECO shall then confirm its acceptance on such allocated quantity and submit its confirmation to KSPC on or before 10:00 AM of the same day;
20. **Connection and Grid Projects/Agreements.** Attached to the instant application is the Project Layout/Scheme on KSPC’s Commissioning Power Requirements showing the connection points and the temporary 138 kV Line. Also, a copy of the project cost estimate, Transmission Line Agreement, Memorandum of Agreement between KSPC and NGCP, Memorandum of Understanding between KSPC and NGCP and supporting documents are attached to the said application;
21. **Procurement and Acquisition Procedure.** The procurement and acquisition procedure for the engineering projects for the Commissioning of the KSPC Power Plant went through the standard bidding and procurement process of KEPCO Philippines;
22. **CENECO’s Procurement Process.** In 2007, CENECO applied for a bilateral Power Sales Agreement (PSA) with the Commission for forty (40) MW “firm” contract from KSPC for a term of ten (10) years. KSPC will start to supply CENECO in the year 2011 to 2020. Last August, KSPC informed CENECO that it will start commissioning its plant by October 8, 2010. KSPC offered to CENECO the thirty six (36) MW portion of its commissioning power at a rate of **Php2.83/kWh** under a “non-firm” contract which it will divide the commissioning power proportionately to the DUs based on their bilateral PSA with KSPC. CENECO welcomed the opportunity as a rate reduction measure. Thus, CENECO’s board of directors passed a resolution accepting KSPC’s offer;
23. **KSPC Commissioning Power Rate.** Each delivery of Commissioning Power shall be subject to the rate set forth in instant application of the CPSC comprising of the Testing and



Commissioning Power Rate and the Pre-Commercial Operation Rate, both of which shall in no case be above the ERC-approved NPC Visayas Time-of-Use (TOU) rate. The KSPC Commissioning TOU Rate is as follows:

KSPC Commissioning Power TOU Rate			NPC-Visayas TOU Rate	
Period	Testing and Commissioning Power Rate (TCP <sub>kl</sub> )	Pre-Commercial Operation Rate (PCP <sub>kl</sub> )	Period	TOU Rate
1:00	1.6861	2.1920	1:00	2.6158
2:00	1.4298	1.8587	2:00	2.2181
3:00	1.4298	1.8587	3:00	2.2181
4:00	1.4298	1.8587	4:00	2.2181
5:00	1.4298	1.8587	5:00	2.2181
6:00	1.4298	1.8587	6:00	2.2181
7:00	1.4298	1.8587	7:00	2.2181
8:00	1.8912	2.4586	8:00	2.9340
9:00	2.2017	2.8623	9:00	3.4157
10:00	2.3413	3.0437	10:00	3.6322
11:00	2.3413	3.0437	11:00	3.6322
12:00	2.3413	3.0437	12:00	3.6322
13:00	2.3413	3.0437	13:00	3.6322
14:00	2.3413	3.0437	14:00	3.6322
15:00	2.3413	3.0437	15:00	3.6322
16:00	2.3413	3.0437	16:00	3.6322
17:00	2.2775	2.9607	17:00	3.5332
18:00	4.1741	5.4263	18:00	6.4755
19:00	4.1741	5.4263	19:00	6.4755
20:00	4.1741	5.4263	20:00	6.4755
21:00	4.1741	5.4263	21:00	6.4755
22:00	2.3413	3.0437	22:00	3.6322
23:00	1.9670	2.5571	23:00	3.0516
24:00	1.8912	2.4586	24:00	2.9340

NOTE: NPC TOU Rate is exclusive of all the adjustments namely GRAM, ICERA and ACA. If all the adjustments are included in the NPC TOU Rate then the Average will be approximately PhP4.1113/kWh.

In support of the foregoing Commissioning Power Rate, attached to the instant application are the KSPC Commissioning Power Rate Computation and Coal Supply Plan describing the various Coal Supply Agreements entered into for the KSPC power plant. The computation of the KSPC Commissioning Rates is as follows:

**COMMISSIONING POWER RATE**

**I. ON AND AFTER SYNCHRONIZATION**

**FUEL**

TYPE	CONSUMPTION	PRICE	EXPENSES	COMMENTS
Coal	222,899 Ton	\$54.80	PhP561,884,756	Price : 2010 1 <sup>st</sup> Quarter
Light Oil	1,001 KL	PhP38.31	PhP 38,336,372	Price : Cebu City Gas Station Price on March 31, 2010
Limestone	6,178 Ton	PhP1,219.50	PhP7,533,827	Price : Price in Operation and Maintenance Contract
<b>Total</b>	-	-	<b>PhP607,754,955</b>	-

❖ 1\$ = PhP46

**ELECTRICITY OUTPUT (MWh)**

UNIT	TESTING AND COMMISSIONING	PRE-COMMERCIAL	TOTAL
MWh	98,254	162,629	260,883

**RATE**

TYPE	FUEL COST AFTER SYNCHRONIZATION	ELECTRICITY	RATE (P/kWh)
Testing and Commissioning (T&S)	PhP607,754,955	260,883 (MWh)	2.330
Pre-Commercial	-	-	3.029 (130% of T & S)

**II. BEFORE SYNCHRONIZATION**

**FUEL EXPENSE**

TYPE	CONSUMPTION	PRICE	EXPENSES, (PhP)
Coal	15,936 Ton	\$54.80	40,171,469
Light Oil	10,795 KL	PhP38.31	413,564,112
Limestone	442 Ton	PhP1,219.50	539,019
<b>Total</b>	-	-	<b>454,274,600</b>

1\$ = PhP46

24. If in any case the current price of coal goes up over ten percent (10%) of the base price then the Commissioning Power Rate will be adjusted according to the formula set out in Annex "C" of the CPSC.

25. **Delivery Point.** The DU shall take delivery of the Final Hourly CPQ at the high voltage side of the main transformer of the Cebu Power Plant at 138 KV (Receiving Point). Any line rental such as transmission line losses, congestion charges and other transmission charges from the Receiving Point to the DU's substation shall be for the account of the DU;
26. **Payment.** Commencing on the Scheduled Commissioning Date, the Buyer shall pay to the Seller an amount (the "Monthly Payment") calculated in accordance with the formula set out in Annex "B", exclusive of value added taxes and any other applicable taxes, fees and charges. The billings shall be based on the total CPQ for the Billing Month;

**COMPUTATION OF MONTHLY PAYMENTS**

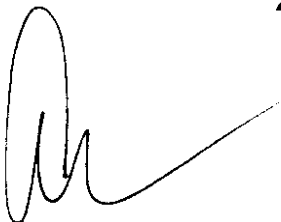
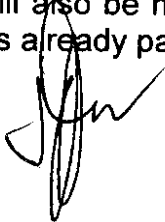
$$GC_{Month} = \sum_{i=26}^{125} \sum_{j=1}^{24} \{(CPQ_{ij} * TCP_{kj}) + (CPQ_{ij} * PCP_{kj})\} * K_{adj}$$

**Where:**

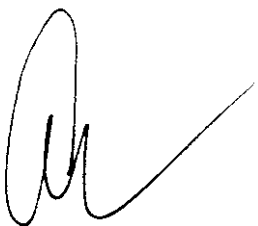
- $GC_{Month}$  = Generation Charge or Monthly Payment in Peso
- $CPQ_{ij}$  = Final Hourly CPQ for the relevant day  $i$  and relevant hour  $j$  of the Billing Month, kWh
- $K_{adj}$  = Adjustment Factor of the Seller for the Billing Month
- $TCP_{kj}$  = KSPC Testing and Commissioning Power Rates for the relevant hour  $j$  of the Billing Month, P/kWh
- $PCP_{kj}$  = KSPC Pre-Commercial Operation Power Rates for the relevant hour  $j$  of the Billing Month, P/kWh
- $i$  = Represents the relevant day of the Billing Month
- $j$  = Represents the relevant hour of the Billing Month

27. **Potential Cost of Ancillary Services if the IPP or the DU is Connected to the Main Grid.** The National Grid Corporation of the Philippines (NGCP) confirmed with KSPC that it will not charge any Ancillary Services (imbalance and over-generation) during the Commissioning Period because at this time, the generation supply is not yet stable and reliable. NGCP, however, will charge KSPC for the metering services;

28. There will also be no additional cost of ancillary service for MECO since it is already paying the same to NGCP;


29. **Environmental Compliance Certificate.** On December 5, 2005, the Department of Environment and Natural Resources (DENR) issued to KSPC an Environmental Compliance Certificate (ECC);
30. **CENECO's Board Approval of the CPSC and MOA.** Herein CPSC and MOA have been approved by the Board of Directors of CENECO;
31. **DOE Certificate of Endorsement.** The KSPC Cebu Power Plant is consistent with the Power Development Plan (PDP) of the government pursuant to the implementing Rules and Regulations (IRR) of Republic Act No. 9136 (RA 9136);
32. The KSPC Commissioning Power Rate is lower than the approved KSPC Rate and lower than the ERC-approved NPC Visayas TOU Rate;
33. On February 10, 2010, the Department of Energy (DOE) presented in Cebu City, the "Visayas Power Situation", a 2009 Update on the Philippine Energy Plan, where the Visayas Power Supply and Demand Outlook is already critical since 2009. It showed that the Visayas Grid needs a total additional capacity of 2,150 MW from 2009 to 2030;
34. Latest reports from the newspapers in the Visayas region showed that more brownouts are happening due to short supply of electricity;
35. The CPSC will serve to mitigate the energy problem in the franchise area of CENECO during the times when the KSPC Commissioning Power is available. However, this temporary and minor solution requires immediate implementation;
36. Thus, they are constrained to ask for a provisional authority from the Commission to allow them to buy and sell electricity at the KSPC Commissioning rate agreed upon in their CPSC;
37. This motion is intended only for the purpose mentioned above and nothing else;
38. As mentioned above, KSPC already started commissioning its Cebu Power Plant last October 8, 2010. Accordingly, KSPC was constrained to request from the Commission the authority to sell its commissioning power to the DUs pending the filing or during the pendency of its applications;
39. On October 8, 2010, KSPC received a letter-reply from the Commission allowing it to sell such commissioning power pending the processing of the necessary applications and actions thereon, subject to the existing policies on the purchase by distribution utilities of electricity under unapproved supply contracts and on the pricing of commissioning power; and



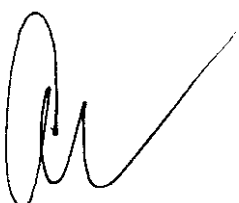
40. They pray that their motion for the issuance of provisional authority be approved by the Commission prior to the hearing and that their CPSC and MOA be also approved.

Having found the 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 March 14, 2011, were issued setting the case for initial hearing, pre-trial conference and evidentiary hearing on April 5, 2011.

KSPC and CENECO 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 the initial hearing. They were also directed to inform the consumers within CENECO's franchise area, by any other means available and appropriate, of the filing of the instant application, their reasons therefor and of the scheduled 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 attached Notice of Public Hearing and were requested to have their respective duly authorized representatives present at the aforesaid hearings.

Likewise, the Offices of the Mayors of the Cities and Municipalities within the franchise area of CENECO were furnished with copies of the said Order and Notice of Public Hearing, for the appropriate posting thereof on their respective bulletin boards.



On March 30, 2011, KSPC and CENECO filed their "Pre-Trial Brief".

During the April 5, 2011 hearing, KSPC and CENECO appeared. Mr. Romeo L. Lavilla, CENECO's member-consumer, appeared as observer. No intervenor or oppositor appeared nor was there an intervention or opposition registered.

At the said hearing, KSPC and CENECO presented their proofs of compliance with the Commission's posting and publication of notice requirements which were duly marked as Exhibits "H" to "I-1", inclusive. Thereafter, they conducted an expository presentation of their application. The Commission then conducted a pre-trial conference.

KSPC and CENECO presented the following witnesses: a) Mr. Choi Hoong Sook, KSPC's Marketing Manager, who testified, among others, on the following: 1) Technical Specification Summary of the Plant; 2) Determination of the Commissioning Power Rate; 3) Acquisition and Procurement Process; and 4) other matters related thereto; and b) Ms. Elaine Jo G. Pudadera, CENECO's Head of Economics Utility Section, who testified, among others, on the following: 1) the execution of the CPSC; 2) the salient features of the contract and its implications on the current generation rate of CENECO; and 3) other matters related thereto.

At the termination of their direct examinations, the Commission propounded clarificatory questions.

Three handwritten signatures in black ink are located at the bottom of the page. The first signature on the left is a cursive 'A'. The middle signature is a cursive 'J'. The signature on the right is a cursive 'B'.

On April 28, 2011, KSPC and CENECO filed their "Formal Offer of Evidence" which is hereby admitted for being relevant and material in the final resolution of this case.

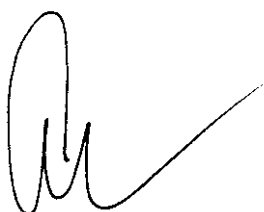
On July 4, 2011, KSPC and CENECO filed their "Compliance and Manifestation (list of documents in support for the evaluation of the cases of KSPC with CEBECO I, CEBECO II, NORECO I, NORECO II and VRESCO)" and "Additional Compliance".

## DISCUSSION

The CPSC between CENECO and KSPC is a "non-firm basis" supply of electricity. KSPC shall proportionately allocate a Commissioning Power Quantity (CPQ) to its buyers (DUs) based on the buyers' percentage shares on the total capacity cap stated in their respective PSCs on an hourly basis.

The following are the salient features of the CPSC:

- **Term**  
The CPSC shall become valid and binding upon the date of its execution until the Commercial Operations Date of the Cebu Power Plant  
  
If the Commercial Operations Date of Unit 1 has occurred and Unit 2 is in its Commissioning Period, the power during Commercial Operations Date of Unit 1 will be sold first to the DUs before the Commissioning Power Produced by Unit 2
- **Installed Capacity**  
2 x 100 MW
- **Type of Plant**  
Circulating Fluidized Bed Combustor Boiler Coal-Fired Base Load Power Plant
- **Location**  
Naga, Cebu



- **Commissioning Date** KSPC will undertake the commissioning of its Cebu Power Plant beginning October 8, 2010 and ending a day before the Commercial Operations Date
  
- **Contracted Energy** Commissioning Power will be allocated to all customers depending on their percentage share on the total capacity cap stated in their PSCs  
  
 CENECO has a forty percent (40%) share on the commissioning power to be produced by KSPC per Annex "M" of the application
  
- **Electricity Supply Mode** Non-Firm Basis
  
- **Delivery Mode**  
  
 CENECO shall take delivery of the Final Hourly CPQ at the high voltage side of the main transformer of the Cebu Power Plant at 138 KV (Receiving Point). Any line rental such as transmission line losses, congestion charges and other transmission charges from the Receiving Point to its substation shall be for its account.

**KSPC COMMISSIONING POWER RATE**

The delivery of Commissioning Power shall include the Testing, Commissioning Power and Pre-Commercial Operation rates, which shall in no case be higher than the ERC-approved NPC Visayas TOU rates. The KSPC Commissioning TOU rates are as follows:

KSPC Commissioning Power TOU Rate (Php/kWh)			NPC-Visayas TOU Rate (Php/kWh)	
Period	Testing and Commissioning Power Rate (TCP <sub>kj</sub> )	Pre-Commercial Operation Rate (PCP <sub>kj</sub> )	Period	TOU Rate
1:00	1.6861	2.1920	1:00	2.6158
2:00	1.4298	1.8587	2:00	2.2181
3:00	1.4298	1.8587	3:00	2.2181
4:00	1.4298	1.8587	4:00	2.2181
5:00	1.4298	1.8587	5:00	2.2181
6:00	1.4298	1.8587	6:00	2.2181

7:00	1.4298	1.8587	7:00	2.2181
8:00	1.8912	2.4586	8:00	2.9340
9:00	2.2017	2.8623	9:00	3.4157
10:00	2.3413	3.0437	10:00	3.6322
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14:00	2.3413	3.0437	14:00	3.6322
15:00	2.3413	3.0437	15:00	3.6322
16:00	2.3413	3.0437	16:00	3.6322
17:00	2.2775	2.9607	17:00	3.5332
18:00	4.1741	5.4263	18:00	6.4755
19:00	4.1741	5.4263	19:00	6.4755
20:00	4.1741	5.4263	20:00	6.4755
21:00	4.1741	5.4263	21:00	6.4755
22:00	2.3413	3.0437	22:00	3.6322
23:00	1.9670	2.5571	23:00	3.0516
24:00	1.8912	2.4586	24:00	2.9340
<b>Average</b>	<b>2.3300</b>	<b>3.0290</b>	-	<b>3.6140</b>

NOTE: NPC TOU Rate is exclusive of all the adjustments, namely: GRAM, ICERA and ACA. If all the adjustments are included in the NPC TOU Rate, then the Average will be approximately PhP4.1113/kWh.

### Computation of Monthly Payments

$$GC_{Month} = \sum_{i=26}^{n25} \sum_{j=1}^{24} \{(CPQ_{ij} * TCP_{kj}) + (CPQ_{ij} * PCP_{kj})\} * K_{adj}$$

**Where:**

$GC_{Month}$  = Generation Charge or Monthly Payment in Peso

$CPQ_{ij}$  = Final Hourly CPQ for the relevant day  $i$  and relevant hour  $j$  of the Billing Month, kWh

$K_{adj}$  = Adjustment Factor of the Seller for the Billing Month

$TCP_{kj}$  = KSPC Testing and Commissioning Power Rates for the relevant hour  $j$  of the Billing Month, PhP/kWh

$PCP_{kj}$  = KSPC Pre-Commercial Operation Power Rates for the relevant hour  $j$  of the Billing Month, PhP/kWh

$i$  = Relevant day of the Billing Month

$j$  = Relevant hour of the Billing Month

If in any case the current price of coal goes up over ten percent (10%) of the base price then the Commissioning Power Rate will be adjusted according to the following formula:

### Commissioning Power Rate Adjustment

$$K_{adj} = 1 + ( CF_n / CF_o )$$

Where:

$K_{adj}$  = Adjustment Factor of the Seller for the Billing Month  
 $CF_n$  =  $BP_n + TBP_n$   
 $CF_o$  =  $BP_o + TBP_o$  (4<sup>th</sup> quarter 2007)

Where:

$BP_o$  = shall be \$27.72  
 $TBP_o$  = shall be \$24.85

Where:

a. Adjustment to the Base Price ( $BP_n$ )

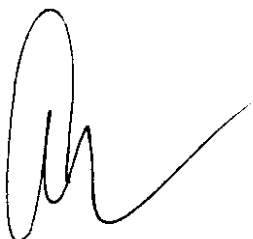
The  $BP_n$  shall be adjusted quarterly to reflect the increase or decrease of the price Global Coal FOB Newcastle as of the first day of loading as per the formula stated below:

$$BP_n = BP_{n-1} \times (BIP_{n-1} / BIP_{n-2})$$

Where:

$BP_n$  = Base Price as of current quarter  
 $BP_{n-1}$  = Base Price as of preceding quarter. For the quarter where the First Delivery Date occurs, \$27.72 shall be applied  
 $BIP_{n-1}$  = Base Index Price as of preceding quarter  
 $BIP_{n-2}$  = Base Index Price as of preceding quarter to  $BIP_{n-1}$

- The quarter shall refer to a calendar quarter
- Base Index Price shall be the quarterly average of the global coal physical index, FOB Newcastle. For reference, the initial  $BIP_{n-2}$  shall be \$94.37 per ton (1<sup>st</sup> Quarter of 2010)
- The initial price adjustment shall be made on the First Delivery Date and shall be effective until the end of the quarter of the First Delivery Date
- The next price adjustment after the First Delivery Date will be on the next calendar quarter and shall be adjusted on the first day of every quarter thereafter



- Any applicable and export-related taxes, duties and other charges imposed by the respective governments of the exporters shall be added to the Base Price of current quarter ( $BP_n$ )

b. Adjustment of Transportation Base Price ( $TBP_n$ )

The  $TBP_n$  shall be adjusted quarterly to reflect the increase or decrease of the price of Marine Diesel Oil as of the first day of loading as per formula stated below:

$$TBP_n = (TBP_{n-1} \times 0.75) + \{TBP_{n-1} \times (BBP_{n-1} / BBP_{n-2}) \times 0.25\}$$

Where:

$TBP_n$	=	TBP as of current quarter
$TBP_{n-1}$	=	TBP as of preceding quarter. For the quarter where the First Delivery Date occurs, \$24.85 shall be applied
$BBP_{n-1}$	=	Bunker Basis Price in US cents of preceding quarter
$BBP_{n-2}$	=	Bunker Basis Price in US cents of preceding quarter to $BBP_{n-1}$
75%	=	Fixed Cost
25%	=	Variable Cost

- The quarter shall refer to a calendar quarter
- Bunker Basis Price shall be the quarterly average of the Pertamina Publicly Listed Price Index for Marine Diesel Oil (MDO) posted in PT. Pertamina website ([www.pertamina-bunker.com](http://www.pertamina-bunker.com)). For reference, the initial  $BBP_{n-2}$  shall be \$0.6105 per liter (1<sup>st</sup> Quarter of 2010)
- The initial price adjustment shall be made on the First Delivery Date and shall be effective until the end of the quarter of the First Delivery Date
- The next price adjustment after the First Delivery Date will be on the next calendar quarter and shall be adjusted on the first day of every quarter thereafter

### Power Supply-Demand Scenario

The following are the private sector initiated power projects with equivalent capacity of 1,338 MW for Luzon, Visayas and Mindanao:

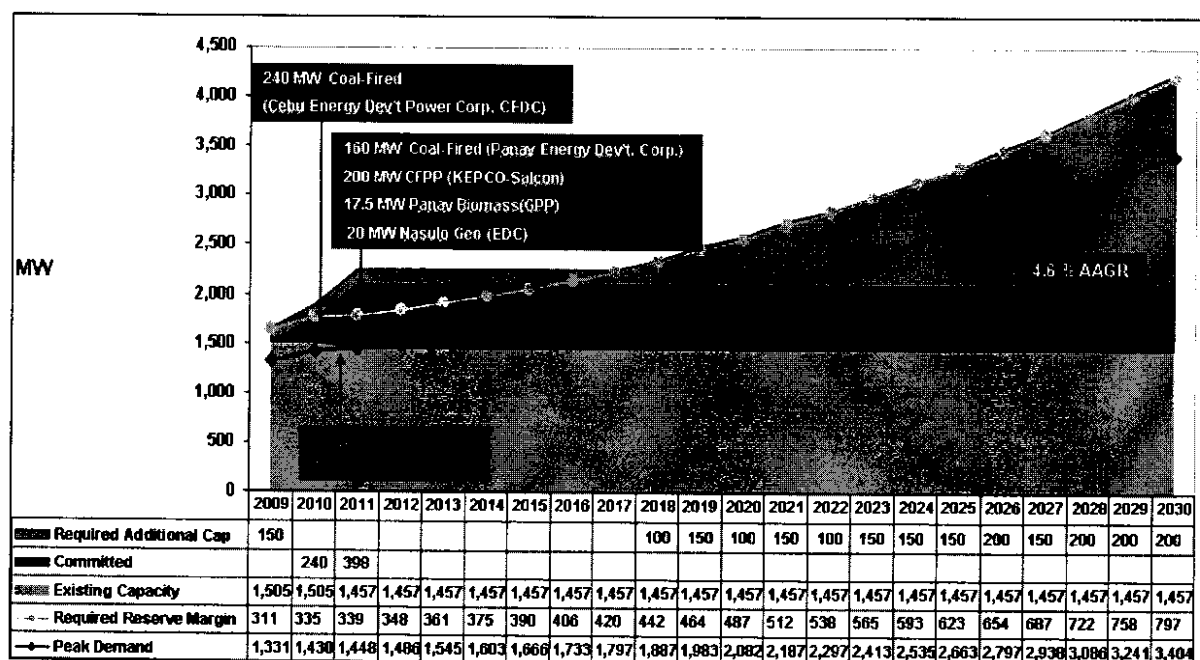
- 1) For Luzon, an additional 600 MW coal-fired plant from GN Power will be on-stream before the end of 2012;



- 2) For Visayas, out of the 638 MW total committed power projects, 600 MW will come from coal-fired power plant with the remaining 38 MW coming from renewable energy; and
- 3) In Mindanao, the 100.5 MW total committed projects will come from renewable energy.

Additional capacities are needed on top of the committed capacities to meet the increasing electricity requirements of the country broken down into the following grid requirements: (i) 72.0 percent or 11,900 MW for the Luzon grid; (ii) 13.0 percent or 2,150 MW for the Visayas grid; and (iii) 15.0 percent or 2,500 MW for the Mindanao grid.

For the years 2010-2011, the supply of power in the Visayas Grid remains tight as illustrated in the figure below:



With the commitment of the following additional capacities, the supply situation in the Visayas is expected to normalize:

- 1) 3 x 80 MW Coal-Fired Plant from Cebu Energy Development Corporation (CEDC) in March 2010 for Unit I, June 2010 for Unit II and January 2011 for Unit III;
- 2) 200 MW Cebu Coal-Fired Plant of KSPC;

- 3) 160 MW Panay Coal-Fired Plant from Global Green Power (GGP);
- 4) 20 MW Geothermal Plant from Energy Development Corporation (EDC); and
- 5) 17.5 MW Biomass-Fed Plant from GGP.

Based on the results of the 2009-2030 demand forecast exercises, Visayas Grid is projected to increase its annual electricity requirement by 4.6 % until 2030. With this projection, the system needs a total of 2,150 MW additional capacities on top of the committed power projects thereby assuming 2018 as the Grid's new critical period.

#### **CENECO's Power Requirements**

CENECO has a 40% share on the commissioning power to be produced by KSPC per Annex "M" of the application. Below is the Generation Mix of CENECO for the month of April 2011:

Billing Month	April 2011	Percentage
Power Bill Period	February 26- March 25	
GCGI	-	
Renewable	-	
Non-Renewable	-	
PSALM	10,625,718.00	22.60%
Renewable	8,448,508.00	
Non-Renewable	2,177,210.00	
KSPC	14,882,435.00	31.66%
PEDC	9,963,913.00	21.19%
WESM	11,540,830.00	24.55%
Renewable	5,447,905.00	
Non-Renewable	6,092,925.00	
Total kWh Purchased	47,012,896.00	100.00%
Total Renewable	30%	
Total Non-Renewable	70%	

### **Procurement Process**

The procurement process adopted by CENECO for the KSPC Commissioning Power is not the same with the procurement process for a regular PSC since the CPSC is a non-firm contract for a limited period only (Commissioning Period). Its purchase of KSPC's Commissioning Power is for the purpose of addressing the potential power supply deficiency in the Visayas. This is in addition to the fact that the Commissioning Power Rate is lower than the NPC/PSALM TOU rate.

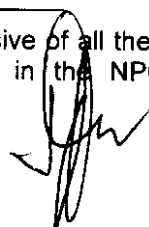
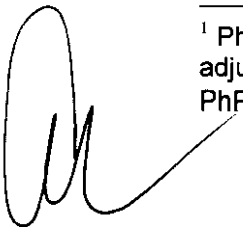
### **Joint Sales Agreement (JSA) Between NPC and KSPC**

NPC shall market the electricity generated from the Cebu Power Plant (CPP) and secure firm commitments from several Distribution Utilities (DUs) for the supply of electricity. On the other hand, KSPC shall construct the Cebu Power Plant, enter into power supply contracts with DUs to allow it to operate at 80% plant factor and supply the base load contract quantities of the DUs.

### **KSPC Commissioning Power Rate**

For its Commissioning Power Rate, KSPC developed a TOU rate design. For Testing and Commissioning Power Rate, the average rate is PhP2.3300/kWh equivalent to approximately 64% of NPC-TOU Average Rate of PhP3.6140/kWh.<sup>1</sup>

<sup>1</sup> PhP3.6140/kWh is exclusive of all the adjustments, namely: GRAM, ICERA and ACA. If all the adjustments are included in the NPC TOU rate, the average rate will be approximately PhP4.1113/kWh.



However, the Commission noted that KSPC's Pre-Commercial Operation Rate of PhP3.0290/kWh (KSPC average TOU rate) is approximately 84% of the NPC-TOU rate.

Shown below are the computations of the Proposed Testing and Commissioning Power Rate (PhP2.3300/kWh) and Pre-Commercial Operation Rate (PhP3.0290/kWh):

**I. On and After Synchronization**

a. Fuel

Type	Consumption	Price	Expenses (PhP)	Comments
Coal	222,899 Ton	\$54.80	561,884,756	Price: 2010 1 <sup>st</sup> Quarter
Light Oil	1,001 KL	PhP 38.31	38,336,372	Price: Cebu City Gas Station price on March 31, 2010
Limestone	6,178 Ton	PhP1,219.50	7,533,827	Price: Price in Operation and Maintenance Contract
<b>Total</b>	-	-	<b>607,754,955</b>	-

1\$ = PhP46

b. Electricity Output (MWh)

UNIT	TESTING AND COMMISSIONING	PRE-COMMERCIAL	TOTAL
MWh	98,254	162,629	260,883

c. Rate

Type	Fuel Cost After Synchronization	Electricity	Rate (PhP/kWh)
Testing and Commissioning (T&C)	PhP607,754,955	260,883 (MWh)	2.3300
Pre-Commercial	-	-	3.0290 (130% of T & C)

**II. Before Synchronization**

Fuel Expense

TYPE	CONSUMPTION	PRICE	EXPENSES (PhP)
Coal	15,936 Ton	\$54.80	40,171,469
Light Oil	10,795 KL	PhP38.31	413,564,112
Limestone	442 Ton	PhP1219.50	539,019
<b>Total</b>	-	-	<b>454,274,600</b>

1\$ = PhP46

It must be noted that during the Testing and Commissioning Period, the fuel cost "On and After Synchronization" amounted to PhP607,754,955.00, with a projected power generation of 260,883 MWh at the rate of PhP2.3300/kWh without any mark-up. However, the Testing and Commissioning Rate of PhP2.3300/kWh does not include the estimated fuel cost to be incurred "Before Synchronization" of the power plant.

During the Pre-Commercial Period, KSPC intends to recover the cost of fuel amounting to PhP2.3300/kWh and an additional actual fuel cost of PhP0.699/kWh (30% x PhP2.3300/kWh) or a total rate of PhP3.0290/kWh. The 30% additional rate will address the estimated fuel expenses to be incurred before synchronization.

To validate its rates, KSPC submitted the following documents in support of its proposed Testing and Commissioning Rate and Pre-Commercial Rate: 1) actual expenses for Coal, Light Oil and Limestone; 2) Daily Fuel Inventory and Generation Status (EWP Official Data); 3) actual generation from NGCP; and 4) Power Sales Revenue.

The Commission noticed that KSPC has only one rate for Testing and Commissioning and Pre-Commercial Periods which is PhP3.8208 as shown below. However, in the application, it proposed a Testing and Commissioning rate of PhP2.3300/kWh and Pre-Commercial rate of PhP3.0290/kWh:

<b>Actual kWh Sold: 91,841,790</b>			
<b>Particular</b>	<b>Fuel Consumption</b>		<b>Generation Rate, PhP/kWh</b>
	<b>Quantity</b>	<b>Expenses, PhP</b>	
Coal	80,109 (ton)	242,861,038.00	2.6443
Light Oil	3,365,779 (L)	107,268,969.00	1.1680
Limestone	0.510 (ton)	782,155.00	0.0085
<b>Total</b>		<b>350,912,162.00</b>	<b>3.8208</b>

### Determination of the Billing Determinant

KSPC submitted a Load Profile from NGCP and Log Sheets from EWP Cebu Corporation (EWP) for the computation of the billing determinant.

Based on the documents submitted, the Commissioning Power produced by Unit 2 is 5,102,837 kWh, broken down as follows:


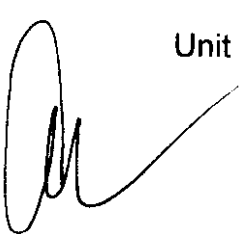
Date	KWh
January 10, 2011	8,032
January 12, 2011	178,575
February 16, 2011	268,240
February 17, 2011	1,246,690
February 18, 2011	1,312,090
February 19, 2011	1,044,210
February 20, 2011	1,045,000
<b>Total</b>	<b>5,102,837</b>

Upon verification of the said documents, the Commission noted the following:

- a. The Log Sheet for January 10, 2011 was not submitted;
- b. No data for Unit 2 generation were reflected in the January 12, 2011 Log Sheet;
- c. Zero (0) generation for Unit 2 was reflected in the February 16, 2011 Log Sheet;
- d. The February 17, 19 and 20, 2011 Log Sheets reflected the same kWh generation from Unit 2 which is consistent with the submitted "Compliance" of KSPC; and
- e. The generation of Unit 2 on February 18, 2011 disclosed 1,312,070 kWh compared to 1,312,090 kWh as reported by KSPC.

The total generation of Unit 2 included in the Load Profile secured by KSPC from NGCP is 4,647,970 kWh which shall be deducted from the total actual kWh generated by the power plant to arrive at the total kWh generated by

Unit 1.



In computing the billing determinant, the Commission finds it more reasonable to use the actual kWh generated by the power plant (sold and unsold) instead of the actual kWh sold as applied by KSPC, to wit:

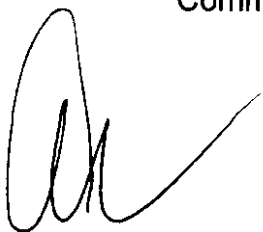
Actual kWh Generated (October 26, 2010- February 27, 2011)	100,318,787.29
Less: Actual kWh Generated by Unit 2	4,647,970.00
<b>Total: Actual kWh Generated by Unit 1</b>	<b>95,670,817.29</b>

### Commissioning Schedule

The Schedule of Events in the Coal Inventory Status of KSPC provides that the Testing and Commissioning Period commenced on October 8, 2010 to January 20, 2011 while the Pre-Commercial Period commenced on January 21, 2011 to February 17, 2011. The KSPC conducted, among others, the following commissioning tests:

- a) Synchronization Test – It is a one (1) hour type of test to determine the connection of the generating unit to the grid taking into account the frequency and voltage requirement of the grid;
- b) Plant Reliability Test - A test to demonstrate the reliability of the Power Plant at 100% load; and
- c) Plant Performance Test – A test to determine the power plant's performance in generating power continuously at certain loading percentage (50%, 75%, and 100%).

The Commission computed the total actual expenses based on **30% before, 100% on and 100% after synchronization** divided by the actual kWh generated during the period covered by the Testing and Commissioning and Pre-Commercial Periods of Unit 1.



**Testing and Commissioning Expenses and Pre-Commercial Operation Expenses**

**1. Coal Expense**

The Commission calculated the Total Coal Expenses using as bases, the official receipts and the Coal Inventory Status Report, to wit:

<b>Deliveries</b>	<b>Coal (MT)</b>	<b>Consumption (Tons)</b>	<b>Total Expense, PhP</b>
1 <sup>st</sup>	5,513.610	5,513.610	14,076,031.000
2 <sup>nd</sup>	5,531.080	5,531.080	14,125,661.000
3 <sup>rd</sup>	5,568.260	5,568.260	13,795,793.000
4 <sup>th</sup>	5,526.750	5,526.750	14,582,359.000
5 <sup>th</sup>	5,548.520	5,548.520	13,935,942.000
6 <sup>th</sup>	5,534.120	5,534.120	13,622,899.000
7 <sup>th</sup>	5,563.710	5,563.710	14,403,129.000
8 <sup>th</sup>	5,684.490	5,576.290	13,960,215.951
9 <sup>th</sup>	8,348.900	8,348.900	37,929,888.000
10 <sup>th</sup>	5,574.210	5,574.210	13,770,395.000
11 <sup>th</sup>	4,991.360	4,991.360	22,676,395.000
12 <sup>th</sup>	5,599.704	2,087.840	9,485,266.000
13 <sup>th</sup>	8,102.770	8,102.770	27,535,526.000
14 <sup>th</sup>	8,281.410	8,281.410	15,745,225.000
15 <sup>th</sup>	5,599.704	421.661	2,049,705.556
<b>Total</b>	<b>90,968.598</b>	<b>82,170.500</b>	<b>241,694,430.507</b>

T and C	PhP124,516,494.27
Pre-Com	PhP117,177,936.23
<b>Total</b>	<b>PhP241,694,430.50</b>

Remarks:

1. The 8<sup>th</sup> delivery excludes the unit 2 consumption of 108.2 tons.
2. The Commission, in computing for a reasonable cost for coal expenses to be recovered, based its computation on the actual delivery dates indicated in the Notice of Readiness by World Mariner Philippines, Inc.

It can be gleaned from the foregoing that the total amount of PhP241,694,430.50, comprising of PhP124,516,494.27 for Testing and Commissioning and PhP117,177,936.23 for Pre-Commercial Operation was incurred on and after synchronization.

**2. Light Oil Expense**

Shown below are the Light Oil Expenses incurred before, on and after synchronization:

No.	Quantity (L) Delivered	Quantity (L) Used by Unit 1	PhP/Liter	Total Expense, (PhP)
1	300,000.00	300,000.00	32.48	9,743,040.00
2	300,000.00	300,000.00	32.19	9,657,660.00
3	300,000.00	300,000.00	31.85	9,554,700.00
4	600,000.00	600,000.00	30.94	18,565,080.00
5	1,200,000.00	995,024.00	30.37	30,215,706.95
6	740,000.00	357,024.00	31.64	11,296,810.60
7	920,000.00	104,928.00	32.89	3,451,459.66
8	600,000.00	187,927.00	35.08	6,591,896.59
9	1,000,000.00	220,876.00	37.09	8,192,622.15
<b>Total</b>	<b>5,960,000.00</b>	<b>3,365,779.00</b>	-	<b>107,268,975.95</b>

T and C	PhP62,170,854.14
Before Synchronization (30% xPhP49,691,347.87)	PhP14,907,404.36
During Synchronization (100% xPhP47,263,449.78)	PhP47,263,449.78
Pre-Com	PhP10,314,178.30
<b>Total</b>	<b>PhP72,485,032.44</b>

Based on the documents submitted, the Commission noted KSPC's total Light Oil Expense of **PhP107,268,975.95**, which was derived by adding the T and C Expense in the amount of PhP96,954,797.65 [the cost incurred **before synchronization** in the amount of 49,691,347.87 and the cost incurred **during synchronization** in the amount of PhP47,263,449.78] and Pre-Commercial Expense of PhP10,314,178.30.

However, the Commission allowed only the total Light Oil Expense of **PhP72,485,032.44**, which was derived by adding the T and C Light Oil cost of PhP62,170,854.14 [allowing only thirty percent (30%) of the cost **before synchronization** amounting to PhP14,907,404.36 and the cost **on and after synchronization** amounting to PhP47,263,449.78] and Pre-Commercial Operation cost of PhP10,314,178.30.

**3. Limestone Expense**

Shown below is the derivation of the Total Expense for Limestone:

No.	MT Delivered	Tons Used by Unit 1	PhP/MT	Total Expense, PhP
1	393.6	393.6	1,379.13	542,825.69
2	226.06	116.05	2,062.3	222,297.26
<b>Total</b>	<b>619.66</b>	<b>509.65</b>		<b>765,122.95</b>

T and C	PhP50,641.66
Pre-Com	PhP714,481.28
<b>Total</b>	<b>PhP765,122.95</b>

The amount of PhP50,641.66 represented the Testing and Commissioning period expense while the amount of PhP714,481.28 was spent during Pre-Commercial Period. The total expense for Limestone in the amount of PhP765,122.95 pertains to "on and after synchronization" costs.

**Summary of Fuel Expenses and Comparative Rate Analysis**

The following are the computations of the Testing and Commissioning Rate and Pre-Commercial Operation Rate:

Expenses	T and C	Pre-Commercial	Total Average
Coal, PhP	124,516,494.27	117,177,936.23	241,694,430.51
Light Oil, PhP	62,170,854.14	10,314,178.30	72,485,032.44
Limestone, PhP	50,641.66	714,481.28	765,122.95
Subtotal, PhP	186,737,990.07	128,206,595.81	341,944,585.90
Billing Determinant, kWh	51,045,144.35	44,625,672.94	95,670,817.29
<b>Total, PhP/kWh Before (30%), On and After Only</b>	<b>3.6583</b>	<b>2.8729</b>	<b>3.2920</b>
<b>Total, PhP/kWh 100% of Before, On and After</b>	<b>4.3397</b>	<b>2.8729</b>	<b>3.6555</b>

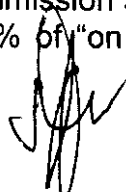
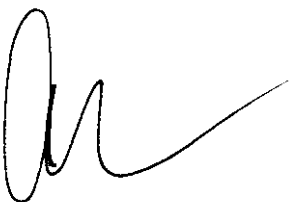
The Commission's computations were based on the actual expenses incurred by KSPC divided by the actual kWh generated for both the Testing and Commissioning and Pre-Commercial Periods. Thus, the Total Expenses amounted to PhP186,737,990.07 for Testing and Commissioning and PhP128,206,595.81 for Pre-Commercial with the actual kWh generated of 51,045,144.35 kWh and 44,625,672.94 kWh, respectively.

On the basis of the foregoing, the Testing and Commissioning Rate is equivalent to PhP4.3397/kWh while the Pre-Commissioning Rate is PhP2.8729/kWh or an average actual rate of PhP3.6555/kWh before, on and after synchronization.

On the other hand, the rates that account for the 30% of "before synchronization cost" and 100% of "on and after synchronization cost" are the following: a) Testing and Commissioning Rate of PhP3.6583/kWh; and b) Pre-Commercial Rate of PhP2.8729/kWh or an average rate of PhP3.2920/kWh. The 30% before synchronization Light Oil Expenses should be recovered in the Testing and Commissioning Period.

The average rate of PhP3.2920/kWh as computed by the Commission is PhP0.5288/kWh lower than the average rate of PhP3.8208/kWh as proposed by KSPC. Relative thereto, the Commission took into consideration the following factors that account for the difference:

- a. The mathematical miscalculation made in the 7<sup>th</sup> delivery of KSPC which affected the succeeding calculations of the Coal Expenses;
- b. The Commission used the actual delivery dates in computing the average actual rate; and
- c. The Commission allowed only 30% of "before synchronization cost" and 100% of "on and after synchronization cost" for the Light Oil



cost. For Limestone Expense, although KSPC reported a Limestone Purchases in January 2011 of 226.06 MT at PhP2,062.30/MT, the Commission adopted the January 2011 receipt showing a delivery of 243.38 MT at PhP1,915.53/MT.

The table below shows the difference between the KSPC's proposed expenses and the Commission's computed expenses incurred during the Commissioning Period:

Expense	KSPC	Commission	Variance-Lower
Coal, PhP	242,861,038.00	241,694,430.51	1,166,607.49
Light Oil, PhP	107,268,969.00	72,485,032.44	34,783,936.56
Limestone, PhP	782,155.00	765,122.95	17,032.05

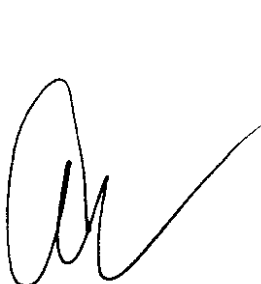

**Summary of the Commission's Approved Rates:**

Particulars	Commission's Approved Rates, PhP/kWh
T and C TOU Rate	2.3300 with indexation
Pre-Commercial TOU Rate	2.8729 without indexation

**Commissioning Power Rate Adjustment**

The Commissioning Power Rate Adjustment will be applied by KSPC in its billing to the DUs. In the event that the current price of coal increases by more than ten percent (10%) of the base price, the Commissioning Power Rate shall be adjusted according to the following formula:

$$K_{adj} = 1 + (CF_n / CF_o)$$

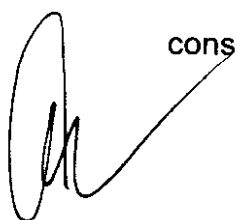




KSPC and MECO manifested that this scenario may not happen since the threshold level is over 10%. Considering that the intent of this provision is to have a base price that will only have an upward adjustment, any downward adjustments in the fuel prices will not be reflected in the base price.

The Commission validated the impact of this provision by comparing the base price versus the current (available) price of coal based on the Global Coal FOB Newcastle Index. Shown below is a comparison between the base price and the current price of coal:

Month	Base Price USD	Current Price, USD	Percentage (%) (Increase/(Decrease))	Over 10%
April 2010	94.37	100.21	6.19%	-
May 2010	94.37	100.77	6.78%	-
June 2010	94.37	98.79	4.68%	-
July 2010	94.37	96.18	1.92%	-
August 2010	94.37	89.41	(5.26%)	-
September 2010	94.37	94.69	0.339%	-
October 2010	94.37	97.34	3.14%	-
November 2010	94.37	106.99	13.37%	3.37%
December 2010	94.37	119.47	26.60%	16.60%
January 2011	94.37	129.99	37.75%	27.75%
February 2011	94.37	127.06	34.64%	24.64%
March 2011	94.37	126.57	34.12%	24.12%
April 2011	94.37	122.26	29.55%	19.55%
May 2011	94.37	119.43	25.06%	15.06%

It can be gleaned from the table above that the price of coal from November 2010 to May 2011 had increased by more than 10%. Hence, the indexation of the Testing and Commissioning Rate is necessary. However, no indexation should be applied for Pre-Commercial operation since it is already based on actual costs. It should be emphasized that the fuel cost utilized in generating electricity may be passed on to the consumers provided that the same is within the efficiency level. Any inefficiency in the coal quality and plant heat rate previously approved by the Commission should not be passed on to the consumers.





Meanwhile, KSPC manifested that the "Formula in Computing the Monthly Payments", i.e.,  $K_{adj} = 1 + (CF_n / CF_o)$ , should be corrected to read as  $K_{adj} = 1 \times (CF_n / CF_o)$  to reflect the correct application of the adjustment.

The Commission concurs with the KSPC's corrected adjustment formula since it is only indexing a single item.

KSPC submitted the following data on the generation and sale of electricity of Unit 2, to wit:

Unit 2 Generation		
Particular	Energy (MWh)	Percentage
Sold to Customers by Contract	5,472	6.69%
Sold to WESM	76,326	93.31%
<b>Total Generation</b>	<b>81,798</b>	<b>100.00%</b>

### **Commissioning Power Rate Provisionally Approved by the Commission**

On September 7, 2010, KSPC filed a letter seeking authority from the Commission to sell its commissioning power supply to various DUs starting October 8, 2010, pending the filing of the instant application.

Acting thereon, on October 8, 2010, the Commission issued a letter approving the aforesaid request of KSPC.



In October 2010, CENECO started sourcing power from KSPC at the rate of PhP1.5905/kWh<sup>2</sup>. Shown below is the energy off-take of CENECO to KSPC during the commissioning of the Cebu Power Plant:

Billing Period	Energy Off-take, kWh (PhP1.5905/kWh)
September 26-October 25, 2010	-
October 26-November 25, 2010	891,352.73
November 26-December 25, 2010	5,108,322.35
December 26, 2010 -January 25, 2011	6,673,386.56
January 26-February 25, 2011	11,785,218.18
February 26-27, 2011	2,434.72
<b>Total Off-Take, kWh</b>	<b>24,460,714.53</b>

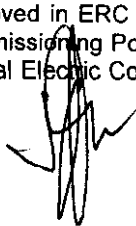
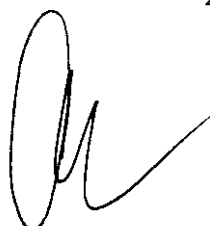
Upon final evaluation of the instant application, the Commission finds that the approval of the CPSC between KSPC and CENECO will redound to the benefit of all the consumers of CENECO in terms of continuous, reliable and efficient power supply as mandated by Republic Act No. 9136 [Section 2. Declaration of Policy – (b) “to ensure the quality, reliability, security and affordability of the supply of electric power”].

**WHEREFORE**, the foregoing premises considered, the application filed by KEPCO SPC Power Corporation (KSPC) and Central Negros Electric Cooperative, Inc. (CENECO) for approval of their Commissioning Power Sales Contract (CPSC) is hereby **APPROVED with Modification** and subject to the following conditions:

1. The Testing and Commissioning Rate and Pre-Commercial Rate shall be as follows:

---

<sup>2</sup> Provisional rate approved in ERC Case No. 2010-085 entitled, “In the Matter of the Application for the Approval of the Commissioning Power Sales Contract between KEPCO SPC Power Corporation (KSPC) and Negros Occidental Electric Cooperative, Inc. (NOCECO), with Motion for the Issuance of Provisional Authority”



Particulars	Commission's Approved Rates, PhP/kWh
Testing and Commissioning Rate	2.3300 <sup>1</sup>
Pre-Commercial Rate	2.8729 <sup>2</sup>

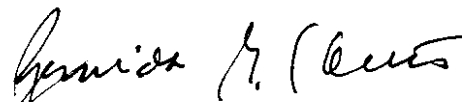
1. Subject to modified Commissioning Power Rate Adjustment
2. Without Indexation


2. The adjustment formula shall be  $K_{adj} = 1 \times (CF_n / CF_o)$ ;
3. KSPC is hereby authorized to collect the difference between the implemented rate and the final approved rate, the same to be made retroactive from the time it delivered its commissioning power to CENECO.


Lastly, KSPC is hereby directed to submit, within thirty (30) days from receipt hereof, the amount of under-recoveries and its proposed recovery scheme for the Commission's approval.

**SO ORDERED.**

Pasig City, August 22, 2011.

  
**ZENAIDA G. CRUZ-DUCUT**  
Chairperson

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

  
**JOSE C. REYES**  
Commissioner

  
**ALFREDO J. NON**  
Commissioner

  
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**Copy Furnished:**

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Counsel for Applicants KEPCO SPC and CENECO  
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Makati City 1229
2. **KEPCO SPC POWER CORPORATION (KEPCO SPC)**  
Attention: MR. BAG WOON CHOI  
General Manager  
7<sup>th</sup> Floor, Cebu Holdings Center  
Cebu Business Park, Cebu City
3. **The Office of the Solicitor General**  
134 Amorsolo Street, Legaspi Village  
Makati City, Metro Manila
4. **The Commission on Audit**  
Commonwealth Avenue  
Quezon City
5. **The Senate Committee on Energy**  
GSIS Building, Roxas Boulevard  
Pasay City
6. **The House Committee on Energy**  
Batasan Hills, Quezon City
7. **Office of the President of PCCI**  
Philippine Chamber of Commerce and Industry (PCCI)  
3<sup>rd</sup> Floor, ECC Building, Sen. Gil Puyat Avenue  
Makati City
8. **Office of the City Mayor**  
Bacolod City  
Province of Negros Occidental
9. **Office of the City Mayor**  
Bago City  
Province of Negros Occidental
10. **Office of the City Mayor**  
Silay City  
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11. **Office of the City Mayor**  
Talisay City  
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12. **Office of the Municipal Mayor**  
Municipality of Murcia  
Province of Neros Occidental
13. **Office of the Municipal Mayor**  
Municipality of Don Salvador  
Province of Negros Occidental