

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



**IN THE MATTER OF
THE APPLICATION FOR
APPROVAL OF THE POWER
SUPPLY AGREEMENT
BETWEEN NEGROS
ORIENTAL II ELECTRIC
COOPERATIVE, INC.
(NORECO II) AND GREEN
CORE GEOTHERMAL, INC.
(GCGI), WITH PRAYER
FOR THE ISSUANCE OF
PROVISIONAL AUTHORITY**

ERC CASE NO. 2011-034 RC

**NEGROS ORIENTAL II
ELECTRIC COOPERATIVE,
INC. (NORECO II),
Applicant.
X ----- X**

DOCKETED
Date: APR 03 2018
By: [Signature]

DECISION

Before this Commission for resolution is the *Application* filed on 07 March 2011 by applicant Negros Oriental II Electric Cooperative, Inc. (NORECO II) for the approval of its Power Supply Agreement (PSA) with Green Core Geothermal, Inc. (GCGI).

NORECO II alleged the following in its Application:

1. Applicant NORECO II is a non-stock, non-profit electric cooperative, organized and existing under and by virtue of Presidential Decree No. 269, as amended, with principal office at Real St., Dumaguete City where it may be served with summons and other legal processes. It is the holder of an exclusive franchise issued by the National Electrification Administration ("NEA") to operate the electric power distribution system in the cities of Dumaguete, Tanjay and Bayawan and the municipalities of Pamplona, Amlan, San Jose, Sibulan, Valencia, Bacong, Dauin, Zamboanguita, Siaton, Sta. Catalina, and Basay all in the province of Negros Oriental (collectively, the "Franchise Area"). A copy of Applicant NORECO II's Certificate of Franchise is hereto attached as Annex "A" to form an integral part hereof;

2. By and pursuant to Rule 20 (B) of the ERC Rules of Practice and Procedure, and other pertinent rules and regulations, this Application is submitted to this Honorable Commission for its due consideration of the Power Supply Agreement (“PSA”) executed by and between Applicant NORECO II and Green Core Geothermal Inc. (“GCGI”). A copy of the subject PSA is herein appended as Annex “B” to form an integral part hereof;

I. STATEMENT OF FACTS

3. GCGI is a corporation duly organized and existing under Philippine laws to engage in the general business of generating electric power, with principal office address at the Energy Center, Merritt Road, Bonifacio Global City, Taguig City, Metro Manila;

Copies of pertinent documents evidencing GCGI’s due registration and permit to operate as a generation company are appended herein as follows:

DOCUMENT	ANNEX
SEC Certificate of Registration	“C”
Articles of Incorporation and By-Laws	“D”
General Information Sheet for 2010	“E”
Environmental Compliance Certificate (“ECC”) for Palinpinon II Geothermal Power Plant. (The requirement of an ECC is not applicable to Palinpinon I and Tongonan Geothermal Power Plants since they were constructed prior to the implementation of the Environmental Impact Statement System by the Department of Environment of Natural Resources)	“F”
Certificate of Compliance for Palinpinon Geothermal Power Plant	“G”
Certificate of Compliance for Tongonan Geothermal Power Plant	“H”

4. On 23 October 2009, GCGI took over the control and possession of the 192.5 MW Palinpinon Geothermal Power Plant (“PGPP”) and 112.5 MW Tongonan Geothermal Power Plant (“TGPP”) through an open and competitive public bidding process which was managed by the Power Sector Assets and Liabilities Management Corporation (“PSALM”) in connection with the privatization of National Power Corporation (“NPC”) assets. A copy of the Joint Certificate of Turnover is herein appended as Annex “I” to form an integral part hereof;
5. Meanwhile, Applicant NORECO II had a Contract for the Supply of Electric Energy (“CSEE”) with the NPC which expired on 25 December 2010. Thus, Applicant NORECO II

was prompted to enter into a power supply agreement with a power generator in view of the inability of NPC to supply electricity to distribution utilities, which has been manifested for several times by the NPC during its hearings before this Honorable Commission.

6. Consequently, herein Applicant NORECO II negotiated with GCGI to supply its power requirements, pursuant to this Honorable Commission's Resolution No. 21, Series of 2006 entitled "*A Resolution Suspending the Effectivity and Implementation of Certain Rules Issued by the Energy Regulatory Commission*" which suspended in the meantime bidding as a method of selecting a power supplier;
7. On 15 December 2010, Applicant NORECO II and GCGI executed a Power Supply Agreement ("PSA") providing for the terms and conditions of the supply of electric energy applicable from 26 December 2010;

II. ABSTRACT OF THE PSA AND OTHER RELATED INFORMATION

8. The following are the salient features of the PSA:
 - a. **TERM.** The PSA shall be in force for a period of ten (10) years, commencing on the effective date of 26 December 2010 until 25 December 2020, unless earlier terminated in accordance with the provisions of the PSA.
 - b. **CONTRACT ENERGY.**

Supply of Energy for the Period 26 December 2010 to 25 December 2020.

Applicant NORECO II shall buy from GCGI the monthly energy quantities specified in Annex C of the PSA as shown below.

Billing Month	26 December 2010 to 25 December 2020 (in kilowatt-hours)
January	14,880,000
February	14,880,000
March	13,440,000*
April	14,880,000
May	14,400,000
June	14,880,000
July	14,400,000
August	14,880,000
September	14,880,000
October	14,400,000
November	14,880,000
December	14,400,000

*: 13,920,000 kilowatt-hours if contract month falls in a leap year.

- c. **MAXIMUM DEMAND.** In any hour, GCGI has no obligation to supply energy to NORECO II over and above the applicable Maximum Demand set out below (which is specified in Annex B of the PSA):

	26 December 2010 to 25 December 2020 (in kilowatts)
Maximum Demand	25,000

Should Applicant NORECO II's actual consumption of electric energy in any one (1) hour period exceed the equivalent energy of the Maximum Demand, such excess electric energy shall be paid by NORECO II at (a) the higher of the Basic Energy Charge for such hour or the WESM price at Applicant NORECO II's node for such hour, in the event that GCGI provides such excess electric energy, or (b) the actual cost of such excess electric energy (including any other penalties that GCGI may incur due to such excess electric energy consumption of NORECO II) in the event that GCGI procured such excess electric energy from other suppliers or the WESM. The payment by NORECO II to GCGI for excess consumption over and above the Maximum Demand is illustrated in Annex H of the PSA;

- d. **BASIC ENERGY CHARGE.** The schedule of Basic Energy Charge as shown below considers that the agreed delivery point is at NORECO II's substations.

	Load Factor	27 January 2010 to 25 December 2020
Basic Energy Charge (Pesos per kilowatt-hour)	100%	5.0336
	95% to 99.99%	5.2985
	90% to 94.99%	5.5928
	85% to 89.99%	5.9219
	80% to 84.99%	6.2920
Base Philippine Consumer Price Index	December 2009	

Herein appended as Annex "J" to form an integral part hereof is a schedule showing the details of the PSA and containing the Executive Summary thereof, including relevant information on GCGI and its power plant capacities, and the salient provisions of the PSA;

III. ADJUSTMENT TO THE BASIC ENERGY CHARGE.

9. The Basic Energy Charge shall be escalated or de-escalated annually by the Philippine Consumer Price Index published by the National Statistical Coordination Board. The base Philippine Consumer Price Index shall be December 2009. An illustrative example to compute for the adjustment to the Basic Energy Charge is shown in Annex F of the PSA;

10. RE-PRICING. The Parties shall agree upon new provisions on Basic Energy Charge, and adjustments to the Basic Energy Charge and Minimum Charge, which shall take effect at the beginning of the sixth (6th) Year;

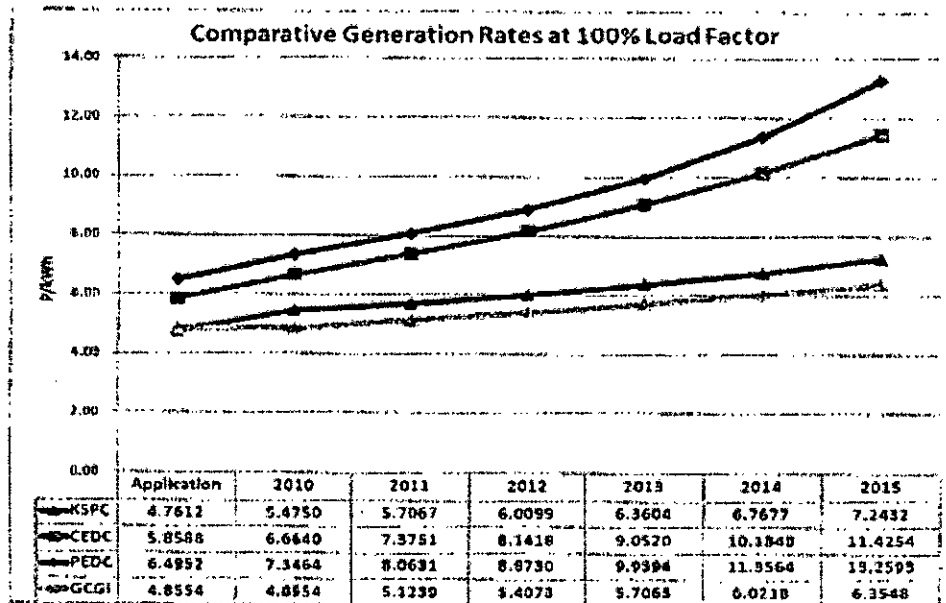
**IV. ADVANTAGES OF GCGI'S MARKET-BASED RATE AND
GCGI'S ADJUSTMENT FORMULA**

11. The foregoing Basic Energy Charge is a fixed market- based rate;
12. A market competition provides the strongest incentives to generators to offer the best service to customers in terms of price and quality of service, and to bring them to the delivery points more reliably and efficiently than their competitors;
13. Certainly, a competition is the best form of economic regulation of electricity markets. It is in cognizance of this that the provisions of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 ("EPIRA"), called for the privatization of the power generation assets of NPC in order to promote competition in the power sector;
14. Thus, in a competitive electricity market, a distribution utility which selects a power supplier with clearly-defined benefits and distinct commercial advantages over competitors in terms of price and quality of service is already assured that its consumers are getting the best price and most efficient power supply in the market;
15. Meanwhile, the Adjustment Formula for the Basic Energy Charge is advantageous to its consumers given that it is simple, predictable, stable and minimal.
 - a. Under Section 6.2 of the PSA, the Basic Energy Charge shall be escalated or de-escalated annually only by the Philippine Consumer Price Index published by the National Statistical Coordination Board. The base Philippine Consumer Price Index shall be December 2009;
 - b. GCGI will be fully absorbing the risk of any upward movement of the geothermal steam cost, which is indexed to global coal prices and foreign exchange rates, and foreign exchange risk related to spare parts and equipment. For this reason, the full Basic Energy Charge shall be subject to the adjustment formula to help GCGI partly cover the risk of potential increases of the geothermal steam cost, and fore-denominated spare parts and equipment; and
 - c. Using the historical indices in the last six (6) years, an analysis was made to compare the projected generation rates of GCGI in the next five (5) years using Philippine CPI only in its adjustment formula, and the projected generation rates of the coal-fired base load power plants, which are adjusted using global coal prices, foreign exchange rate, US CPI and

RP CPI. As shown in the table below, the average increase of global coal prices reached 18.67% per year, compared to only 5.53% per year for RP CPI;

	2004	2005	2006	2007	2008	2009	2010
RP CPI	120.59	129.82	137.94	141.77	154.95	160.03	166.31
ANNUAL CHANGE		7.65%	6.25%	2.78%	9.30%	3.28%	3.92%
AVERAGE							5.53%
COAL PRICES	53.58	48.11	48.82	64.87	128.08	72.07	96.68
ANNUAL CHANGE		-10.21%	1.48%	32.88%	97.44%	-43.73%	34.15%
AVERAGE							18.67%

16. The generation rates of GCGI are expected to remain the lowest in the Visayas area due to the minimal increase and stable movement of the Philippine CPI, as shown in the chart below.



17. Evidently, entering into the PSA with GCGI would significantly reduce Applicant NORECO II's exposure to price volatilities in the WESM once the spot market starts commercial operations in the Visayas;

V. COMMERCIAL ADVANTAGES OF GCGI'S GENERATION RATE AND IMPACT ON NORECO II'S OVERALL RATES

18. The continued increase in the demand for power by its consumers within its franchise area, not to mention the gloomy power situation in the Visayas, have motivated Applicant NORECO II to look for additional power suppliers to provide a safe, secure and reliable power for its consumers;
19. Moreover, Applicant NORECO II cannot rely on NPC to continue supplying its power requirements after the expiration of its Contract for the Supply of Electric Energy with NPC (the "NPC CSEE") on 25 December 2010. With said expiration of the CSEE on 25 December 2010 and NPC's

consequent inability to supply electricity to distribution utilities, as it manifested several times during its hearings before this Honorable Commission, Applicant NORECO II had to enter into a power supply agreement with a power generator;

20. Pursuant to the State Policy declared in the EPIRA to enhance the inflow of private capital and broaden the ownership base of the power generation, transmission and distribution sectors and consistent with the terms and mandate of its franchise, Applicant NORECO II has sought a generation company, GCGI, to supply its power requirements;
21. The generation rate of GCGI is the lowest compared to other generation companies with available capacity to supply the base load requirement of Applicant NORECO II. A new power supply contract with GCGI would be in the best interest of herein Applicant NORECO II's consumers;
 - a. The alternative power suppliers for Applicant NORECO II's base load requirement are the newly constructed coal-fired power plants in the VISAYAS area: (1) KEPCO-Salcon Power Coporation's ("KSPC") 2x100 MW power plant in Naga, Cebu; (2) Panay Energy Development Corporation's ("PEDC") 2x82 MW power plant in La Paz, Iloilo City; and (3) Cebu Energy Development Corporation's ("CEDC") 3x82 MW power plant in Toledo City, Cebu; and
 - b. GCGI's Basic Energy Charge of Php 5.0336 per kWh equivalent to an ex-plant price of Php 4.8554 per kWh (P5.0336 less 3.67% systems loss factor as approved by ERC for the Visayas grid), which is the lowest electricity rate compared to the other base load power plants in the Visayas grid, as shown in the table below. The base prices of the alternative generating facilities have been updated using the latest available indices (July 2010);

Description	Base Price (P/kWh)				Updated Price (as of July 2010)			
	KSPC 100% LF	CEDC 100% LF	PEDC 75% LF	PEDC 100% LF	KSPC 100% LF	CEDC 100% LF	PEDC 100% LF	GCGI 100% LF
Capacity Fee	2.2958	2.2546	3.4740	2.6055 *	2.4285	2.2546	2.6055*	1.6453
Foreign O&M Fee	0.2782	0.3688	0.5078	0.3808	0.3022	0.4387	0.4610	0.5911
Local O&M Fee	0.3809	0.3434	0.5671	0.4253	0.4026	0.3598	0.4457	
Fuel Fee	1.2962	2.2642	2.3876	2.3876	1.7551	2.8969	3.0471	2.9921
Subtotal	4.2511	5.2310	6.9365	5.7993	4.8884	5.9500	6.5593	5.2285
VAT	0.5101	0.6278	0.8324	0.6959	0.5866	0.7140	0.7871	0
Total	4.7612	5.8588	7.7689	6.4952	5.4750	6.6640	7.3464	5.2285
					Updated	Updated	Updated	Agreed
Comparable Prices					5.4750	6.6640	7.3464	4.8554
Net Savings for NORECO II					0.6196	1.8086	2.4910	-

* Derived figure based on Capacity Fee at 100% Load Factor: P3.4740 * 75% = 2.6055/kWh

22. Indeed, GCGI's price advantage over herein Applicant NORECO II's alternative power suppliers ensures a more competitive and efficient supply for Applicant NORECO II's consumers. A comparison of the generation rate of GCGI with the rates of its alternative power suppliers gives the best indication of the PSA's economic advantage to the consumers of Applicant NORECO II;
23. On another note, considering the incentives given to renewable energy resources such as geothermal resources, purchasing electric power from GCGI's geothermal power plant is more advantageous for its consumers, to wit:
- a. The sale of electric power generated from renewable sources of energy shall be subject to zero (0%) value-added tax, pursuant to the National Internal Revenue Code of 1997, as amended by Republic Act No. 9337;
 - b. Buying power from GCGI's geothermal power plants will also support the government's policy to encourage the development and utilization of renewable energy resources to effectively prevent or reduce harmful emissions and thereby balance the goals of economic growth and development with the protection of health and the environment;
24. As shown in the table below, NORECO II's blended generation rate with GCGI supply would result to PhP 5.9662 per kWh, and at PhP 6.3400 per kWh if without said GCGI supply, resulting in an estimated net savings for the Applicant NORECO II's consumers equivalent to Php 0.3738 per kWh with GCGI's supply of electricity.

	Blended Rate Without GCGI PSA (PhP/kWh)	Blended Rate With GCGI PSA (PhP/kWh)
Blended Rate	6.3400	5.9662
Rate Impact	(0.3738)	

25. Under the PSA, Applicant NORECO II is further entitled to a prompt payment discount ("PPD"). By and pursuant to this Honorable Commission's Resolution No. 12, Series of 2005, approving a new policy on the treatment of PPDs, Applicant NORECO II shall be entitled to the PPD should it meet the criteria set forth under Section 9 of the PSA. Member consumers will enjoy fifty percent (50%) of the PPD which Applicant NORECO II is entitled to avail of under the PSA;
26. In view of the foregoing, with the purchase of electricity from GCGI, member-consumers of Applicant NORECO II are assured of adequate and reliable power service, as they are in fact currently enjoying the benefits of convenience having a constant supply of energy;

27. In support of the instant Application for the approval of said rate structure in the PSA between NORECO II and GCGI, Applicant NORECO II herein further attaches the following documents to form integral parts hereof, to wit:

DOCUMENT	ANNEX
NORECO II's Board Resolution No. 348-10 authorizing its Board Chairperson James Y. Fontelo or General Manager Ephraim Taclob to sign, in behalf of NORECO II, the subject PSA with GCGI	"K"
GCGI Board Resolution No. 5 Series of 2009 designating Mr. Richard B. Tantoco and Mr. Ernesto B. Pantangco as duly authorized signatories of GCGI	"L"
NORECO II's letter to ERC informing the latter about the signed PSA with GCGI	"M"
NORECO II Board Resolution No. 41-11 authorizing its General Manager Ephraim Taclob to file the Application for the Approval of the PSA between NORECO II and GCGI with the Energy Regulatory Commission and to sign documents relative thereto	"N"
General Plant Description, showing all relevant technical characteristics of the PGPP	"O"
General Plant Description, showing all relevant technical characteristics of the TGPP	"O-1"
Copy of the Transmission Service Agreement between NORECO II and the National Transmission Company;	"P"
Details on the load forecast projections in accordance with the NORECO II's Distribution Development Plan for 2011	"Q"
Alternative Demand Side Management ("DSM") Program that could be implemented by NORECO II	"R"
Latest and Complete Set of Audited Financial Statements of GCGI (for 22 June 2009- 31 December 2009 period only)	"S"
Details of the computation of GCGI's generation cost	"T"

VI. COMPLIANCE WITH PRE-FILING REQUIREMENTS

27. Applicant NORECO II herein manifests compliance with the pre-filing requirements mandated under *Rule 3, Section 4(e) of the Implementing Rules and Regulations of the EPIRA* and *Rule 6 of the 2006 ERC Rules of Practice and Procedure*, as established by attachments to be appended as follows, to wit:
- a. Copies of the Certificate acknowledging receipt of the instant Application with annexes issued by the Legislative Bodies of the Province of Negros Oriental and Dumaguete City, where Applicant NORECO II's principally operates, are hereto attached as Annexes "U" and "U-1", respectively;
 - b. Notarized Affidavit of Publication stating that the instant Application had been published in a newspaper of general circulation within the Franchise Area of Applicant NORECO II, to be appended as Annex "V";

- c. A copy of the newspaper issue where the Application as published appeared, to be appended as Annex "W";

VII. ISSUANCE OF PROVISIONAL AUTHORITY

28. All the foregoing allegations are hereby repleaded by reference in support of the instant Prayer for the issuance of provisional authority;
29. Considering the ongoing privatization of the NPC generating assets in the Visayas Grid, NPC cannot commit to supply the electric power requirements of Applicant NORECO II as it would not be feasible for NPC to serve its customers from its remaining generation assets;
30. With the expiration of the CSEE with NPC on 25 December 2010, Applicant NORECO II had to enter into a power supply agreement with a power generator to ensure continuous and uninterrupted supply of quality power to the Applicant NORECO II's Franchise Area;
31. Considering that supply of energy by GCGI makes up 70% of Applicant NORECO II's energy demand, pending hearing of the instant Application and in the absence of a provisional authority, Applicant NORECO II and its member-consumers will be at a very vulnerable state as they cannot be assured of continuous supply of energy absent an authority to implement an agreement where the obligation to supply and purchase energy may be enforced;
32. More so, pending approval of the instant Application, and without a provisional authority granted, Applicant NORECO II will be unable to avail of the commercial advantages granted to it under the PSA, to the detriment and prejudice of its member-consumers;
33. Furthermore, it is necessary for herein Applicant NORECO II to avail of the much needed electric power from GCGI, without any delay, and help alleviate the current power shortage in the its Franchise Area;
34. Rule 14, Section 3 of this Honorable Commission's Rules of Practice and Procedure, clearly mandates the issuance of Provisional Authority pending approval of the Application, thus:

Section 3. Action on the Motion. - Motions for provisional authority or interim relief may be acted upon with or without hearing. The Commission shall act on the motion on the basis of the allegations of the application or petition and supporting documents and other evidences that applicant or petitioner has submitted and the comments or opposition filed by any interested person, if there be any. (Emphasis ours)

35. Evidently, there is a sufficient basis for the issuance of the Provisional Authority pending final approval of the instant Application, thus issuance of Provisional Authority is clearly imperative.

PRAYER

WHEREFORE, in view of all the foregoing, it is most respectfully prayed for of this Honorable Commission that pending hearing, a Provisional Authority be issued to Applicant NORECO II authorizing it to immediately implement the rate structure in the Power Supply Agreement with GCGI and that after due notice and hearing, the instant APPLICATION be DULY APPROVED.

Other reliefs as may be just and equitable under the premises are likewise most respectfully prayed for.

Having found NORECO II's *Application* to be sufficient in form and substance, with the required fees having been paid, the Commission issued an *Order* and a *Notice of Public Hearing*, both dated 14 March 2011 setting the case for initial hearing on 12 April 2011.

On 07 April 2011, NORECO II filed its *Pre-trial Brief* with even date.

During the hearing on 12 April 2011, only Applicant NORECO II appeared. No intervenor or oppositor manifested its intent to participate in the proceedings as such.

In the said hearing, the Commission looked into the documents presented by the Applicant to prove its compliance with the publication and posting requirements provided in the *Order* dated 14 March 2011. The Commission verified NORECO II's compliance with the jurisdictional requirements, all of which were marked as Exhibits "X" to "UU-2", inclusive. Thus, the Commission acquired jurisdiction over the instant case.

On 23 May 2011, NORECO II filed its *Formal Offer of Exhibits*.

Subsequently, the Commission issued an *Order* dated 16 May 2011 Provisionally Approving the PSA of NORECO II with GCGI, the dispositive portion of which reads as follows:

WHEREFORE, the foregoing premises considered, the Commission hereby PROVISIONALLY APPROVES the Power Supply Agreement (PSA) of Negros Oriental II Electric Cooperative, Incorporated (NORECO II) with Green Core Geothermal, Incorporated (GCGI) at a Basic Energy Charge of PhP4.8554/kWh (at 100% Load Factor and exclusive of systems loss), subject to the following conditions:

- a. The final generation cost that can be recovered shall be determined by the Commission in its Decision in the instant application;
- b. In the event that the rates provisionally approved are found to be higher than the final rates, the amount corresponding to the excess shall be refunded by NORECO II to its member-consumers by crediting the same in their electric bills over a period to be determined by the Commission; and
- c. The Basic Energy Charge (excluding the Capital Cost Recovery Fee and the component in the O&M pertaining to E.R. 1-94) shall be escalated or de-escalated annually using the Philippine Consumer Price Index as published by the National Statistics Coordination Board, provided that no escalation or de-escalation shall be made within one (1) year from the Effective Date of the PSA.

SO ORDERED.

Likewise, an *Order* dated 30 April 2012 was issued by the Commission extending the Provisional Authority granted to NORECO II until the same is revoked or made permanent by the former.

Thereafter, the Commission issued an *Order* dated 07 February 2017 admitting the exhibits contained in the *Formal Offer of Exhibits* filed by NORECO II, and submitting the instant case for resolution.

ISSUE

The issue for the Commission's resolution is whether or not the PSA entered into by applicant NORECO II with GCGI should be approved.

THE COMMISSION'S RULING

The Commission, on 21 February 2017, resolved to APPROVE the PSA subject of the instant case WITH MODIFICATION as regards the proposed rate. However, due to supervening events¹, the Decision could no longer be promulgated without undergoing reconfirmation by the Commission *En Banc*. Thus, the Commission resolved to reconfirm the same on 25 July 2017.

DISCUSSION

I. GCGI's PROPOSED RATES

The table below shows the different rates that GCGI offered to its customers:

Table 1. Various rates offered by GCGI.

Rate (PhP/kWh)	Description
4.7000	The base rate [at one hundred percent (100%) load factor and exclusive of system loss] offered by GCGI to customers, which cannot avail of Prompt Payment Discount (PPD). This is based on December 2009 Philippine Consumer Price Index (CPI).
4.8554	The base rate [at one hundred percent (100%) load factor and exclusive of system loss] offered by GCGI to customers, which were able to avail of PPD. This is based on December 2009 Philippine Consumer Price Index (CPI).
5.0336	4.8554 plus 3.67% system loss
5.3000	4.8554 plus 9.16% system loss
4.8800	4.7000 plus 3.67% system loss
5.1000	The base rate (at 100% load factor and exclusive of system loss) offered by GCGI to customers which cannot avail of PPD. This is based on June 2011 Philippine CPI.

¹ The Chairman was placed on preventive suspension as per Order of the Office of the President (OP-DC Case No. 17-D-094) dated 02 May 2017 and received on 04 May 2017.

II. COMPUTATION OF GCGI'S TRUE COST OF GENERATION

GCGI averred that its proposed Basic Energy Charges (BECs) are “market-based”. As such, the cost assumptions and methodologies relative to the computation of debt-equity ratio, project cost and return on investment, which are benchmarks in determining actual or true cost of generation, were not applied.

Although GCGI's proposed rate is “market-based”, the Commission deems it prudent to establish GCGI's rate on a “cost-based” methodology, consistent with the Commission's existing policies.

In determining the reasonableness of GCGI's proposed rates and establishing the true cost of generation, the Commission considered only the full recovery and pass-through of prudent and economic costs in acquiring and operating GCGI's power plants with a fair return on assets.

The Commission recognizes that GCGI's proposed rate is a fixed bundled rate. However, it is necessary that the proposed generation rate of PhP5.0336/kWh² be unbundled to compute for the recoverable generation rate. Thus, the Commission considered the following cost components:

- a. **Capital Recovery Fee (CRF)**, which is a capital-related component that will allow GCGI to recover its investment including a reasonable rate of return;
- b. **Operation and Maintenance Fee (OMF)**, which is a component to recover the recurring operating and maintenance (O&M) costs. The O&M cost is usually composed of local and foreign components, which changes proportionately with the changes of the predetermined economic factors such as CPI and foreign exchange rate; and
- c. **Fuel Fee (Geothermal Steam)**, which is a component to recover fuel costs incurred in generating electricity.

² At one hundred percent (100%) load factor and exclusive of system loss.

Shown below is GCGI's computed true cost of generation based on its 2010 and 2011 Audited Financial Statement (AFS):

Table 2. GCGI's True Cost of Generation.

Component	2010 AFS (PhP/kWh)	2011 AFS (PhP/kWh)
Capital Recovery Fee	1.8544	1.4113
Operations and Maintenance Fee	0.5632	0.5165
Fuel Fee	3.3302	3.3500
Total Generation Rate/ Basic Energy Charge	5.7478	5.2778

Each component is discussed extensively below:

A. Capital Recovery Fee (CRF)

The CRF is intended for non-volatile and stable capital cost that is fixed in nature, thus, not subject to CPI.

The Commission computed GCGI's total capital cost at Eleven Billion Eight Hundred Fifty Nine Million Six Hundred Four Thousand Two Hundred Thirty Five Pesos (PhP11,859,604,235.00) by taking into account the asset value based on the costs of acquisition and rehabilitations of the plants, as validated in GCGI's 2010, 2011, and 2012 AFS.

1. Acquisition Cost of the Power Plants

On 02 September 2009, GCGI acquired the 192.5 MW Palinpinon Geothermal Power Plant (PGPP) located in Negros Oriental, and the 112.5 MW Tongonan Geothermal Power Plant (TGPP) located in Leyte through the auction conducted by Power Sector Assets and Liabilities Management (PSALM). Subsequently, on 23 October 2009, both power plants were turned over to GCGI.

The actual cash outflow for the acquisition of the foregoing power plants amounted to Ten Billion One Hundred Sixty Five Million Three Hundred Thirty Seven Thousand Six Hundred Fifty Seven Pesos (PhP10,165,337,657.00).

2. Rehabilitation Cost of the Power Plants

GCGI has undertaken rehabilitation activities primarily to improve the reliability and availability of the power plants considering their condition and age. These rehabilitation activities are expected to increase the total net dependable capacity of the power plants from 230 MW to 245 MW.

Based on its submissions, GCGI indicated a total budget of PhP2.51 Billion for the rehabilitation of the power plants.

Subsequently, however, the budget estimate for the rehabilitation had increased to PhP2.98 Billion due to higher projected costs for turbine/generator repairs, cooling water system, and electrical systems. The said amount consists of incurred and committed capital expenditures, the latter being contingent and may or may not materialize.

GCGI alleged that it had already spent a total of PhP1.70 Billion as of the end of 2011. Meanwhile, GCGI's committed expenditures based on its existing purchase orders, work orders, and contracts with suppliers account for the balance of its updated total budget of PhP2.98 Billion.

The Commission believes that the cost incurred for rehabilitating the power plants is an eligible cost that GCGI can recover and should, therefore, be included as part of its CRF.

It must be emphasized, however, that GCGI failed to substantiate its proposed rehabilitation cost of PhP2.98 Billion, particularly the projected amount.

In calculating the allowable rehabilitation cost, the Commission referred to GCGI's 2010, 2011, and 2012 AFS that were verified and audited by an independent accounting firm. It then adopted the total additional amount of One Billion Six Hundred Ninety Four Million Two Hundred Sixty Six Thousand Five Hundred Seventy Eight Pesos (PhP1,694,266,578.00) as GCGI's incurred rehabilitation costs.

Accordingly, the Commission calculated the total capital cost of GCGI in the amount of Eleven Billion Eight Hundred Fifty Nine Million Six Hundred Four Thousand Two Hundred Thirty Five Pesos (PhP11,859,604,235.00) consisting of the acquisition cost in the

amount of Ten Billion One Hundred Sixty Five Million Three Hundred Thirty Seven Thousand Six Hundred Fifty Seven Pesos (PhP10,165,337,657.00), and the rehabilitation costs in the amount of One Billion Six Hundred Ninety Four Million Two Hundred Sixty Six Thousand Five Hundred Seventy Eight Pesos (PhP1,694,266,578.00).

3. Power Plants' Economic Life

In its initial submission, GCGI indicated an economic life of twenty-two (22) years for both power plants. This corresponds to the remaining years of Energy Development Corporation's (EDC) Geothermal Resources Sales Contract (GRSC) with the National Power Corporation-PSALM (NPC-PSALM) which will expire in 2031. The GRSC assures the steam supply for both the PGPP and the TGPP.

However, during the hearing, GCGI averred that it would be more appropriate to reflect the actual economic life used in its financial statements, as this was subjected to third-party assessment and audit. It further alleged that in its AFS, the weighted average economic life of the power plants is twelve (12) years.

Parenthetically, in the Certificate of Compliance (COC) issued by the Commission in 2010, the economic life of PGPP and TGPP were at twenty-five (25) years.

Therefore, the Commission determines that the plant assets should be recovered and spread over the period within which said assets are expected to be available for use.

While the AFS provided the power plants' economic life at twelve (12) years, the Commission deems it necessary to adopt the twenty-five (25) years economic life consistent with the plants' COC.

4. Return on Equity/Weighted Average Cost of Capital

The project is funded by one hundred percent (100%) equity. All capital contributions were provided by EDC. GCGI's required return on equity (ROE) is twenty-two percent (22%).

The Commission benchmarked the cost of equity with other PSAs approved by the Commission in ERC Case Nos. 2011-030 RC³ and 2011-138 RC⁴, as well as with the rate in setting the Feed-in-Tariff (FIT).

The approved cost of equity is 16.44%, computed as follows:

Table 3. Cost of Equity.

Market Risk Premium	10.13%
Multiply by Re-levered Beta	1.03
Plus Risk Free Rate	6.01%
Cost of Equity	16.44%

The cost of equity of 16.44% is an after-tax cost of equity which, when the effect of thirty percent (30%) income tax is added back, would result to a twenty-three percent (23%) pre-tax cost of equity. Since the pre-tax cost of equity of 23% is higher than GCGI's required ROE of 22%, the Commission adopted GCGI's ROE of 22% in computing its capital recovery.

5. Billing Determinant/Saleable Generation

The PGPP located in Valencia, Negros Oriental Province consists of two power stations, namely, PGPP I and PGPP II. PGPP has a combined installed capacity of 192.5 MW.

PGPP I was commissioned in 1983 and is comprised of three (3) units, each with an installed capacity of 37.5 MW. On the other hand, PGPP II was commissioned in 1992 and is comprised of four (4) units having a combined installed capacity of 80 MW.

TGPP, which is located in Kananga, Leyte, was commissioned in 1983 and has a total installed capacity of 112.5 MW (3 x 37.5 MW).

GCGI, in the computation of its 2010 true cost of generation, proposed a billing determinant of 1,716,960,000 kWh based on the

³ In the Matter of the Application for Approval of the Electricity Supply Agreement (ESA) Between First Catanduanes Electric Cooperative, Inc. (FICELCO) and Catanduanes Power Generation, Inc. (CPGI), with Prayer for the Issuance of Provisional Authority.

⁴ In the Matter of the Application for Approval of the Power Sales Agreement as Amended Among South Cotabato II Electric Cooperative, Inc., Conal Holdings Corporation and Sarangani Energy Corporation.

net dependable capacity of both PGPP and TGPP of 245,000kW and the plant capacity factor of eighty percent (80%).

Additionally, GCGI alleged that based on the present condition of its power plants, the estimated plant capacity factor has increased to eighty-six percent (86%), with an estimated average annual energy of 1,845,732,000 kWh.

The Commission, however, used a billing determinant of 1,908,085,397 kWh based on the average kWh sold, as disclosed in GCGI's 2010 and 2011 Generation Company Management Reports (GCMR).

6. Computation of CRF

The table below summarizes the difference between GCGI's calculation of CRF and the Commission's recomputed CRF:

Table 4. Comparison of the Computation of CRF.

Particulars	GCGI's Computation	Commission's Computation
Acquisition Cost (PhP)	10,165,382,657.00*	10,165,337,657.00
Rehabilitation Cost (PhP)	2,975,901,676.00	1,694,266,578.00
Total Capital Cost (PhP)	13,141,284,333.00	11,859,604,235.00
Plant Economic Life (Years)	12	25
Cost of Equity (Pre-Tax)	22%	22%
Annuity (PhP)	3,183,933,045.00	2,627,331,705.00
Billing Determinant	1,716,960,000	1,908,085,397
Capital Recovery Fee (PhP/kWh)	1.8544	1.3769

* GCGI included 2009 additions amounting to PhP45,000.00

B. Operations and Maintenance Fee (OMF)

Based on the documents submitted, GCGI proposed an OMF of PhP0.5632/kWh using the actual O&M cost of PhP966,970,503.00, as reflected in its 2010 AFS. Subsequently, in 2011, it proposed an OMF of PhP0.5165/kWh to reflect its actual O&M cost of PhP953,278,897.00, as reflected in its 2011 AFS.

The Commission believes that using a two (2)-year cycle is more reflective of the O&M of the power plants than using only a single year. Thus, the Commission adopts the average OMF using the total

actual O&M cost of PhP2,123,841,102.00, as reflected in GCGI's 2010 and 2011 AFS.

In computing the total O&M cost of PhP2,123,841,102.00, the Commission excluded the Replacement Power Cost, Depreciation, Provisions for Probable Losses, Impairment of Parts and Supplies Inventories and Doubtful Accounts.

1. Computation of OMF

The table below summarizes the Commission's recomputed OMF:

Table 5. Operations and Maintenance Fee.

Particulars	Commission's Computation
Operations and Maintenance (PhP)	1,061,920,551.00 ¹
Billing Determinant (kWh)	1,908,085397 ²
O&M Fee (PhP/kWh)	0.5565

Note: ¹ Average O&M cost for 2010 and 2011.

² Average kWh generation for 2010 and 2011.

C. Fuel Fee (Geothermal Steam)

Based on the documents submitted, GCGI proposed a Fuel Fee of PhP3.3302/kWh. This is the effective geothermal steam cost billed by EDC to GCGI for the June 2011 billing period. However, in its updated computation, GCGI proposed a Fuel Fee of PhP3.35/kWh based on the actual cost, as reflected in its 2011 AFS.

In determining the appropriate fuel fee that GCGI should charge to NORECO II, the Commission determined that the appropriate index that Applicant must use is the CPI. The same index has been historically used in determining geothermal prices.

The CPI is a generally accepted and established index that provides for a more stable price. It lessens the risk of exposing the Applicants and, ultimately, the consumers to the volatility of price levels based on economic changes.

The use of Philippine CPI would also allow GCGI and other parties to predict the movement of its steam price. Consequently, it

would aid the concerned parties in developing their strategies to manage the possible risks that such price movement may entail.

Upon evaluation, the Commission has determined that the Fuel Fee or Steam Fee is composed of a Fixed Component in the amount of PhP0.1741/kWh and a Variable Component in the amount of PhP2.5925/kWh.

The fixed component is not subject to indexation. On the other hand, the variable component is subject to escalation/de-escalation using the Philippine CPI, and should be computed in accordance with the formula provided under Annex "F" of the PSA.

III. NON-RATE PROVISIONS OF THE PSA

A thorough evaluation of the PSA entered into by GCGI with NORECO II revealed that the non-rate provisions thereof are reasonable and in accordance with the accepted industry practice, except Sections 16.22 and 16.23 thereof, which states:

16.22. Buyer shall solely bear all risks should ERC disallow Buyer from recovering through its retail rates the payments for the energy taken in accordance with the terms and conditions herein.

16.23. Should the ERC or any other relevant governmental instrumentality order or decide that any provision relating to generation costs, charges, adjustments or energy off-take under this Agreement is disapproved or is approved subject to modifications (Conditional Approval), the Parties agree to negotiate in good faith with a view to amending this Agreement in order to comply with the terms of such order or decision of the ERC or such other relevant governmental instrumentality. Any amendments to this Agreement agreed by the Parties shall be effective upon the approval of such amendments by the ERC or such other relevant governmental instrumentality, as the case maybe. Until such amendments have been agreed to by the Parties and approved by the ERC, each Party shall continue to strictly perform their respective obligations under the terms and conditions of this Agreement, except that the Contracted Energy shall be charged at the higher of (a) the rate approved by the ERC, or (b) the prevailing time-of-use generation rates plus other charges and adjustments applicable to the Visayas Grid which are approved by the ERC. In the event that the Parties fail to reach any agreement on such amendments, Seller shall have the right (but not the obligation) to terminate this Agreement on at least thirty (30) Day's prior notice, and the provisions of the second paragraph of Section 13.2 shall apply. In case of Conditional Approval, Seller and Buyer may continue implementing this Agreement with the modified provisions. In any event, Buyer shall

not be entitled to a return or to refuse payment of such generation costs, charges, adjustments or energy off-take under the disapproved or provisionally approved provisions already billed by or paid to Seller. Any consequent refund to Buyer's customers ordered by the ERC shall be for the sole account of Buyer.

xxx

The Commission believes that this Decision should bind both contracting parties and that their PSA shall not be rendered ineffective or nugatory through any termination or "walk-away" clause in the PSA by reason of this Decision. Thus, the Commission deems it prudent to disallow the foregoing provisions.

The Commission has a mandate to protect the interest of the electricity consumers, insofar as they are affected by the rates, by ensuring that the tariffs imposed are consistent with the principle of full recovery of prudent and reasonable costs.

After a thorough evaluation of the documents submitted and the testimonies of the witnesses presented, the Commission finds that the approval and implementation of the PSA will be beneficial to NORECO II's member-consumers by way of reliable, continuous and efficient supply of power within its franchise area at reasonable costs as mandated by the EPIRA⁵.

WHEREFORE, the foregoing premises considered, the *Application* filed by Negros Oriental II Electric Cooperative, Inc. (NORECO II) for the approval of its Power Supply Agreement (PSA) with Green Core Geothermal Incorporated (GCGI) is hereby **APPROVED WITH MODIFICATION** and subject to the following conditions:

1. The applicable Basic Energy Charge (BEC) shall be as follows:

COMPONENT	PhP/kWh
Plant Capital Recovery Fee (P-CRF)	1.3769
Steam-Fixed Component (S-FC)	0.1741
Plant Operations and Maintenance (P-O&M)	0.5565
Steam-Variable Component (S-VC)	2.5925
TOTAL BEC	4.7000

⁵ Section 2. Declaration of Policy - (b) to ensure the quality, reliability, security and affordability of the supply of electric power.

2. The P-CRF and S-FC shall not be subject to any indexation. On the other hand, the P-O&M and S-VC shall be indexed to Philippine CPI. The indexation to Philippine CPI shall be in accordance with the Escalation/De-escalation Formula provided under Annex "F" of the Power Supply Agreement (PSA). The base Philippine CPI shall be December 2011.
3. A rebasing shall be made every ten (10) years beginning 2015.
4. GCGI's actual cost of operation, including the actual rehabilitation cost, shall be audited by an Independent Third Party in accordance with the rules to be promulgated by the Commission. The approved rates herein shall be adjusted, if warranted. The test of reasonability shall NOT be the actual cost incurred BUT *"whether or not such cost is incurred based on a good utility practice and comparable or within the level of the power plants similarly situated to that of GCGI"*. Further, the cost of audit shall be shouldered by GCGI.

The Commission further **RESOLVES** to:

- a. **DISALLOW** all termination or "walk-away" clauses incorporated in the PSA;
- b. **DIRECT** NORECO II to **INCLUDE** in the monthly calculation of its generation rate in accordance with the Automatic Generation Rate Adjustment (AGRA) Rules, the indices and references thereof used by GCGI in the O&M and Fuel Fees calculation;
- c. **DIRECT** GCGI to **SUBMIT** its latest Audited Financial Statements (AFS), as soon as it becomes available; and

- d. **DIRECT** NORECO II and GCGI to **SUBMIT**, within **fifteen (15) days** from receipt hereof, their proposed refund or recovery scheme, as the case may be, for the difference between the final approved rates and the provisionally implemented rates.

SO ORDERED.

Pasig City, 25 July 2017.

JOSE VICENTE B. SALAZAR*
Chairman and CEO



ALFREDO J. NON
Commissioner



GLORIA VICTORIA C. YAP-TARUC
Commissioner



JOSEFINA PATRICIA A. MAGPALE-ASIRIT
Commissioner



GERONIMO D. STA. ANA
Commissioner

LS: JCN/ARG/APV

PSA TWG GROUP C: ALC/ECE

* On preventive suspension as per Order of the Office of the President (OP-DC Case No. 17-D-094) dated 02 May 2-17 and received on 04 May 2017.

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