

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



IN THE MATTER OF THE
APPLICATION FOR THE
APPROVAL OF GENERATION RATE
FOR THE USE OF A 1 UNIT 2 MW
MODULAR GENERATION SET BY
THE MISAMIS ORIENTAL I RURAL
ELECTRIC SERVICE
COOPERATIVE, INC. (MORESCO-1)
AND CORRESPONDING APPROVAL
OF THE LOAN FROM THE
NATIONAL ELECTRIFICATION
ADMINISTRATION (NEA), WITH
PRAYER FOR THE ISSUANCE OF A
PROVISIONAL AUTHORITY

ERC CASE NO. 2015-014 RC

MISAMIS ORIENTAL I RURAL
ELECTRIC SERVICE
COOPERATIVE, INC. (MORESCO I),
Applicant.

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DOCKETED
Date: MAR 05 2015
By: [Signature]

NOTICE OF PUBLIC HEARING

TO ALL INTERESTED PARTIES:

Notice is hereby given that on January 30, 2015, the Misamis Oriental I Rural Electric Service Cooperative, Inc. (MORESCO I) filed an application for the approval of the generation rate for the use of a one (1) unit 2 MW modular generation set and corresponding approval of the loan from the National Electrification Administration (NEA), with prayer for the issuance of a provisional authority.

In the said application, MORESCO I alleged, among others, that:

1. It is an electric cooperative (EC) existing pursuant to Presidential Decree No. 269 (P.D. 269), as amended. It has its postal address at Poblacion, Laguindingan, Misamis Oriental. It may be served with the processes of

the Commission through its Board President, Engr. Melvyn D. Eballe and General Manager, Engr. Julie B. Real whose joint authority pursuant to Board Resolution No. 2014-0301 is attached to the application as Annex "A" and made an integral part thereof;

2. Its franchise area includes the Municipalities of Alubijid, Initao, Opol, Lugait, Laguindingan, Manticao, Gitagum, Libertad, Naawan, El Salvador City in the Province of Misamis Oriental, a portion of Cagayan de Oro City and the Municipalities of Talakag and Baungon in the Province of Bukidnon;

MODULAR GENERATING SET PROGRAM OF THE DOE

3. Since 2006, the Island of Mindanao has a shortage of 295 MW due to lack of new generation capacity and heavy reliance on Hydropower, which accounts for about 52.49% of the overall generation mix, but which generates less electricity output during summer months when water levels are low. While there is excess power supply in the Luzon grid, the Mindanao grid is not connected to the Luzon grid;
4. This situation has led the Department of Energy (DOE) to encourage the ECs, including MORESCO I, to acquire and/or lease modular generation sets as a near and short term solution to the rotating blackouts in Mindanao until such time that additional capacities shall have been installed sometime in late 2016 to early 2017;
5. Although the Power Sector Assets and Liabilities Management Corporation (PSALM) has an existing Transition Supply Contract (TSC) with MORESCO I, which will expire in August 2015, it has, however, unilaterally reduced the committed available power supply to MORESCO I by about thirty percent (30%) of its annual demand due to the declining dependable capacities of the *Pulangi* and *Agus* Hydropower Plants and has compelled it to look for new capacities especially for its peaking requirements when demand is at its highest;

6. Under Republic Act No. 9136 (R.A. No. 9136) or the "*Electric Power Industry Reform Act of 2001*" or the EPIRA, DUs, like the MORESCO I, are mandated to source their own power supply through "long term" contracts with generating companies and from the Wholesale Electricity Spot Market (WESM) and, as far as practicable, to procure power supply at the least possible costs;
7. Under the recently passed law, R.A. 10531¹, ECs are now authorized to generate power from its own sources;
8. The DOE directed the National Electrification Administration (NEA) to implement the Modular Generating Set Program to ECs in Mindanao to address the power shortage causing rotating blackouts within their coverage franchise areas;
9. The Association of Rural Electric Cooperatives, Inc. (AMRECO) was tapped by the NEA to create a Technical Working Group (TWG) to study and recommend the Terms of Reference (TOR) in the conduct of bidding for ECs in Mindanao which are willing to acquire or lease the modular generation sets. Copy of the TOR is attached to the application as Annex "B";
10. It was one of the ECs which signified an intention to acquire the modular generating set, more specifically for one (1) unit 2 MW brand new Modular Diesel Electric Generator set;
11. The AMRECO adopted the recommendations of the TWG and thereafter created the Bids and Awards Committee (BAC) to implement the bidding;
12. The AMRECO conducted the Bidding in Cagayan de Oro City on October 13, 2013 at the Grand Caprice Lim Ket Kai Center participated by several local and international bidders for both the acquisition and lease options;

¹ "*National Electrification Administration Reform Act of 2013*"

13. The BAC, after due consultation with the TWG of AMRECO, awarded the winning bids using the technical and financial standards in the TOR, to the most responsive bidders;
14. For MORESCO I, the winning bidder was GenDiesel Philippines, Inc. (GENDIESEL), a domestic corporation with business address at 101 Commerce Street, Laguna Technopark, Phase 2, Laguna. As a consequence thereto, a "Contract of Agreement for the Supply, Installation of 2MW Modular Genset" was signed by the representatives of MORESCO I and Supplier GENDIESEL. Copy of the said Contract is attached to the application as Annex "C";
15. For the acquisition cost and incidental expenses, it was provided financing at reasonable interest rate by the NEA, a copy of the "Contract of Loan" signed by the parties is attached to the application as Annex "D";

SALIENT FEATURES OF THE SUPPLY AND INSTALLATION CONTRACT

16. The modular gen set is described as "Brand new containerized and trailer capable genset (diesel generating set silent type @ 85dba at 7 meters distance), prime power rating not greater than 0.27 liter kWh. Synchronized generator with step up transformer of 13.2 kV Y 60 Hz. Inclusive of protective device at high and low voltage, low/high voltage power cable, grounding cable and external fuel tank 5,000 liters capacity with fuel pipes and filter";
 - a. Cost and Manner of Payment
17. The Modular Genset has a selling price of PhP40,647,188.00 per winning bid submitted by the Supplier GENDIESEL which is payable directly by NEA to GENDIESEL payable upon the happening of certain conditions as set forth in the contract. MORESCO I will then pay NEA for the principal plus interest cost in a fifteen (15) year period;

b. General Description and Operation of the Genset

18. The genset is expected to utilize 1800 RPM set at Prime Power Application Rating. It has a capacity of 2000 kW, 480 V, 3 phase. Its operation is assumed to be for eight (8) hours a day or 3000 hours per year at a load factor of eighty percent (80%). It will be using diesel fuel and SAE No. 40 lube oil. At site condition, its ambient temperature will be 45 deg. C, at an atmospheric pressure of 100 kPa, at a relative humidity of sixty percent (60%) and cooling water in temperature at 75 deg. C. The engine is MTU Brand, 2280 mkW, cooling fan kW loss of 100 kW, Engine Model: 16V4000G83, 16 Cylinders V type, four stroke, trunk piston with electronic fuel control;

MODULAR GENSET

Cost Parameters & Rate

<u>Generator Set Data</u>		Unit	<u>Operational Details</u>		Unit
Generator Set Type	Modular Diesel		Demand	2,000.00	kW
Type of Fuel	LFO		No. of Hours	4.00	hrs
Speed	1,800.00	rpm	No. of Days	30.00	days
Generating Capacity	2,200.00	kW	No. of Months	12.00	months
Economic Life	15.00	Yr.	Availability Factor	90%	
			Capacity Factor	20%	
			Energy (Annual)	2,592,000.00	kWh
<u>Technical Data</u>		Unit	<u>O&M Cost Data</u>		Unit
Dependable Capacity	2,000.00	kW	Fuel (LFO)	50.00	Php / liter
Fuel Consumption	0.2607	l / kWh	Lube	120.00	Php / liter
Lube Oil Consumption	0.0008	l / kWh	Admin, Taxes & Insurance	3,835,374.40	Php
<u>Financing Data</u>		Unit			
GenSet Cost	38,366,228.00	Php	CRF	2.21	Php / kWh
Testing & Commissioning Cost	2,280,960.00	Php	Fixed O&M Charge	1.87	Php / kWh
DIS/EIS/Consultancy Cost	1,150,000.00	Php	Var. O&M Charge	0.95	Php / kWh
Fuel & Lube (1 month)	2,815,549.96	Php	Fuel Recovery Charge	13.03	Php / kWh
Other CAPEX	3,550,000.00	Php	Lube Recovery Charge	0.09	Php / kWh
Contingency (10% of GenSet Cost)	3,836,622.80	Php	Effective Rate	18.15	Php / kWh
Total Capital Cost	51,999,360.76	Php	Effective Rate (w/ VAT)	20.33	Php / kWh
Loan Repayment	13.00	Yr.			
Debt Rate	6.00%				
Amortization (Annual)	5,716,885.93	Php			
VAT	12.00%				

IMPACT ON ITS OVERALL GENERATION RATE

**NPC-PSALM & MODULAR GENSET GENERATION MIX
 Year 2014**

POWER SUPPLIER	Contract Energy (kWh)	Contract Demand (kW)	Average Generation Rate (P/kWh)	Weighted Average Generation Rate (kWh)	Average Generation Rate Impact
NPC - PSALM	338,059,500.23	51,421.00	3.0000	3.0193	0.0193
MODULAR GENSET	432,000.00	2,000.00	18.1500		
TOTAL	338,491,500.23	53,421.00			

Year 2015

POWER SUPPLIER	Contract Energy (kWh)	Contract Demand (kW)	Average Generation Rate (P/kWh)	Weighted Average Generation Rate (kWh)	Average Generation Rate Impact
NPC - PSALM	314,968,850.98	51,421.00	3.0000	3.1237	0.1237
MODULAR GENSET	2,592,000.00	2,000.00	18.1500		
TOTAL	317,560,850.98	53,421.00			

PRAYER

19. It prays that upon the filing of the instant application, the Commission: a) provisionally approves the generation rate arising from the use of one (1) unit 2 MW modular genset. The prayer for the issuance of a Provisional Authority (PA) is necessitated in order that it can immediately use the genset upon delivery by GENDIESEL pending review and evaluation by the Commission of the final authority on the generation rate applied for; and b) to approve the financing of the acquisition of loan through the NEA.

The Commission has set the application for jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing on **April 7, 2015 (Tuesday) at two o'clock in the afternoon (2:00 P.M.), at the MORESCO I's Main Office, Poblacion, Laguindingan, Misamis Oriental.**

All persons who have an interest in the subject matter of the proceeding may become a party by filing, at least five (5) days prior to the initial hearing and subject to the requirements in the ERC's Rules of Practice and Procedure, a verified petition with the Commission giving the docket number and title of the proceeding and stating: (1) the petitioner's name and address; (2) the nature of petitioner's interest in the subject matter of the proceeding, and the way and manner in which such interest is affected by the issues involved in the proceeding; and (3) a statement of the relief desired.

All other persons who may want their views known to the Commission with respect to the subject matter of the proceeding may file their opposition to the application or comment thereon at any stage of the proceeding before the applicant concludes the presentation of its evidence. No particular form of opposition or comment is required, but the document, letter or writing should contain the name and address of such person and a concise statement of the opposition or comment and the grounds relied upon.

All such persons who may wish to have a copy of the application may request the applicant, prior to the date of the initial hearing, that they be furnished with a copy of the application. The applicant is hereby directed to furnish all those making a request with copies of the application and its attachments, subject to reimbursement of reasonable photocopying costs. Likewise, any such person may examine the application and other pertinent records filed with the Commission during the usual office hours.

WITNESS, the Honorable Chairperson, **ZENAIDA G. CRUZ-DUCUT**, and the Honorable Commissioners, **ALFREDO J. NON**, **GLORIA VICTORIA C. YAP-TARUC** and **JOSEFINA PATRICIA A. MAGPALE-ASIRIT**, Energy Regulatory Commission, this 2nd day of March 2015 at Pasig City.


ATTY. FRANCIS SATURNINO C. JUAN
Executive Director III