

# 19<sup>th</sup> EPIRA Implementation Status Report

(Period Covering April 2011 to October 2011)

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*With Contributions from*

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## CONTENTS

|   |    |
|---|----|
| I. INTRODUCTION.....  | 4  |
| II. PRIVATIZATION.....  | 4  |
| A. Privatization of Generating Assets .....   | 4  |
| B. Remaining Assets for Privatization.....  | 4  |
| C. Privatization Proceeds.....  | 5  |
| D. Transfer of NPC-IPP to Independent Administrators.....   | 6  |
| E. Concession of the National Transmission Network .....  | 7  |
| F. Sale of Sub-Transmission Assets (STAs).....  | 8  |
| III. ELECTRICITY RATES .....  | 8  |
| A. PSALM/NPC Effective and Basic Generation Charges .....   | 8  |
| B. Transmission Rates.....  | 9  |
| C. Distribution Utilities (DUs) Rates .....   | 10 |
| 1. Average Effective Electricity Rates .....  | 10 |
| 2. Regulatory Actions .....   | 12 |
| C. Administration of Universal Charge (UC).....   | 15 |
| 1. Total Collections/Disbursements for UC-ME and UC-EWR.....  | 15 |
| 2. UC for Stranded Contract Costs (SCC) and Stranded Debts (SD).....  | 16 |
| D. Assumption of Loans of Electric Cooperatives .....   | 16 |
| E. Mandatory Rate Reduction (MRR) .....   | 17 |
| F. Lifeline Rate Subsidy Program.....   | 17 |
| IV. COMPETITION.....  | 18 |
| A. Wholesale Electricity Spot Market Implementation .....   | 18 |
| B. Open Access and Retail Competition.....  | 23 |
| C. Market Power Monitoring.....   | 26 |
| V. POWER SUPPLY SECURITY AND RELIABILITY .....  | 27 |
| VI. TOTAL ELECTRIFICATION.....  | 33 |
| A. Qualified Third Party.....   | 34 |
| B. Implementation of E.R. 1-94 Program .....  | 35 |
| C. Challenges.....  | 36 |
| LIST OF ANNEXES .....   | 37 |
| Annex 1. TransCo Inspection Report Based on Concession Agreement.....   | 38 |
| Annex 2. NGCP Related Petitions to ERC as of October 2011.....  | 40 |
| Annex 3 – Summary of MERALCO 2011 Residential Unbundled Power Rates.....  | 43 |
| Annex 4. NPC Generation Charges in PhP/kWh .....  | 45 |
| Annex 5. Status of Rules Change Proposal in RCC.....  | 48 |
| Annex 6 – Status of Technical Committee’s Review and Monitoring of Technical Matters under the Grid Code, Distribution Code and the WESM Rules..... | 49 |
| Annex 7. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh) .....  | 50 |
| Annex 8. Demand and Energy Offers (MW).....   | 53 |
| Annex 9. Generation Mix (%) .....   | 55 |
| Annex 10. Effective Settlement Prices .....   | 57 |
| Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011 .....   | 59 |
| Annex 12. Private Sector Initiated Power Projects (Visayas) as of November 2011 .....   | 64 |
| Annex 13. Private Sector Initiated Power Projects (Mindanao) as of November 2011 .....  | 68 |
| Annex 14 - ERC-Approved Capital Expenditure Projects (May 2011 – August 2011) .....   | 71 |
| Annex 15. ECs Average Systems Rates as of January to October 2011 .....   | 91 |

LIST OF TABLES

|   |    |
|---|----|
| Table 1. Remaining Assets for Privatization .....   | 4  |
| Table 2. Generated and Collected Proceeds of Privatization.....   | 6  |
| Table 3. Utilization of Privatization Proceeds .....  | 6  |
| Table 4. Indicative Schedule for Appointment of IPP Administrator .....                                     | 6  |
| Table 5. NPC Effective Generation Charges (PhP/kWh) .....   | 8  |
| Table 6. Average Systems Rates, June vs October 2011(PhP/kWh) .....   | 10 |
| Table 7. EC's Unbundled Average Effective Residential Electricity Rates, September 2011<br>(PhP/kWh).....   | 10 |
| Table 8. PDUs Average Effective Rates (AER), October 2011 (PhP/kWh) .....                                   | 11 |
| Table 9. Summary of MERALCO Residential Unbundled Power Rates, October 2011 .....                           | 11 |
| Table 10. Total Base Generation Rate .....  | 12 |
| Table 11. Effective Maximum Allowable Revenue (MAR) 2011 (In PhP Million).....                              | 13 |
| Table 12. Status of 2 <sup>nd</sup> Entry Group PDUs Rate Application to ERC .....                          | 14 |
| Table 13. UC Collections & Disbursements, as of 31 October 2011 ( In Billion PhP).....                      | 15 |
| Table 14. UC Collections and Disbursements for the Period January -September 2011 (In Billion<br>PhP) ..... | 16 |
| Table 15. Status of Loan as of September 2011 (in Billion PhP).....   | 17 |
| Table 17. Monthly Amount Incurred by NPC for Grant of MRR, April to October 2011 .....                      | 17 |
| Table 16. Breakdown of Payments to NEA per Type of Loan (as of September 2011).....                         | 17 |
| Table 18. Summary of Lifeline Subsidy for the month of November 2011 .....                                  | 18 |
| Table 19. Luzon and Visayas Trading Results .....   | 19 |
| Table 20. Metered Quantity.....   | 19 |
| Table 21. WESM Generation Mix.....  | 19 |
| Table 22. Registration Update as of October 2011 (Luzon and Visayas).....                                   | 23 |
| Table 23. PHILIPPINES, 2011 and 2010 Comparative Generation, GWh.....                                       | 28 |
| Table 24. LUZON Grid, 2011 and 2010 Comparative Generation, GWh .....                                       | 28 |
| Table 25. VISAYAS Grid, 2011 and 2010 Comparative Generation, GWh .....                                     | 29 |
| Table 26. MINDANAO Grid, 2011 and 2010 Comparative Generation, GWh.....                                     | 29 |
| Table 28. Barangay Electrification Status as of 31October2011 .....   | 33 |
| Table 27. Targets Per Implementors.....   | 33 |
| Table 29. Summary of Financial Benefits as of October 2011 (In PhP Billion).....                            | 35 |

LIST OF FIGURES

|  |    |
|--|----|
| Figure 1. Market Share (Philippines, Luzon, Visayas, and Mindanao) .....   | 26 |
| Figure 2. Dasmariñas Sub-Station Expansion.....                            | 31 |
| Figure 3. Bal-oi - Villanueva 230 kV Transmission Line Project.....        | 31 |
| Figure 5. NPC Contractual Obligations for Luzon, Visayas and Mindanao..... | 32 |
| Figure 4. Mindanao S/S Expansion 2005 (Phase II).....                      | 32 |

## I. INTRODUCTION

This report provides the summary update of the developments on the restructuring of the power sector covering the months of April to October 2011. The preparation for the attainment of the retail electricity market has noted significant events such as the Energy Regulatory Commission (ERC) declaring the completion of the pre-requisite relative to the implementation of Retail Competition and Open Access (RCOA). Accordingly, the DOE took the necessary actions to ensure that participants are ready in the eventual implementation.

The report provides a glimpse of the continuing implementation of the Luzon-Visayas integrated electricity market while some updates on new market developments were tackled to include the study on the establishment of the Independent Market Operator.

Electricity supply-demand highlights the status for the period January to June 2011. On the other hand, monitoring of market share shows significant transition to private sector ownership of the installed capacity in particular to Luzon and Visayas grids. With respect to privatization of remaining NPC assets and contracts, no significant developments were noted though PSALM continued to work on the requirements to continue the privatization in accordance with its mandate.

## II. PRIVATIZATION

For this report period, activities in the privatization of NPC/PSALM generating assets and Independent Power Producer (IPP) contracts were deferred with the new administration's call for a review of the privatization plan and the need to address the seasonal supply interruptions. However, developments pertaining to PSALM's continuing activity for the completion of the remaining legal, financial and technical requirements for the smooth turn-over of the privatized power plants and IPP contracts are hereunder enumerated and discussed:

### A. Privatization of Generating Assets

For the second semester of 2011, the government's privatization program for the remaining assets, i.e., generating assets and contracted capacities of IPPs, pursued in accordance with the PSALM Board's approved timetable and the direction set by the DOE consistent with the Energy Reform Agenda. Hence, the bidding process commenced in July 2011.

### B. Remaining Assets for Privatization

The remaining assets for privatization are shown in Table 1 with the indicative privatization schedule as approved by the PSALM Board. The privatization of the remaining assets will continue depending on the policy direction to be set by the administration consistent with the Energy Reform Agenda, with the concurrence of the Joint Congressional Power Commission. However, the confluence of factors such as investors' interest and plant-specific concerns may cause possible changes in the target dates.

*Table 1. Remaining Assets for Privatization*

| Plant Name                     | Rated Capacity (MW) | Bid Date | Turn Over Date |
|--------------------------------|---------------------|----------|----------------|
| <b>Owned Generating Plants</b> |                     |          |                |
| <b>Luzon Grid</b>              |                     |          |                |
| Malaya                         | 650.00              | 2012     | 2013           |
| <b>Sub-total Luzon</b>         | <b>650.00</b>       |          |                |

| Plant Name                   | Rated Capacity (MW) | Bid Date   | Turn Over Date |
|------------------------------|---------------------|--|----------------|
| <b>Visayas Grid</b>          |                     |  |                |
| PB 101                       | 32.00               | Bidding process starts in July 2011 subject to completion of bidding documents |                |
| PB 102                       | 32.00               |  |                |
| PB 103                       | 32.00               |  |                |
| <b>Sub-total Visayas</b>     | <b>96.00</b>        |  |                |
| <b>Mindanao Grid</b>         |                     |  |                |
| PB 104                       | 32.00               | Bidding process starts in July 2011 subject to completion of bidding documents |                |
| Agus 1 & 2                   | 260.00              | 2014-2015  | 2015-2016      |
| Agus 4 & 5                   | 213.00              |  |                |
| Agus 6 & 7                   | 254.00              |  |                |
| Pulangui                     | 255.00              |  |                |
| <b>Sub-total Mindanao</b>    | <b>1,014.10</b>     |  |                |
| <b>TOTAL</b>                 | <b>1,760.10</b>     |  |                |
| <b>Decommissioned Plants</b> |                     |  |                |
| Bataan Thermal               | <b>0.01</b>         | December 2011  | October 2012   |
| Sucac                        | <b>0.01</b>         | February 2017  | December 2017  |

Source: PSALM

- **Agus-Pulangui**

PSALM, having signed the Operation and Maintenance Agreement with NPC, shall fund the rehabilitation of the Agus-Pulangui hydropower plant complexes. Said fund may either be sourced out from the income of power plant operations or through financing scheme.

- **Power Barges (PB) 101 to 104**

The NPC bought the Power Barges (PB) 101, 102, 103 and 104 from a Japanese firm, Hitachi Zosen Corporation, to help ease severe power shortage in the Philippines, providing the required support in the Visayas and Mindanao regions. Commissioned in 1981, PB 101 and PB 102 are currently tied-up in Barrio Obrero, Iloilo City. PB 103 and 104, which were commissioned in 1985, are moored in Botongon, Estancia, Iloilo, and in Holcim Compound, Ilang, Davao City, respectively.

These barges are movable and can be relocated anywhere with adequate mooring structures. Designed as base-load plants, PB 101, 102, 103 and 104 are nominal 32 MW barge-mounted bunker-fired diesel generating power stations that consist of four (4) identical Hitachi-Sulzer diesel generator units rated at 8 MW each.

The privatization of PB 101 to 104 is set by PSALM to commence before the year ends. The sale of these power barges has been approved by the PSALM Board provided that said barges shall be transferred to Mindanao to augment its power supply but only after the power situation in the Visayas region has been stabilized.

### C. Privatization Proceeds

As of 31 October 2011, the generated proceeds of PSALM amounted to US\$10.210 Billion. Table 2 indicates the sources of the privatization proceeds, namely: generating assets;

decommissioned plants; transmission asset; and appointment of IPP Administrators. Total actual collection as of the same date amounts to US\$5.272 Billion. PSALM generated most of the proceeds from the transmission assets but collected the most from generating assets.

Table 2. Generated and Collected Proceeds of Privatization

| Privatization Proceeds<br>(In US\$Billion) | Generated     | Collected    |
|--|---------------|--------------|
| Generating Assets                          | 3.027         | 3.064        |
| Decommissioned Plants                      | 0.004         | 0.004        |
| Transmission Asset (TransCo)               | 3.950         | 1.765        |
| Appointment of IPPAs                       | 3.229         | 0.439        |
| <b>TOTAL</b>                               | <b>10.210</b> | <b>5.272</b> |

Source: PSALM

Out of the total collected amount, Table 3 confirms that about ninety-eight percent (98%) of it has been utilized for the prepayment of NPC loans, debt service of NPC regular loans as well as IPP obligations and payment of privatization-related expenses.

Table 3. Utilization of Privatization Proceeds

| Privatization Proceeds UTILIZED | In US\$ Billion |
|---------------------------------|-----------------|
| Debt Prepayment                 | 1.298           |
| Regular Debt Service            | 2.411           |
| Lease Obligations               | 1.398           |
| Others                          | 0.052           |
| <b>TOTAL</b>                    | <b>5.159</b>    |

Source: PSALM

#### D. Transfer of NPC-IPP to Independent Administrators

Table 4 shows the indicative schedule for the appointment of an IPP Administrator in the remaining NPC-IPP contract in Luzon, Visayas and Mindanao Grids. The bidding process in the Visayas Grid started in July 2011 for the contracted energy with Unified Leyte and Naga Complexes.

Table 4. Indicative Schedule for Appointment of IPP Administrator

| Plant Name                | Contracted Capacity (MW) | Bid Date                         | Turn Over Date |
|---------------------------|--------------------------|----------------------------------|----------------|
| <b>Luzon Grid</b>         |                          |                                  |                |
| CASECNAN MULTI-PURPOSE    | 140.00                   | 2012                             |                |
| <b>Sub-total Luzon</b>    | <b>140.00</b>            |                                  |                |
| <b>Visayas Grid</b>       |                          | 2012                             |                |
| Unified Leyte             | 559.00                   | Bidding process starts July 2011 |                |
| CEBU THERMAL 1 & 2        | 95.80                    |                                  |                |
| CEBU DIESEL (1-6)         | 36.00                    |                                  |                |
| <b>Sub-total Visayas</b>  | <b>690.80</b>            |                                  |                |
| <b>Mindanao Grid</b>      |                          |                                  |                |
| MT. APO GEOTHERMAL PP     | 44.52                    | 2014                             |                |
| WMPC DIESEL PP            | 100.00                   |                                  |                |
| SPPC DIESEL PP            | 50.00                    |                                  |                |
| MT. APO 2 GEOTHERMAL      | 48.00                    |                                  |                |
| MINDANAO COAL-FIRED PP    | 200.00                   |                                  |                |
| <b>Sub-total Mindanao</b> | <b>442.52</b>            |                                  |                |
| <b>Total Luz-Vis-Min</b>  | <b>1,273.32</b>          |                                  |                |

Source: PSALM

- ***Naga Complex Power Plants***

PSALM deferred its bidding process in the Naga Complex Power Plants for the appointment of the IPP administrators which was initially set on 10 October 2011. This is due to some critical issues integrated in the privatization design of the said plants that need to be addressed first as requested by the JCPC. The postponement gave way to the conduct of in-depth study and analysis on bidding practices, specifically the alleged unfair and illegal condition known as the 'right to top' the highest bid previously granted to SPC Power Corporation (SPC) in the Land Lease Agreement executed by and among PSALM, NPC and SPC in 2009.

The Naga Complex comprises the 106.8MW Naga 1 and 2 coal thermal power plants and the 39MW Naga diesel power plant located in Naga, Cebu. These plants are under a Rehabilitate-Operate-Maintain-and-Manage Agreement / Energy Conversion Agreement with Korea Electric Power Corporation (KEPCO) Salcon Philippines which will expire in March 2012.

- ***Casecnan***

PSALM is also lining up this year the privatization of the power supply agreement for the 150MW Casecnan hydropower facility. The Casecnan Project, a combined irrigation and hydroelectric power project in the northern part of Luzon, is the first multi-purpose Build-Operate-and Transfer project in the Philippines. However, there is one major hitch – the facility's ownership may still revert to the government through the National Irrigation Administration (NIA).

- ***Unified Leyte***

PSALM is likewise planning to sell the contracted capacity of the 640MW Unified Leyte geothermal power plants in tranches this year. But its supply contract has been proposed for "splitting" the capacities due to the concern of investors on the market cap for the Visayas. In order not to violate the market cap provisions under the Electric Power Industry Reform Act (EPIRA), the bidding rules has indicated that capacities will be divided at 60 - 40, which means that the capacities will bid out at 384 MW and 255 MW, respectively.

Four (4) investor groups have signified interest when the government announced in June last year the resumption for the bidding of the contracted capacity of the Unified Leyte geothermal power plants. However, the bidding was postponed in line with the government's deferment of the privatization process.

## **E. Concession of the National Transmission Network**

The Concession Agreement provides that TransCo has to conduct inspection of the assets condition and the Projects Under Construction (PUC) accomplishments consistent with the inspection protocol established with the concessionaire.

For February to October 2011, TransCo was able to inspect ten (10) PUCs, two (2) New Projects and sixteen (16) transmission facilities. The details of which, i.e. name of project/transmission facility, its location, date of inspection and the inspection report number, are provided in *Annex 1*.

All the inspection reports were forwarded to the concessionaire for their appropriate action.

#### F. Sale of Sub-Transmission Assets (STAs)

As of 31 October 2011, TransCo has signed eighty-four (84) sale contracts amounting to about P4.09 billion with sixty-six (66) distribution utilities/electric cooperatives (ECs) /consortia. These sales cover an aggregate length of about 3,323 ckt-kms of sub-transmission lines and 30,200 sub-transmission structures. Out of the 84 sale contracts, forty-three (43) of them, with the total sale price of P2.08 billion, have been approved by the ERC. The forty-one (41) sale contracts are still for ERC filing, evaluation or approval.

Consistent with the EPIRA provision to extend concessional financing to ECs, TransCo implemented the lease purchase arrangements with a 20-year term. Of the 84 sale contracts already signed, fifty-four (54) of which are under the lease purchase agreements with 50 ECs/consortia, valued at about P2.9 billion. The remaining thirty (30) contracts involved sales to private distribution utilities.

TransCo is looking forward to a sale of about 800 ckt-kms of sub-transmission lines and 560 MVA of substation equipment among the thirty-three (33) interested distribution utilities/consortia for the next four years.

### III. ELECTRICITY RATES

The DOE continuously monitors data on electricity rates to provide the JCPC and the public an idea of what is the latest information on electricity rates. This section considers the reports submitted by the ERC and also the data and information gathered by the DOE from various sources to fully substantiate and provide the JCPC with significant updates to serve as reference in identifying areas that may require legislative actions.

#### A. PSALM/NPC Effective and Basic Generation Charges

PSALM/NPC is continuously implementing the March 2009 provisionally approved Basic Generation Charges (BGC) pending ERC decision on the proposed Asset Valuation Guidelines. Meanwhile, the NPC Average Effective Rate for the report period is summarized in Table 5 below.

NPC Effective Generation Charges (EGC) for the billing months May 2011 to October 2011 in Mindanao increased by PhP0.02540/ kWh, while for Luzon and Visayas, the NPC-EGC declined by PhP0.0074/kWh and PhP0.0228/kWh respectively as reduction to its DAA-ICERA.

Table 5. NPC Effective Generation Charges (PhP/kWh)

| Billing Month  | Billing Period                      | Luzon  | Visayas | Mindanao |
|----------------|-------------------------------------|--------|---------|----------|
| May 2011       | 26 April 2011 - 25 May 2011         | 5.0179 | 4.0971  | 2.6739   |
| June 2011      | 26 May 2011 - 25 June 2011          | 5.0196 | 4.0953  | 2.6745   |
| July 2011      | 26 June 2011 - 25 July 2011         | 5.0140 | 4.0976  | 2.6742   |
| August 2011    | 26 July 2011 - 25 August 2011       | 5.0056 | 4.0726  | 2.6719   |
| September 2011 | 26 August 2011 - 25 September 2011  | 5.0154 | 4.0768  | 2.9286   |
| October 2011   | 26 September 2011 - 25 October 2011 | 5.0105 | 4.0743  | 2.9279   |

Source: NPC



Relative to the pending NPC petition for the recovery of its costs under the deferred accounting adjustments, ERC issued its decision on 15 November 2010, on the 9<sup>th</sup> to 14<sup>th</sup> Incremental Costs on Foreign Currency Exchange Rate (ICERA) Fluctuation covering the test period January 2007 to June 2009. The said decision approved for refund adjustments to Luzon and Mindanao customers while a recovery was approved for Visayas grid.

PSALM through its letter dated 05 May 2011 sent to the ERC and NPC the notice to cease implementation of the said refund for certain customers effective 26 March-25 April billing period since the said costs/charges was already exhausted.

## **B. Transmission Rates**

Following are the developments on the transmission rates charges imposed by the NGCP as approved by the ERC:

### **1. Maximum Annual Revenue Approval (MAR)**

Under the Financial Determination (FD) for the Third Regulatory Period, ERC approved the Unsmoothed and Smoothed MAR (SMAR). The Smoothed MAR was based on the three percent (3%) Efficiency Factor which will be used in translating the ARR to the annual effective MAR for each of the regulatory year of the Third Regulatory Period. This annual rate translation of the maximum transmission wheeling rates should be determined in accordance with the timetable and process specified under Article VI of the RTWR. Likewise, the revenue cap form of price control for the Third Regulatory Period provided in Article V of the RTWR shall be continuously applied.

On 04 July 2011, the Commission approved NGCP's Maximum Annual Revenue (MAR) for the calendar year 2011 in the amount of PhP44,889.03 million which was PhP1,395.71 million lower than the provisionally approved amount of PhP46,284.74 million last 17 January 2011 and Performance Incentive Scheme (PIS) in the amount of PhP322.00 million.

The difference was mainly due to the computation of the MAR 2010. NGCP proposed a MAR 2010 equal to the gross effective MAR 2010 while the Commission used the adjusted MAR to account for the initial price correction factor (Po) amounting to PhP1.435 billion as starting point for the smoothing process.

As discussed in the FD, the revenue smoothing is undertaken to reduce the likelihood of price shocks to customers and revenue shocks to the Regulated Entity. The objective of the process for smoothing revenue is to achieve a revenue path whereby the net present value (NPV) of the smoothed revenue path is equal to the NPV of the MAR at the end of 2010, including of any revenue adjustment that was applied in 2010.

The PIS rewards or penalizes NGCP to the extent that the actual level of performance of the grid for the regulatory year exceeds or falls below the target level of performance as defined in the Final Determination (FD). The commission found the computed PIS of PhP322 million for NGCP which is consistent with the provisions of the RTWR which is below the maximum reward of PhP1,322.37 million as defined in Clause 1.7, Chapter 1 of the FD.

### C. Distribution Utilities (DUs) Rates

The following discussions provide updates on the electricity rates for the month of May to October 2011 as well as related developments on regulatory actions, with rate cases being under the exclusive jurisdiction of the ERC.

#### 1. Average Effective Electricity Rates

The country's average electricity rates rate as of October 2011 is PhP7.9653/kWh, PhP0.3864/kWh lower compared with the June 2011 average systems rate. Among the three major grids, Luzon has the highest rate of PhP8.4300/kWh while Mindanao remains the lowest at PhP6.1131/kWh for October 2011.

Table 6. Average Systems Rates, June vs October 2011(PhP/kWh)

| Grid        | Electric Cooperatives |         |         | Private Distribution Utilities |         |         | National Average |         |         |
|-------------|-----------------------|---------|---------|--------------------------------|---------|---------|------------------|---------|---------|
|             | June                  | October | Change  | June                           | October | Change  | June             | October | Change  |
| Luzon       | 9.3293                | 8.2594  | -1.0699 | 8.8427                         | 8.6006  | -0.2421 | 9.0860           | 8.4300  | -0.6560 |
| Visayas     | 8.1718                | 8.0900  | -0.0818 | 7.4332                         | 7.9130  | 0.4798  | 7.8025           | 8.0015  | 0.1990  |
| Mindanao    | 6.1715                | 5.9519  | -0.2196 | 6.3158                         | 6.2743  | -0.0415 | 6.2437           | 6.1131  | -0.1306 |
| Philippines | 8.1408                | 7.4561  | -0.6847 | 8.5626                         | 8.4745  | -0.0881 | 8.3517           | 7.9653  | -0.3864 |

Sources: : ECs – NEA's Quarterly Unbundled Power Rate Schedules  
PDUs – Monthly Operations Report

The ECs' national unbundled electricity rate for September 2011 is PhP8.9377/kWh, a decrease of PhP0.1850/kWh from the June 2011 level. Generation costs comprised 47 percent of ECs' national average effective electricity rates followed by distribution costs share of 24 percent of the total. The largest reduction in ECs' rates was noted in the Luzon grid at PhP9.3293/kWh in June 2011 to PhP8.2594/kWh in October 2011. Mindanao however, posted the lowest generation costs at PhP2.9009/kWh comprising only 40 percent of the unbundled residential electricity rates.

Table 7. EC's Unbundled Average Effective Residential Electricity Rates, September 2011 (PhP/kWh)

| Bill Subgroup    | LUZON         |               | VISAYAS       |               | MINDANAO      |               | NATIONAL      |               |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                  | PhP/kWh       | Percent share | PhP/kWh       | Percent share | PhP/kWh       | Percent share | PhP/kWh       | Percent share |
| Generation       | 4.8264        | 48.60         | 4.8864        | 50.94         | 2.9009        | 39.80         | 4.2046        | 47.04         |
| Transmission     | 1.1319        | 11.40         | 0.9885        | 10.31         | 1.4639        | 20.08         | 1.1948        | 13.37         |
| System Loss      | 0.8392        | 8.45          | 0.7652        | 7.98          | 0.5377        | 7.38          | 0.7140        | 7.99          |
| Distribution *   | 2.2383        | 22.54         | 2.2033        | 22.97         | 1.9203        | 26.34         | 2.1206        | 23.73         |
| Subsidies        | 0.0684        | 0.69          | 0.0395        | 0.41          | 0.0573        | 0.79          | 0.0551        | 0.62          |
| Government Taxes | 0.8275        | 8.32          | 0.7093        | 7.39          | 0.4091        | 5.61          | 0.6486        | 7.25          |
| <b>Total</b>     | <b>9.9317</b> | <b>100.00</b> | <b>9.5922</b> | <b>100.00</b> | <b>7.2892</b> | <b>100.00</b> | <b>8.9377</b> | <b>100.00</b> |

Source: NEA

\* Includes Distribution, Supply and Metering Charges

Source: ECs' submission of their unbundled effective rates to NEA

The national average systems rates of private distribution utilities (PDUs) decreased by PhP0.0881/kWh from PhP8.5626/kWh in June 2011 to PhP8.4745/kWh in October

2011 however there is an increase of PhP0.4798 in the Visayas grid. Among the PDUs, Manila Electric Company (MERALCO) has the highest average effective rate for the residential customers at PhP10.5705/kWh for the billing period October 2011. On the other hand, Iligan Light & Power, Inc. (ILPI) remains to have the lowest average effective residential rates at PhP5.6346/kWh for the same billing period.

Table 8. PDUs Average Effective Rates (AER), October 2011 (PhP/kWh)

| PDU                          | Residential    | Commercial    | Industrial    | Average       |
|------------------------------|----------------|---------------|---------------|---------------|
| <b>Luzon Grid Average</b>    | <b>10.4189</b> | <b>9.3571</b> | <b>7.5053</b> | <b>8.6006</b> |
| MERALCO                      | 10.5705        | 9.4091        | 7.5099        | 8.6273        |
| DECORP                       | 8.3844         | 8.1117        | 7.9401        | 8.2216        |
| LUECO                        | 8.1365         | 8.7401        | 8.8447        | 8.4167        |
| AEC                          | 8.1323         | 8.6216        | 11.5725       | 8.4160        |
| CELCOR                       | 9.4557         | 9.1799        | 8.9517        | 9.3071        |
| SFELAPCO                     | 7.5842         | 7.9245        | 6.4585        | 7.1987        |
| TEI                          | 8.8055         | 8.1111        | 7.2721        | 8.1830        |
| IIEEC                        | 8.7126         | 7.4516        | 7.4677        | 8.2483        |
| <b>Visayas Grid Average</b>  | <b>8.0300</b>  | <b>8.7412</b> | <b>7.5641</b> | <b>7.9130</b> |
| PECO                         | 9.4167         | 9.1643        | 9.3180        | 9.1406        |
| MECO                         | 7.3134         | 7.2902        | 8.0051        | 7.4829        |
| VECO                         | 8.0103         | 9.2121        | 7.3108        | 7.8450        |
| BLCI                         | 5.5640         | 5.3387        | -             | 5.4069        |
| <b>Mindanao Grid Average</b> | <b>6.6356</b>  | <b>6.5339</b> | <b>5.8478</b> | <b>6.2743</b> |
| CEPALCO                      | 7.2350         | 6.7111        | 5.8566        | 6.4453        |
| DALIGHT*                     | 6.1413         | 6.4847        | 5.4324        | 5.7950        |
| COLIGHT                      | 6.2634         | 6.7161        | 5.8533        | 6.1678        |
| ILPI                         | 5.6346         | 5.8487        | 5.6636        | 5.7106        |
| <b>National Average</b>      | <b>10.1120</b> | <b>9.2745</b> | <b>7.4580</b> | <b>8.4745</b> |

Source: PDUs -Monthly Operations Report

Note: Based on Monthly Operations Report submitted by Private DUs (AER = Revenue over Sales)

\*September 2011 data

For October 2011 billing, MERALCO's effective residential rates for the different residential customer classes ranged from PhP10.2588/kWh to PhP11.6930/kWh of which the highest component was generation costs at PhP5.4202/kWh. Meanwhile, MERALCO distribution charges for its different residential customer classes comprised 19 percent to 28 percent of the total effective residential rates equivalent to PhP1.9417/kWh and PhP3.2235/kWh, respectively.

Table 9. Summary of MERALCO Residential Unbundled Power Rates, October 2011

| BILL SUBGROUP       | 0 to 200 kWh<br>(P/kWh) | %          | 201 to 300<br>kWh<br>(P/kWh) | %          | 301 to 400<br>kWh<br>(P/kWh) | %          | Over 400kWh<br>(P/kWh) | %          |
|---------------------|-------------------------|------------|------------------------------|------------|------------------------------|------------|------------------------|------------|
| Generation          | 5.4202                  | 53         | 5.4202                       | 51         | 5.4202                       | 49         | 5.4202                 | 46         |
| Transmission        | 1.0481                  | 10         | 1.0481                       | 10         | 1.0481                       | 9          | 1.0481                 | 9          |
| System Loss         | 0.6501                  | 6          | 0.6501                       | 6          | 0.6501                       | 6          | 0.6501                 | 6          |
| Distribution        | 1.9417                  | 19         | 2.2990                       | 22         | 2.6362                       | 24         | 3.2235                 | 28         |
| Subsidies*          | 0.1349                  | 1          | 0.1349                       | 1          | 0.1349                       | 1          | 0.1349                 | 1          |
| Universal Charge    | 0.1188                  | 1          | 0.1188                       | 1          | 0.1188                       | 1          | 0.1188                 | 1          |
| Government<br>Taxes | 0.9450                  | 9          | 0.9851                       | 9          | 1.0250                       | 9          | 1.0974                 | 9          |
| <b>TOTAL**</b>      | <b>10.2588</b>          | <b>100</b> | <b>10.6562</b>               | <b>100</b> | <b>11.0333</b>               | <b>100</b> | <b>11.6930</b>         | <b>100</b> |

Source: MERALCO Website

\* Lifeline Rate Charges (applicable to 101 kWh consumption and up) + Cross Subsidy Charge

## 2. Regulatory Actions

The following report on regulatory actions on electricity rates are based on ERC issuances as gathered in the ERC website.

### a. Generation

- On June 9, 2011, First Bay Power Corporation (FBPC) and AP Renewables, Inc. (APRI) jointly filed Motion for Reconsideration (of the January 24, 2011 ERC Decision) on the approval of the power supply agreement (PSA) between FBPC and APRI. On the said Decision (24 January 2011), ERC considered and approved the provisional authority on the average generation rate requested by FBPC & APRI in the amount of PhP3.7772/kWh. Unfortunately, the said amount is much lower than the generation rate agreed upon in the PSA between FBPC and APRI, thus the said joint motion for reconsideration.

FBPC and APRI provided the Commission various discussions/considerations i.e. indicative price (increase) structure of generation costs as of April 2011. Likewise, it was also cited the issue on the reasonableness of the PSA price, and APRI manifests to consider other factors affecting base generation rate; The Commission after thorough discussion granted APRI a Capital Cost Recovery Fee (CCRF) of 2.5356/kWh; WACC of 15.26%; Plant Operation and Maintenance Cost (O&M) of P1.8971/kWh; and General and Administrative Expenses (G&A Expenses) of P0.8212/kWh.

The table below shows a comparison of the Commission's recalculated Base Generation Rate, APRI's Computed Base Generation Rate and APRI's Proposed PSA Rate:

*Table 10. Total Base Generation Rate*

| Particulars          | Commission's Recalculated Base Generation Rate (P/kWh) | APRI's Computed Base Generation Rate (PhP/kWh) | APRI's PSA Rate (PhP/kWh) |
|----------------------|--|--|---------------------------|
| CCRF                 | 2.5356   | 2.9376   | -                         |
| Plant O&M Costs      | 1.8971   | 2.0205   | -                         |
| Plant G & A Expenses | 0.2812   | 0.2812   | -                         |
|                      | <b>4.7139</b>  | <b>5.2393</b>                                  | <b>4.2096*</b>            |

Source: ERC Website

Note: \*Weighted Average Time-of-Use (TOU) Rate for the Billing Month June 2010. For December 2010, APRI's Weighted Average TOU Rate was PhP3.9496/kWh

The Commission's recalculated Base Generation Rate, a lower by approximately PhP0.5254/kWh compared to APRI's computed Base Generation Rate. However, the recalculated Base Generation Rate is higher than APRI's Proposed PSA Rate by approximately PhP0.5043/kWh. This being the case, the Commission deems it prudent to peg the Base Generation Rate at APRI's proposed PSA Rate of PhP4.2096/kWh.

b. Transmission

- The ERC on its decision on ERC Case No. 2008-041 RC dated May 16, 2011, on the application for approval of the Ancillary Services Procurement Agreement (ASPA) between TRANSCO and NPC approved and authorized to recover the cost relative to the ASPA for the period June 23, 2008 to June 23, 2009 with the following formula and rates:

$$\text{Total Cost of Ancillary Services (AS)} = \text{Capacity Cost} + \text{Energy Cost} - \text{Energy Cost Adjustment}$$

Where:

$$\text{Capacity Cost per Month} = \sum(\text{kW as scheduled} \times \text{hours per month}) \times \text{Capacity Fee}$$

$$\text{Energy Cost per Month} = \text{kWh registered} \times \text{the contracted Energy Fee} + \text{AFC3}$$

$$\text{Energy Cost Adjustments} = \text{kWh registered (adjusted by applicable loss factor)} \times \text{ERC-approved NPC Visayas Grid rate}$$

$$\text{Capacity Fee} = 5.6204 \text{ PhP/kW (per hour)}$$

$$\text{Energy Fee} = 9.5040 \text{ PhP/kWh (per month)}$$

$$\text{Fuel Rate} = 0.264 \text{ liter/kWh at 33\% load factor}$$

- On July 14, 2011 the ERC on its decision to ERC Case No. 2010-152 RC regarding the application of the National Grid Corporation (NGCP) for the approval of the Maximum Allowable Revenue (MAR) for calendar year 2011 and Performance Incentive Scheme (PIS) in compliance with the alternative form of rate setting methodology under the Rules for Setting Transmission Wheeling Rates (RTWR) under the following effective MAR:

*Table 11. Effective Maximum Allowable Revenue (MAR) 2011 (In PhP Million)*

| Particulars  | Effective MAR 2011<br>(PhP, Million) |
|--------------|--------------------------------------|
| MAR          | 44,889.03                            |
| PIS          | 322.00                               |
| <b>TOTAL</b> | <b>45,211.03</b>                     |

Source: NGCP Website

The said MAR 2011 of PhP45.2 Billion is lower by PhP1.40 Billion compared to the provisionally approved MAR2011 of PhP46.6 billion.

c. Private Distribution Utilities (PDUs)

The ERC continued to adopt phased implementation of Performance-Base Rate Methodology for PDUs to Rules for Setting Distribution Wheeling Rates (RDWR).

Following are the updates:

1<sup>st</sup> Entry Group (MERALCO, DECORP, CEPALCO)

The PDUs under the 1<sup>st</sup> Entry Group have entered their 3<sup>rd</sup> Regulatory Period (July 1, 2011 to June 30, 2015). On various dates in June 2011, the ERC have already issued the Final Determination on their Annual Revenue Requirement (ARR) and Performance Incentive Scheme (PIS).

The ERC has yet to approve the applications for rate translation for the DUs under this group.

2<sup>nd</sup> Entry Group (MECO, ILPI, CLPC)

On February and June 2010, the ERC approved the rate translation for the 2<sup>nd</sup> Entry Group. The following are the approved rates:

*Table 12. Status of 2<sup>nd</sup> Entry Group PDUs Rate Application to ERC*

| DU   | Case Number/<br>Date of Filing | Regulatory<br>Year | RY 2009 Rate (PhP/kWh) |                 |                                |            | Status   |
|------|--------------------------------|--------------------|------------------------|-----------------|--------------------------------|------------|--|
|      |                                |                    | Previous<br>Rates      | ERC<br>Approved | Proposed<br>Rates<br>(RY 2011) | Difference |  |
| MECO | 2010-154<br>RC/<br>17-Dec-2010 | 2009-2013          | 1.0149                 | 1.0839          | 1.0891                         | 0.0052     | Final Decision<br>issued by ERC on<br>Feb. 28, 2011. |
| ILPI | 2010-153 RC<br>21-DEC-2010     | 2009-2013          | 1.1256                 | 1.3669          | 1.3696                         | 0.0027     | Final Decision<br>issued by ERC on<br>June 21, 2011. |
| CLPC | 2009-178 RC                    | 2009-2013          | 1.3189                 | 1.5056          | 1.7620                         | 0.2564     | Final Decision<br>issued by ERC on<br>Feb. 22, 2010. |

*Source: ERC*

d. Electric Cooperatives

1) On-Grid Electric Cooperatives

In preparation for the implementation of the revised Tariff Glide Path, pursuant to Article 7 (Tariff Glide Path Provision) of the Rules for Setting the Electric Cooperatives' Wheeling Rates (RSEC-WR), the ERC conducted training on 8-9 June 2011. The participants included the General Managers, Finance Managers and the Technical Services Division (TSD) Managers of each Electric Cooperative.

The RSEC-WR TGP governs the movement of the initial tariffs caps which refer to the maximum rates for Distribution, Supply, and Metering. It includes the (1) escalation factor that will be used in adjusting the rates to reflect the combined impact of inflation and load growth; (2) efficiency factor to account for the operational efficiency of the ECs in setting their rates; and (3) performance incentive that will either reward or penalize the EC for performing above or below the performance standard.

Under the revised TGP Rules, the Regulatory Period will now be six (6) years and will impact the rates by the 4th year of the First Regulatory Period. The implementation of the TGP will be done by batch as arranged into three (3) Entry Groups (1st, 2nd, and 3rd Entrants). The filing for the rate adjustment resulting

from the TGP implementation will be done on the 3rd year of the First Regulatory Period. The Reset Process from the TGP implementation for data collection will be in 2011 to 2014 and the new classification will be effective in 2017.

In another development, on July 6, 2011, the ERC issued Resolution No. 14, series of 2011, “A Resolution Modifying the Terms Members’ Contribution for Capital Expenditures (MCC) to Reinvestment Fund for Sustainable Capital Expenditures (RFSC) and MCC-Real Property Tax (RPT) to Provision for RPT as Provided in the Rules for Setting Electric Cooperatives’ Wheeling Rates (RSEC-WR)”.

The move is due to the diverging interpretations of the MCC interpreting it as a capital build-up or compulsory “capital contributions” from member-consumers. The Resolution therefore clarified that the intent of the RSEC-WR in translating Reinvestment Fund into MCC is to recognize that fact that the said MCC Charge indeed represents contributions from the member-consumers for the expansion, rehabilitation and upgrading of the ECs’ distribution system which should be reflected in their bills for greater transparency.

## 2) Off-Grid Electric Cooperatives

The Public Consultations for the Issues Paper on the Proposed Alternative Regulatory Framework for Electric Cooperatives (ECs) Servicing Off-Grid Areas was conducted on May 30, 2011 for Luzon stakeholders and June 1, 2011 for the Visayas and Mindanao stakeholders.

The Issues Paper aims to implement a more responsive regulatory framework to the operations of off-grid ECs considering the challenges they face in servicing isolated and sparsely populated areas. The Issues Paper will be used to analyze selected financial parameters which can provide basis on determining appropriate regulatory framework for off-grid ECs.

## C. Administration of Universal Charge (UC)

This section provides development on the implementation of UC pursuant to *Section 34 of the EPIRA*. Highlights include status of collection and disbursements, updates on PSALM’s application for the recovery of stranded contract costs and stranded debts, and the implementation of UC collection from self-generating facilities.

### 1. Total Collections/Disbursements for UC-ME and UC-EWR

Total collections/remittances to PSALM as of 30 October 2011 amounted to PhP19.236 billion. Out of this amount, PhP18.602 billion was disbursed by PSALM to NPC-SPUG and NPC for missionary electrification and for environment or watershed rehabilitation, in accordance with the provisions of the EPIRA. As of report period, total interest earnings

*Table 13. UC Collections & Disbursements, as of 31 October 2011 ( In Billion PhP)*

| Particulars                | Collections/<br>Remittances | Interests    | Disbursements | Balances     |
|----------------------------|-----------------------------|--------------|---------------|--------------|
| Missionary Electrification | 18.238                      | 0.043        | 18.263        | 0.018        |
| Environmental Charge       | 0.998                       | 0.058        | 0.339         | 0.717        |
| <b>Total:</b>              | <b>19.236</b>               | <b>0.101</b> | <b>18.602</b> | <b>0.735</b> |

Source: PSALM

from deposits and placements of UC funds amounted to PhP0.101 billion. This leaves the UC fund with a balance of about PhP0.735 billion as of 30 September 2011.

For the period January to October 2011, PSALM received a total of Php1.892 billion in UC remittances from collecting entities, and disbursed to NPC-SPUG the total amount of Php1.936 billion for missionary electrification. The monthly breakdown of the collections and disbursements are provided in Table 14.

Table 14. UC Collections and Disbursements for the Period January -September 2011 (In Billion Php)

| Month        | UC - ME      | UC - EWR     | Total        | UC-ME Disbursements |
|--------------|--------------|--------------|--------------|---------------------|
| January      | 0.242        | 0.012        | 0.254        | 0.289               |
| February     | 0.204        | 0.010        | 0.214        | 0.204               |
| March        | 0.172        | 0.010        | 0.182        | 0.179               |
| April        | 0.197        | 0.012        | 0.209        | 0.190               |
| May          | 0.173        | 0.010        | 0.183        | 0.165               |
| June         | 0.194        | 0.012        | 0.206        | 0.205               |
| July         | 0.200        | 0.012        | 0.212        | 0.203               |
| August       | 0.082        | 0.012        | 0.094        | 0.078               |
| September    | 0.086        | 0.012        | 0.098        | 0.085               |
| October      | 0.343        | 0.013        | 0.356        | 0.338               |
| <b>Total</b> | <b>1.892</b> | <b>0.116</b> | <b>2.008</b> | <b>1.936</b>        |

Source: PSALM

Disbursement of UC-EC to NPC is currently on hold pending ERC approval on the petition for watershed rehabilitation and management.

## 2. UC for Stranded Contract Costs (SCC) and Stranded Debts (SD)

Pursuant to EPIRA, the Petitions for the UC on SD and SCC were filed by PSALM before the ERC on 28 June 2011. SCC refers to the “excess of contracted cost of electricity under eligible contracts over the actual selling price of the contracted energy output of such contracts in the market”. SD on the other hand is calculated as the total debt service net of privatization proceeds and of the Php200-billion debt of the National Power Corporation absorbed by the government.

As of December 31, 2010, the actual aggregate eligible contract cost of obligations of NPC amounted to Php74.298 million for the periods covering CY2007 to CY2010 while NPC Stranded Debts amounted to Php65.019 million.

PSALM determined the final amounts for the UC-SD at Php0.313 per kWh to be collected over a fifteen-year recovery period and UC-SCC at Php0.3666 per kWh to be collected over a four-year period in accordance with the revised guidelines issued by the ERC. Hearings for the petitions were conducted in 5-6, 26 and 28 September 2011.

Following this, PSALM received proposals by some lawmakers to withdraw the UC petitions for the recovery of the SD and SCC. Based on the press release, while the matter is yet to be decided by the JPCP, PSALM is extensively studying the implications of such withdrawal.

## D. Assumption of Loans of Electric Cooperatives

As of 30 September 2011, PSALM has paid the National Electrification Administration (NEA), Other Government Agencies (OGAs) and Local Government Units (LGUs) the total of Php12.852 billion for the condonation of the ECs’ outstanding financial obligations.



Table 15. Status of Loan as of September 2011 (in Billion PhP)

|              | Total Assumption | Actual Payments      |              | Balance      |              |
|--------------|------------------|----------------------|--------------|--------------|--------------|
|              |                  | Amount               | %            | Amount       | %            |
| NEA          | 17.978           | 12.776 <sup>1/</sup> | 71.06        | 5.202        | 28.94        |
| LGU/OGA      | 0.096            | 0.076 <sup>2/</sup>  | 79.17        | 0.019        | 19.79        |
| <b>TOTAL</b> | <b>18.074</b>    | <b>12.852</b>        | <b>71.11</b> | <b>5.221</b> | <b>28.89</b> |

<sup>1/</sup>With application of the PhP2.215 Billion collection of NEA from ECs amounting to PhP369,652,000.00

<sup>2/</sup> Net of discount from the Provincial Government of Palawan amounting to PhP3,725,000.97

Source: PSALM

Of the PhP12.776 billion total payments to NEA as of 30 September 2011, about 75.24% or Php9.612 billion was used to pay the Rural Electrification loans incurred by the ECs, 15.59% of Php1.992 billion was for Mini-hydro loans, 9.10% or Php1.162 billion was for Dendro Thermal loans. Payments intended for house wiring services only amounted to Php9.574 million or 0.07%. On Table 15 is the summary of these payments.

Table 16. Breakdown of Payments to NEA per Type of Loan (as of September 2011)

| Type of Payment            | Amount Paid (In billion PhP) | Percentage to Total |
|----------------------------|------------------------------|---------------------|
| Rural Electrification Loan | 9.612                        | 75.24%              |
| Mini-hydro                 | 1.992                        | 15.59%              |
| Dendro Thermal             | 1.162                        | 9.10%               |
| House wiring               | 0.010                        | 0.07%               |
| <b>TOTAL</b>               | <b>12.776</b>                | <b>100.00%</b>      |

Source: PSALM

### E. Mandatory Rate Reduction (MRR)

Pursuant to *Section 72 of the EPIRA*, NPC continuously grant to residential customers the mandatory discount of 30-centavos/kWh. For the period April to October 2011, total discounts granted by NPC amounted to PhP676.47 million of which 65 percent were availed by residential customers in Mindanao, 22 percent in the Visayas and 13 percent in Luzon.

Table 17. Monthly Amount Incurred by NPC for Grant of MRR, April to October 2011

| Billing Month  | MERALCO              | REST OF LUZON        | TOTAL LUZON          | VISAYAS               | MINDANAO              | TOTAL                 |
|----------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| April 2011     | 5,172,690.30         | 4,263,910.08         | 9,436,600.38         | 20,084,581.86         | 58,855,190.04         | 88,376,372.28         |
| May 2011       | 8,387,174.86         | 4,784,938.17         | 13,172,113.03        | 20,529,433.51         | 68,402,330.52         | 102,103,877.06        |
| June 2011      | 11,310,086.13        | 4,973,382.86         | 16,283,468.99        | 22,250,391.59         | 62,851,407.75         | 101,385,268.33        |
| July 2011      | 10,547,112.05        | 4,653,784.10         | 15,200,896.15        | 22,352,448.64         | 60,225,893.67         | 97,809,238.46         |
| August 2011    | 9,207,207.46         | 2,838,448.20         | 12,045,655.66        | 20,978,035.54         | 62,271,564.88         | 95,295,256.08         |
| September 2011 | 7,076,107.39         | 4,610,040.19         | 11,686,147.58        | 20,868,424.70         | 62,829,132.99         | 95,383,705.27         |
| October 2011   | 5,551,114.71         | 4,515,770.27         | 10,066,884.98        | 21,339,283.45         | 62,856,303.08         | 94,262,471.51         |
| <b>TOTAL</b>   | <b>57,251,492.90</b> | <b>32,493,191.17</b> | <b>89,744,684.07</b> | <b>148,402,599.29</b> | <b>438,291,822.93</b> | <b>676,469,106.29</b> |

Source: NPC

### F. Lifeline Rate Subsidy Program

On 21 June 2011, Republic Act 10150 was signed into law. This extended the implementation of the lifeline rate subsidy by another 10 years. To date, coordination meetings are being conducted by the concerned government agencies with the ERC to study the possible changes in the current mechanism which is in placed to implement the subsidy program.

Meanwhile, Table 18 shows the current status of lifeline rate subsidy implementation, as provided by the ERC.

Table 18. Summary of Lifeline Subsidy for the month of November 2011

| Particulars  | PDU's          | ECs           | Total          |
|--|----------------|---------------|----------------|
| Amount of Subsidy Provided by Non-Lifeline Customers (Php)                         | 338,362,947.54 | 36,307,228.30 | 374,670,175.84 |
| Total Consumption of Lifeline Customers (kWh)                                      | 107,100,536    | 18,703,751    | 125,804,287    |
| Total Number of Lifeline Customers   | 2,073,259      | 1,240,572     | 3,313,831      |
| Total Number of Non-Lifeline Customers   | 3,305,120      | 4,869,173     | 8,174,293      |
| Total Discounts to Lifeline Customers (Php)  | 329,427,265.65 | 40,716,261.46 | 370,143,527.11 |
| <b>Average Amount of Subsidy Provided to Lifeline Customers (In Peso/kWh)</b>      | <b>3.16</b>    | <b>1.94</b>   | <b>2.98</b>    |
| <b>Average Amount of Subsidy Provided to Lifeline Customers (In Peso/Customer)</b> | <b>163.20</b>  | <b>29.27</b>  | <b>113.06</b>  |

Source: ERC

Based on the data above, lifeline electricity end-users consumed a total amount of 25 GWh of electricity in August 2011. Of the said amount, 23% were from Private Distribution Utilities (PDU's) while 77% were consumed by lifeline electricity end-users of ECs. This amount of consumption translated to PhP 61 Million of subsidy all over the country. This resulted to an average benefit to lifeline customers from PDU franchises amounting to PhP 2.59/kWh and PhP 2.40 in EC areas to a national average of PhP 2.44/kWh subsidy.

#### IV. COMPETITION

This section provides an update on key areas of competition to include the operation of the Wholesale Electricity Spot Market (WESM), preparation for open access and retail competition and monitoring of compliance to *Section 45 of the EPIRA*. Significant developments include declaration of the commencement date of Retail Competition and Open Access and the increase in number of WESM participants mainly due to the integration of the Visayas WESM as well as due to the continuous implementation of the Disconnection Policy promulgated by the DOE in 2010.

##### A. Wholesale Electricity Spot Market Implementation

As of October 2011, the integrated WESM has a total of 112 participants comprised of 47 generating companies and 65 customer trading participants comprised of 6 Private Distribution Utilities, 46 ECs, 6 Bulk end-users and 7 wholesale aggregators. There are 40 applications being evaluated in Luzon, mostly intending trading participants while there were no applications whether generators or customers in the Visayas.

1) Following are highlights of WESM trading for the period April 2011-October 2011:

- Average system demand for Luzon and Visayas registered at 5,723 MW
- Peak demand was recorded at 7,530 MW which occurred in the month of June
- Spot market transactions amounted to 2,494 GWH, translating to 8 percent of the total energy consumed in the Luzon and Visayas regions during the six

months period while the remaining 92 percent of the total volume was transacted and settled outside the market.

- Effective Spot Settlement Price for customers amounted to Php 5,257 per MWH

Table 19. Luzon and Visayas Trading Results

| Billing Month | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers |
|---------------|-------------|----------------------------|----------------|-----------------------|
| 58   Apr-2011 | 7,037       | 7,419                      | 5,384          | 6,953                 |
| 59   May-2011 | 7,507       | 7,326                      | 6,059          | 6,892                 |
| 60   Jun-2011 | 7,530       | 7,338                      | 5,828          | 6,964                 |
| 61   Jul-2011 | 7,404       | 7,742                      | 5,814          | 6,722                 |
| 62   Aug-2011 | 7,188       | 7,394                      | 5,699          | 6,847                 |
| 63   Sep-2011 | 7,099       | 7,039                      | 5,686          | 6,789                 |
| 64   Oct-2011 | 7,219       | 7,252                      | 5,594          | 6,552                 |

Source: PEMC MO

Table 20. Metered Quantity

| Billing Month | Metered Quantity (Load), MWh | Spot Quantity (Load), MWh | %   | Bilateral Contract Quantity, MWh | %   |
|---------------|------------------------------|---------------------------|-----|----------------------------------|-----|
| 58   Apr-2011 | 4,313,514.71                 | 202,777.98                | 5%  | 4,110,736.73                     | 95% |
| 59   May-2011 | 4,675,217.40                 | 399,466.39                | 9%  | 4,275,751.00                     | 91% |
| 60   Jun-2011 | 4,665,692.14                 | 453,082.12                | 10% | 4,212,610.01                     | 90% |
| 61   Jul-2011 | 4,496,424.04                 | 358,118.31                | 8%  | 4,138,305.73                     | 92% |
| 62   Aug-2011 | 4,588,527.67                 | 280,049.63                | 6%  | 4,308,478.03                     | 94% |
| 63   Sep-2011 | 4,591,257.49                 | 364,979.67                | 8%  | 4,226,277.81                     | 92% |
| 64   Oct-2011 | 4,359,048.50                 | 435,802.47                | 10% | 3,923,246.03                     | 90% |

Source: PEMC MO

- Generation in Luzon and Visayas for the billing period May to October 2011 was dominated by Coal Power Plants at 37.75 percent followed by Natural Gas Plants at 36.08 percent. Geothermal contributed a share of 14.9 percent, hydro with percent. Diesel powered power plants contributed about 2 percent, a minimum contribution of generation came from Wind-Based Plants at 0.07 percent.

Table 21. WESM Generation Mix

| Billing Month | Hydro | Geo   | Coal  | Nat Gas | D/O  | Wind   | Biofuel |
|---------------|-------|-------|-------|---------|------|--------|---------|
| 59   May-11   | 4.4%  | 14.6% | 42.2% | 35.7%   | 2.9% | 0.056% | 0.036%  |
| 60   Jun-11   | 5.8%  | 15.1% | 41.1% | 36.9%   | 1.0% | 0.049% | 0.000%  |
| 61   Jul-11   | 7.9%  | 15.4% | 40.1% | 34.6%   | 2.0% | 0.095% | 0.000%  |
| 62   Aug-11   | 9.4%  | 15.3% | 34.6% | 38.5%   | 2.1% | 0.056% | 0.000%  |
| 63   Sep-11   | 13.6% | 14.7% | 33.9% | 36.5%   | 1.3% | 0.081% | 0.000%  |
| 64   Oct-11   | 13.7% | 14.3% | 34.6% | 34.3%   | 3.1% | 0.100% | 0.006%  |

Source: PEMC-MO

## 2) Status of Pending ERC Regulatory Filings

### a. Market Fees

- ERC issued various Orders setting the hearings on PEMC's application for the approval of the level of Market Fees which were on 17 & 25 October, and 15 November 2011
- On 15 September 2011, PEMC filed an application for the approval of additional market fees for the New Market Management System (NMMS) in the estimated amount of PhP841.05 M. On 26 September 2011, ERC Ordered set the application for public hearings on 24 & 25 October 2011, and 16 November 2011.
- PEMC's petition for the review of MMS Migration is still pending with the Court of Appeals (CA). An additional public hearing for PEMC's application on the approval of Market Fees for the WESM Visayas, was conducted on 14 September 2011. On 29 September 2011, PEMC filed its Formal Offer of Evidence and Compliance, highlighting the MDOM Software Modification Project. As regard to the Market Fees Setting Rules (MFSR) on 29 September 2011, PEMC received the Resolution of the CA noting PEMC's Manifestation and considering the case closed and terminated for lack of interest on the part of petitioner.

### b. Pricing and Cost Recovery Mechanism for Reserves (PCRM)

- On 06 June 2011, the ERC issued an Order denying PEMC's prayer for the approval of the phased-in implementation of the WESM PCRM for Reserves and the deferral of the filing for approval of the reserve market in the Visayas pending the ERC's resolution on the Luzon reserve market.
- However, PEMC's motion to implead the System Operator (SO) was granted. The NGCP as SO was directed to coordinate and cooperate with PEMC to accomplish the operational enhancements earlier directed by the ERC. The Order further read: "Considering the integration of the Visayas to the Luzon Grid, the Commission reiterates PEMC's compliance, in coordination with the NGCP, with the directives embodied in the November 15, 2010 Order with modifications as follows:
  - a) *Within three (3) months from receipt of this Order, to submit measures to Mitigate Market Power; and*
  - b) *Within six (6) months from receipt of this Order to:*
    - i. *Implement an Ex-ante Partial Effectiveness Factors to allow broader competition in Reserve Market Categories;*
    - ii. *Realign the Specification of Reserve Services to create a Fast Contingency Service;*
    - iii. *Set up New Lower Reserve Service;*
    - iv. *Introduce ILD as a Fully Functioning Reserve Service;*
    - v. *Set up interim arrangement for ILD;*

- vi. *Set up appropriate changes in the PGC; and*
- vii. *Submit Plans for future enhancements and develop interim plans." (hereinafter, collectively referred to as "Operational Enhancements")"*

On 26 September 2011, PEMC filed a Manifestation and Motion where it prayed that an Order be issued:

- Confirming PEMC's submission of Market Power Mitigation Measures for the WESM Reserve Market on 1 August 2011;
- Directing service to NGCP-SO of a copy of the 6 June 2011 Order; and
- Noting PEMC's Manifestation that it shall submit a conceptual framework to implement the directives of the Commission.

### 3) Update on WESM Governance Activities

Following are highlights of the activities of the various WESM governance committees for the report period.

#### *c. Market Surveillance Committee (MSC)*

Held consultative meeting with Grid Management Committee (GMC) on its monitoring of compliance with Clause 6.3.3 on the Operational Responsibilities of the generators under the Philippine Grid Code (PGC), which requires the generators to fully deliver the capabilities declared in their Connection Agreement or Amended Connection Agreement, and to provide accurate and timely planning operations data to the Grid Owner and System Operator. This is significant MSC's monitoring of the trading participants' compliance to the must-offer rule.

The MSC also approved the Revised Process Flowcharts in the Compliance Monitoring, Reporting and Evaluation on the Must Offer Rule and RTD Schedule/Instruction, as part of its ongoing initiative to review and streamline current procedures and processes.

#### *d. Dispute Resolution Administrator (DRA)*

The Dispute Resolution Group (DRG) recommended for WESM Rules amendments to separate the DRG from the governance structure of the PEMC and instead outsource mediators and arbitrators for disputes in the WESM from a pool of accredited mediators and arbitrators. This was approved by the PEM Board on 30 June 2011 leading to the dissolution of the DRG, the appointment of a new DRA under the new structure and the establishment of the Dispute Management Protocol (DMP).

#### *e. Rules Change Committee (RCC)*

The RCC is mandated to provide assistance to the PEM Board and the Department of Energy (DOE) in the formulation and amendment of the WESM Rules and the Market Manuals. The formulation and amendment of Rules and Manuals is aimed at enhancing market design, as well as refining market processes and operations appropriate for the current environment.

During the covered period, the RCC deliberated and approved the proposed New WESM Manual on the Segregation of Line Rental Trading Amounts which documents the manner by which the line rental trading amount is computed in the WESM as well as provides the methodology for segregating line rental trading amounts into losses and congestion cost. It was subsequently approved by the PEM Board during its meeting on 25 August 2011.

The RCC likewise continued its deliberation on the Proposed Amendments to the WESM Manual on the Management of Must-Run Units which involve revisions on the compensation and settlement mechanism to comply with ERC Order dated 6 February 2008 in ERC Case No. 2006-007 RC, as well as provide for regional application of the methodology for allocating the MRU settlement. For this purpose, regional application means that the application of cost recovery will be applied only to the region where the must-run unit is implemented. The proposal also involves revisions on the flowchart to reflect the current procedures being followed by the System Operator (SO) in designating and scheduling of MRUs. Other RCC accomplishments during the report period are detailed in *Annex No. 5*.

*f. Technical Committee (TC)*

The TC provided recommendation to the RCC on the proposed amendments to the Management of MRU Manual Issue 4.0. It proposed that WESM should strictly enforce the must-offer rule and ensure the reliability and availability of Day-Ahead Projection (DAP) figures since SO is using it for ancillary service planning and scheduling.

The TC likewise reviewed the NGCP's recommendations of still using the +/-3% dispatch deviation and lowering of trading interval (i.e. 30 minutes or lower) in which it highlighted that there is a need to determine the dispatch tolerance level per type of plant based on historical information.

On the issues on Automatic Load Dropping (ALD) and Manual Load Dropping (MLD), the TC raised concerns on the need to look at the infrastructure requirements to address MLD of Loads with Bilateral Contracts and the need to further review and provide new market policies. Other accomplishments of the Technical Committee during the report period are detailed in *Annex No. 6*.

*g. PEM Audit Committee*

PA Consulting Group Ltd. (PA) of New Zealand, the External Auditor for the 2<sup>nd</sup> MO presented its findings and recommendations to the PEM Board on 25 August 2011. On 26 August 2011, PA submitted the draft audit report to the PAC, for final review and comments/responses from PEMC management. The second MO Audit will conclude with the acceptance of the Final Audit Report and Audit Certificates for all WESM-related numerical software by the PAC, WESM Audit Technical Working Group (TWG) and PEMC.

The said audit covered the review of the systems and procedures on market operations, and the billing and settlement, including the interfaces with the System Operator (SO), the Metering Services Providers (MSP), WESM Participants, the ERC and the DOE for the period 26 June 2009 to 25 June 2011.

4) WESM Registration

Table 22. Registration Update as of October 2011 (Luzon and Visayas)

| CATEGORY                             | EXPECTED<br>(Luz & Vis) | REGISTERED |           |           |           | APPLICANT |     | NOT REGISTERED |          |   |
|--------------------------------------|-------------------------|------------|-----------|-----------|-----------|-----------|-----|----------------|----------|---|
|                                      |                         | DIRECT     |           | INDIRECT  |           | LUZ       | VIS | LUZ            | VIS      |   |
|                                      |                         | LUZ        | VIS       | LUZ       | VIS       |           |     |                |          |   |
| Generation Companies                 | 48                      | 25         | 22        |           |           |           |     |                | 1        |   |
| Customer Trading Participants        | Private DUs & LGUs      | 15         | 3         | 3         | 4         | 0         | 3   |                | 1        | 1 |
|                                      | ECs                     | 72         | 23        | 23        | 14        | 5         | 7   |                |          |   |
|                                      | Bulk users              | 111        | 3         | 3         | 37        | 22        | 29  |                | 17       |   |
|                                      | Wholesale aggregators   | 7          | 7         |           |           |           |     |                |          |   |
| Total Customer Trading Participants  | 205                     | 36         | 29        | 55        | 27        | 40        |     | 18             | 1        |   |
| <b>TOTAL PARTICIPANTS/APPLICANTS</b> | <b>253</b>              | <b>61</b>  | <b>51</b> | <b>55</b> | <b>27</b> | <b>40</b> |     | <b>18</b>      | <b>2</b> |   |

Source: PEMC

Notes:

1. Changes from August 2011 WESM Registration Status Update:

- a. Total number of expected participants is 253 from 254 and total expected customer trading participants is 205 from 206. This is because the number of expected bulk users is reduced by 1 from 112 to 111 with the inclusion of Hanjin Heavy Industries and Construction under Subic Enerzone Corporation. It was explained that HHIC facilities are located within the SEZ facilities and as such, is not to be registered separately.
- b. Panay Electric Company (PECO) is excluded from the list of registered Indirect WESM Members (private distribution utilities) in the Visayas, as its membership is recommended to be deferred due to pending issues in regards its connection to the grid. Thus, the total number of registered Indirect Members in the Visayas is now 27 instead of 28.
- c. La Union Electric Cooperative, Inc. was approved as Direct WESM Member, bringing total number of Luzon ECs registered as Direct WESM Member to 23.
- d. Applications were received from two bulk users in Luzon, namely Linde Philippines, Inc. (formerly CIGI) and Itogon Suyoc Resources bringing total number of bulk user applicants in Luzon to 29 and reducing non-registered bulk users to 17.
- e. Application was received from Bohol Enterprises, Inc., bulk user in the Visayas, bringing total number of Visayas bulk users registered as Indirect WESM members to 22.

2. Expected number of wholesale aggregators is based on number of applicants, and not based on number of licensed aggregators.

**B. Open Access and Retail Competition**

On 06 June 2011, the ERC declared that the compliance to the pre-conditions under *Section 31 of the EPIRA* for the implementation of Retail Competition and Open Access (RCOA) has been fulfilled. Specifically for the compliance to *Section 31 (d) and 31 (e)*, as well as the

additional pre-condition stipulated under ERC Resolution No. 3, Series of 2007, the ERC declared the compliance as follows:

- *Fulfillment of the requirements under Section 31 (d) and (e)*

As presented by PSALM the computation for the purpose of determining the compliance to the said pre-requisites was based on the list of power plants for privatization/disposal as approved and endorsed by the Joint Congressional Power Commission (JCPC) through Resolution No. 2002-02 issued in 29 August 2002.

Accordingly, the government has already turned-over 79.56 percent of its generating assets to the winning bidders as of March 2011. This is equivalent to 3,370.31 MW out of 4,236.18 MW total generating assets offered for privatization in Luzon and Visayas. With regard to the transfer of the contracted energy outputs of NPC-IPPs to IPP Administrators (IPPA), PSALM has already transferred 76.85 percent of the total NPC contracted energy outputs to the IPPAs which is equivalent to 3,593.91 MW out of 4,676.41 MW in Luzon and Visayas.

- *Readiness of the necessary infrastructures*

One of the fundamental requirements of the RCOA is the adequacy of generation supply in order to prevent exercise of market power in the retail competition. In its decision on Case No. 2011-004 RM, the ERC cited DOE's submission of the supply and demand outlook for the next five years in Luzon and Visayas to justify sufficiency of supply. Positive outlook were presented for both grids considering the commercial operations of about 710 MW coal power plants in the Visayas and 600 MW coal power in Luzon in 2013. On this basis, the ERC conclude that the supply conditions would be sufficient to sustain the operations of the retail market.

As regard to the readiness of the transmission network, the NGCP provided its list of ongoing and proposed transmission projects in Luzon and Visayas. The projects are intended to improve the performance of the transmission system and minimize possible occurrences of congestions. According to NGCP, the projects in the Visayas which are expected to be completed in 2011 will enable to transport power from Luzon to Leyte and provide adequate power to Cebu, Negros and Panay sub-grids which have been experiencing power shortages due to transmission constraints and increasing power demand. The ERC found this sufficient enough to support the wholesale market which in turn will also be sufficient enough to support the retail market.

With the completion of most of the requirements as provided in *Section 31*, based on the resolutions and decisions on various applications for unbundling and removal of cross subsidy and the commercial operation of the wholesale electricity spot market in Luzon and Visayas as presented at ERC Case no. 2011-004 the ERC determined that all legal pre-conditions have been fulfilled. Relative to this, the ERC issued Resolution No. 10, Series of 2011 declaring 26 December 2011 as the open access date to mark the commencement of the full operations of the competitive retail electricity market in Luzon and Visayas. Corollary to this, all electricity end-users with an average demand of at least one (1) MW for the past twelve months before 26 December 2011, as certified by the ERC to be a contestable customer, shall have the right to their own electricity suppliers.

However, to ensure readiness of stakeholders and the market environment, the DOE created the RCOA Steering Committee (RCOA-SC) through Department Circular No. 2011-06-0006 to assist in recommending policies towards ensuring the sufficiency of existing rules, infrastructures and other institutional requirements necessary to achieve smooth transition to RCOA.



Chaired by the DOE, RCOA-SC membership is composed of heads of DOF, ERC, TRANSCO, PSALM, NPC, NEA, PEMC, PEZA, and NGCP with ERC as observer and resource agency. Three (3) technical working groups (TWGs) were created to address technical, financial, and risk management issues concerning RCOA implementation. Each group was tasked to identify the potential issues respective to their areas of concerns and to regularly coordinate and interact with ERC to validate and determine if any identified issue had been considered and addressed in the ERC issuances.

From its creation to the date of this report, the RCOA-SC discussed the following possible recommendations:

i. Deferment of the Implementation of RCOA on 26 December 2011 to a later date

One of the major recommendations is the deferment of the RCOA implementation. As suggested by some proponents, the RCOA implementation should be deferred until such time that the necessary infrastructures and guidelines are all set-up or to any viable date which ensures the policy and operational success. Also, infrastructures needed for the Business-to-Business (B2B) System and Accounting, Billing and Settlement System (ABS) which are considered vital component of the retail market are yet to be organized. Insufficiency of time to conduct comprehensive review and analysis of new rules and guidelines that the regulator may issue is also a major concern considering the requirement to contract with the Retail Electricity Supplier (RES) 30 days before implementation of the RCOA. According to the various stakeholders, the postponement will allow Contestable Customers (CCs) to engage in more detailed preparations and will allow them to properly evaluate governing rules and regulations.

ii. Revisit RCOA Design/Framework

The concern raised by the TWGs with regard to the design/framework of the retail electricity market is whether RES and contestability will be mandatory. As provided under *Section 31 of the EPIRA*, it stipulates that “*ERC shall allow all electricity end-users with a monthly average peak demand of at least one megawatt (1MW) for the preceding twelve (12) months to be the contestable market*”. However, with the requirement for the Supplier of Last Resort if a CC is not able to contract with the RES, it seems to be understood that both RES and being part of the contestable market is mandatory. Therefore, this puts the CCs no choice but be part of the retail market.

iii. Establishment of the B2B Infrastructure

With regard to the establishment of the B2B System, there is still a need to see a clear guidance or direction where to source funding for the B2B system and a clear mechanism for the recovery of cost in putting up the system costs for its operation and maintenance. For the entity that acts as the Central Registry Body (CRB)/Central Registration Agent (CRA) the TWGs sees that it would be more beneficial that at the onset of the implementation of open access, the CRA/CRB is an independent 3rd party that will handle data bank, customer switching, monitoring and operation of the B2B system.

iv. Accounting, Billing and Settlement

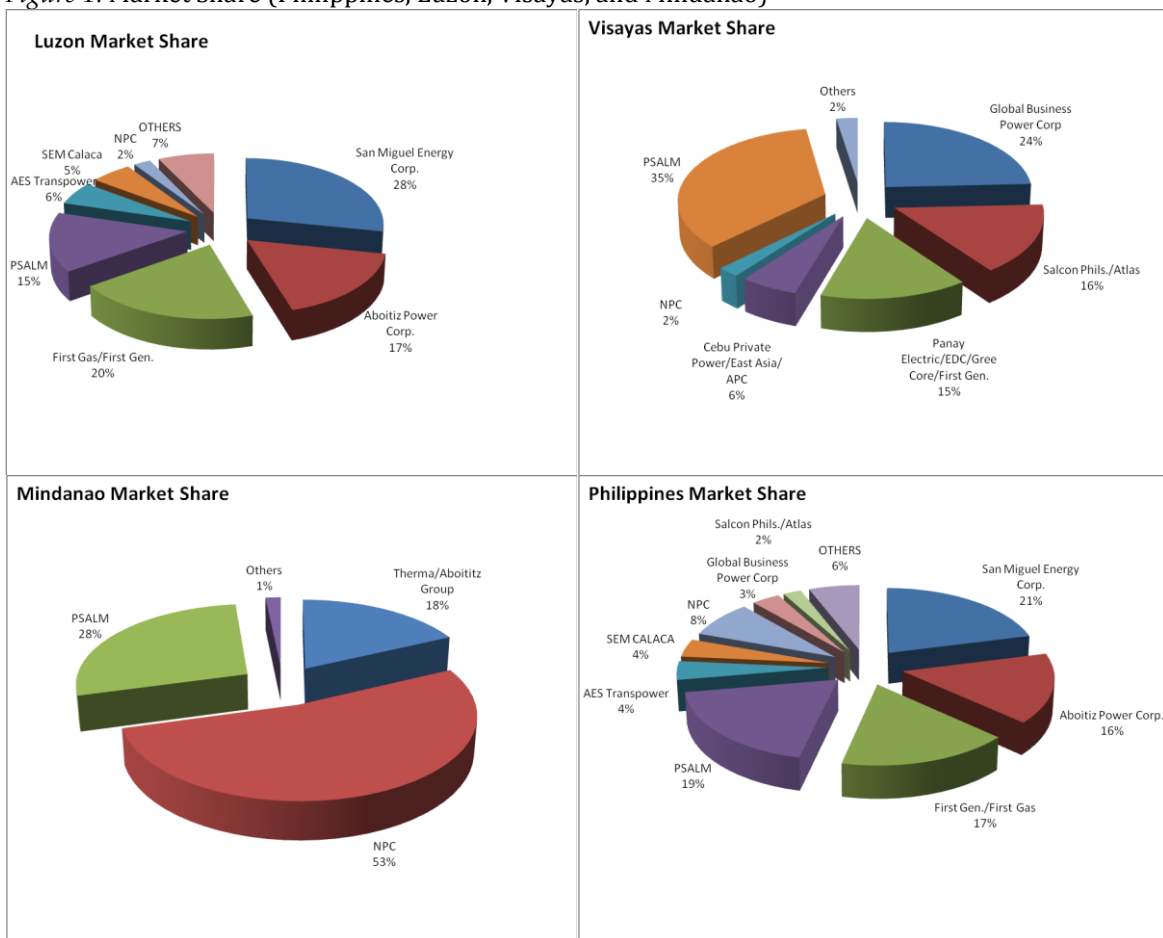
With regard to the Accounting, Billing and Settlement System, the TWG recommends to develop ABS Manual. The imbalances in the WESM due to additional participants should be fully accounted under the B2B system, i.e., properly determine the responsible entity that

should be charged. There should be an accurate, transparent and timely accounting of the energy quantity injected into the DU system and their attendant cost schedule and frequency of data submission.

### C. Market Power Monitoring

There is not much movement with regard to capacity ownership for the last six months (April to October 2011). However in October, PSALM awarded in favor of the joint venture of SPC Light Company and SPC Power Corporation (SPC Power Consortium) the operation and maintenance service contract (OMSC) for the 650-megawatt (MW) Malaya Thermal Power Plant. Although SPC has been in operation for years, this will be the first plant in Luzon that they will operate.

Figure 1. Market Share (Philippines, Luzon, Visayas, and Mindanao)



Source: DOE

PSALM still holds 15 percent share in Luzon with SMEC still leads with 28 percent share, Lopez Group with 20 percent while Aboitiz has 17 percent. NPC is still left with 2 percent share due to still pending privatization of Angat Hydro Power Plant.

In the Visayas, PSALM still has 35 percent share pending privatization of its contracted capacity with the EDC on the Leyte Geothermal Power Plants. Global Business Power continues to increase its share with 24 percent, SPC with 16 percent while Aboitiz Group has 6 percent.

In Mindanao, the government still control the generation business with a total of 81 percent with NPC having 53 percent share while 28 percent for PSALM of the generation capacity in the grid. Aboitiz has a bit increased its share in the grid due to the commercial operation of the 42 MW Sibulan HEPP.

For the national grid, SMEC still lead the generation market with 21 percent share of the national capacity. Lopez group still has 17 percent, Aboitiz wit 16 percent, NPC with 8 percent while PSALM still has 19 percent. During the report period, no generating company was able to breach the limitation set in *Section 45 (a) of the EPIRA*.

## V. POWER SUPPLY SECURITY AND RELIABILITY

The data on installed generating capacity of each power plant are based on the Monthly Operations Report submitted to the DOE by the generating companies and are counter checked from the Daily Operation Report of the NGCP. Total installed capacity in the country of 2011 decreased to 16,128 MW from 16,358 MW in 2010, equivalent to 1.4 percent decline. This is mainly attributed to the decommissioning of the 49MW Northern Negros geothermal power plants in June 2011 and the non-availability of the some diesel power plants in the country.

In Luzon, the installed capacity dropped by 2 percent, from 11,981 MW in 2010 to 11,764 MW in 2011 as a result of the non-availability of some diesel power plants in the grid. However, the dependable capacity of Luzon grid grew by 2 percent buoyed by the testing and commissioning of the 3 x 25 MW Ambuklao hydro facilities during the latter part of the 1<sup>st</sup> semester of 2011. The first and second units started its operation last June 2011 and the 3<sup>rd</sup> unit in October 2011 respectively. Also, the recommissioned/transferred from PSALM to Udenna of the 116 MW diesel power plant in Subic during the 2<sup>nd</sup> quarter of the year contributed to the reported increase in dependable capacity of the Luzon grid.

In the Visayas installed capacity also reduced slightly to 1 percent, traced mainly related to the decommissioning of the Northern Negros Geothermal facility. However, dependable capacity in Visayas reflects accelerating path with 17 percent increase, from 1,745 MW in 2010 to 2,046 MW in 2011.

In Mindanao, the stability and reliability of power supply was still considered to be the major challenge in the country since the power reserve level in the island remained precariously low. Since 2006, the power supply in Mindanao has remained the same while the demand growth continues its strong growth. Even if the existing hydro power plants are running in full capacity, the need to curtail load is necessary due to a generation deficiency caused by the scheduled maintenance of some power plants, and the unexpected shutdown or reduced capability of others. The corresponding power curtailment, if any, is lifted once the demand recedes or once there is enough available capacity coming into the grid from the power plants. The Mindanao grid-wide power load curtailment is implemented to maintain the power grid's security and reliability.

In 2010, the long dry spell brought about by the El Nino aggravated the prevailing power deficiency in Mindanao. The shortage of power continued to accelerate in 2011 merely because there were no additional capacities goes on stream against the growing power demand in the grid. It was observed in 2011, available capacity in Mindanao on the average was 1,317MW as against the peak load of 1,346 MW or a deficiency in reserves of 28 MW.

## A. Power Generation

Gross electricity generation of 2011 reached 68,279 GWh, posting a minimal increase of 0.79 percent compared to 67,743 GWh in 2010. Generation in Luzon grid registered a decline of 0.80 percent while Visayas registered a remarkable increase of 12.62 percent due to the commissioning of the coal-fired power plants in the grid. In Mindanao, due to suppressed demand in view of capacity constraints, electricity generation dropped by 2.48 percent.

Table 23. PHILIPPINES, 2011 and 2010 Comparative Generation, GWh

| FUEL TYPE    | 2011          |       | 2010          |       | Difference |             |
|--------------|---------------|-------|---------------|-------|------------|-------------|
|              | GWh           | %     | GWh           | %     | GWh        | %           |
| Coal         | 25,430        | 37.24 | 23,301        | 34.40 | 2,129      | 9.14        |
| Oil-based    | 2,498         | 3.66  | 7,101         | 10.48 | -4,603     | -64.83      |
| Natural Gas  | 20,277        | 29.70 | 19,518        | 28.81 | 759        | 3.89        |
| Geothermal   | 10,494        | 15.37 | 9,929         | 14.66 | 565        | 5.69        |
| Hydro        | 9,451         | 13.84 | 7,803         | 11.52 | 1,648      | 21.11       |
| Wind         | 70            | 0.10  | 62            | 0.09  | 8          | 13.20       |
| Solar        | 1             | 0.00  | 1             | 0.00  | 0          | -30.61      |
| Biomass      | 58            | 0.09  | 27            | 0.04  | 31         | 113.42      |
| <b>Total</b> | <b>68,279</b> |       | <b>67,743</b> |       | <b>536</b> | <b>0.79</b> |

Source: DOE

Note: As of January 2012, excluding off-grid with embedded assumptions.

Luzon power supply was generally sufficient throughout the year of 2011. However, under-generation or load shedding were experienced by the grid towards the end of the year. These were brought about by the limited output of natural gas plants due to fuel supply restrictions from the SPEX Malampaya onshore gas plant on the last quarter of the 2011.

Table 24. LUZON Grid, 2011 and 2010 Comparative Generation, GWh

| FUEL TYPE    | 2011          |       | 2010          |       | Difference  |              |
|--------------|---------------|-------|---------------|-------|-------------|--------------|
|              | GWh           | %     | GWh           | %     | GWh         | %            |
| Coal         | 19,547        | 39.20 | 20,047        | 39.88 | -500        | -2.49        |
| Oil-based    | 742           | 1.49  | 3,287         | 6.54  | -2,546      | -77.44       |
| Natural Gas  | 20,277        | 40.66 | 19,518        | 38.83 | 759         | 3.89         |
| Geothermal   | 4,395         | 8.81  | 3,323         | 6.61  | 1,072       | 32.25        |
| Hydro        | 4,807         | 9.64  | 4,014         | 7.98  | 794         | 19.78        |
| Wind         | 70            | 0.14  | 62            | 0.12  | 8           | 13.20        |
| Biomass      | 26            | 0.05  | 14            | 0.03  | 12          | 81.87        |
| <b>Total</b> | <b>49,864</b> |       | <b>50,265</b> |       | <b>-400</b> | <b>-0.80</b> |

Source: DOE

Table 25. VISAYAS Grid, 2011 and 2010 Comparative Generation, GWh

| FUEL TYPE    | 2011          |       | 2010         |        | Difference   |              |
|--------------|---------------|-------|--------------|--------|--------------|--------------|
|              | GWh           | %     | GWh          | %      | GWh          | %            |
| Coal         | 4,431         | 43.36 | 1,529        | 26.49  | 2,903        | 189.87       |
| Oil-based    | 402           | 3.93  | 1,727        | 29.92  | -1,325       | -76.73       |
| Biomass      | 32            | 0.31  | 13           | 0.22   | 19           | 148.57       |
| Geothermal   | 5,308         | 51.94 | 5,771        | 100.00 | -463         | -8.02        |
| Hydro        | 47            | 0.46  | 36           | 0.62   | 11           | 30.82        |
| <b>Total</b> | <b>10,220</b> |       | <b>9,075</b> |        | <b>1,145</b> | <b>12.62</b> |

Source: DOE

Table 26. MINDANAO Grid, 2011 and 2010 Comparative Generation, GWh

| FUEL TYPE    | 2011         |       | 2010         |       | Difference  |              |
|--------------|--------------|-------|--------------|-------|-------------|--------------|
|              | GWh          | %     | GWh          | %     | GWh         | %            |
| Coal         | 1,452        | 17.72 | 1,726        | 20.54 | -274        | -15.86       |
| Oil-based    | 1,354        | 16.53 | 2,087        | 24.84 | -733        | -35.12       |
| Solar        | 1            | 0.01  | 1            | 0.01  | 0           | -30.61       |
| Geothermal   | 790          | 9.65  | 834          | 9.93  | -44         | -5.28        |
| Hydro        | 4,597        | 56.10 | 3,754        | 44.68 | 843         | 22.45        |
| <b>Total</b> | <b>8,194</b> |       | <b>8,403</b> |       | <b>-209</b> | <b>-2.48</b> |

Source: DOE

In 2010, the Mindanao shortfall in power supply was severely felt throughout the island when a prolonged dry season that brought the water level in Lake Lanao several centimeters below the critical level. But towards the end of the year, the Mindanao power situation has reached its critical level that requires new power stations to be built within the next succeeding years. Since the government was no longer allowed to generate new capacities following the enactment of the Electric Power Industry Reform Act Of 2001 (R.A. 9136), the state-owned company has been cutting power supply to distribution utilities. Also, the effect of the structural in the grid such as aging power plants that runs on limited capacity which entails more regular maintenance and assessment also contributed to the power supply condition in the grid.

The country's total generation from hydroelectric power plants posted a significant increase of 21 percent, and was driven mainly by the Mindanao grid in which hydro plants were fully dispatched, since the plant capability of the hydroelectric plants in 2010 decreased as a result of low water elevation of the reservoir cause by El Nino Phenomenon.

Modest increase of 9 percent in the utilization of coal-fired power plants was noted. In the Visayas grid, the higher use of coal for power generation was mainly due to the entry of new coal generating power plants in the Grid. In Luzon and Mindanao, the timid decrease in coal-based electricity generation was compensated by the higher output of the geothermal and hydroelectric plants, respectively.

Meanwhile, in generation from national gas electricity generation, the insipid increase of about 4 percent in 2011 was driven mainly by the generation supply constraint brought about by the maintenance shutdown of the Malampaya natural gas pipeline from 20-26 October. The effect of the gas restriction causes the whole plant of Ilijan (1,200 MW) not

available from the whole period of 20-26 October 2011 in parallel with the Malampaya Natgas shutdown. Thus, overall generation sourced from the indigenous gas fuels dripped, as a result of the natural gas restriction of Malampaya, which led to the use of the liquid fuel.

On the other hand, the country's total generation from oil-based power plants reflects a decelerating path, with 65 percent decline from 7,101GWh in 2010 to 2,498 GWh in 2011. As recalled in 2010, oil-based power plants were frequently dispatched as a must run unit to address the insufficient reserve capacity in the Luzon grid. While in the Mindanao, while the grid was able to cope up with the limited hydroelectric power plants output, from 2,087 GWh in 2010 to 1,354 GWh in 2011, a 35 percent decline in the generation sourced from oil-based generating facilities was recorded.

Year-on-year (y-o-y) gross power generation from geothermal power plant accelerated by 6 percent or 759 GWh from 9,929 GWh in 2010 compared to 10,494 GWh in 2011. The slight increase of generation from geothermal power plants was attributed to the following reasons: 1) The unit 1 of Bacman (55 MW), after being out of service since March 2009, synchronized to the system last December 2011 to conduct tests and commissioning and it is expected that two (2) other units of Bacman will also conduct commissioning tests in the first quarter of 2012; 2) Decommissioned of Northern Negros Geothermal Power Plant (49 MW); and 3) Palinpinon Geothermal Power Plant Unit 2 was out for 85 days ( Sept 19 to Nov 29) due to main transformer failure.

Contributions from renewable energy such as wind, solar and biomass combined, inclined by 43 percent or 39 GWh with a share of only 19 percent to the total generation. The prevalence of the substantial increase was attributed from the 4MW San Pedro Landfill Methane Recovery and Electricity Generation in Luzon and 15 MW of Central Azucarera de San Antonio (CASA).

## **B. System Peak Demand**

Luzon demand in the 1<sup>st</sup> semester of 2011 was generally lower relative to the previous year due to lower energy demand on account of cooler temperatures. It will be recalled that the extensive heat all over the country brought by El Niño Phenomenon in the first half of 2010 drove up the demand for electricity. However, the inception of La Niña from the latter half of 2010 until 1<sup>st</sup> semester of 2011 brought cooler temperatures. System peak intensity during the month of June posted a remarkable figure of 7,552 MW or 1 percent lower compared to the same period of 2010 and 1 percent lower compared to the previous year's maximum peak which occurred on May 2010.

Meanwhile, average electricity requirement in Luzon for the 2<sup>nd</sup> semester of 2011 accelerated to 3 percent from the semester-ago level decrease of 1 percent but was slightly lower than the year-ago level of 5 percent.

In the Visayas, coincident peak demand in December 2011 reached 1,481 MW, higher by about 4 percent compared from the previous year of the same month with 1,431 MW. In sub-grid level, Cebu reflected highest average demand for the whole year of 2011 with a 48 percent share to the total average demand of Visayas grid. The lowest recorded system demand in the grid was on 25 December 2011 (Christmas Day) with 1,202 MW.

The rapid expansion of business activity in Visayas continued to edge higher, affecting the grid's power demand growth. With the fast-paced development of the key cities in Visayas, the region's power generation capacity for the year 2010 remained tight. The integration of the new capacity to the grid due to the commercial operation of the new power plants on

the 1<sup>st</sup> semester of 2011 (3 x 72MW Coal by CEDC), (2x72 MW Coal by PEDC) and the (2 x 100MW Coal by Kepco-Salcon) contributed to avert the power shortage in the grid.

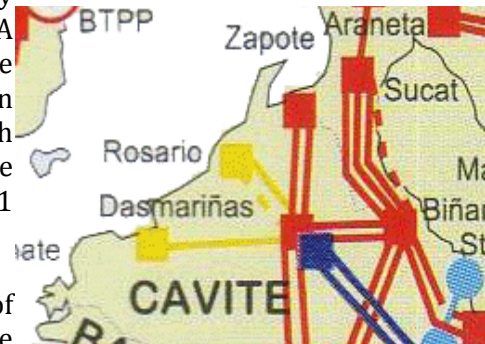
Meanwhile, the recorded maximum peak demand on December 2011 is 1,346 MW, a 5 percent increase compared to 2010 actual coincident peak with 1,288 MW of the same period while the lowest recorded demand was on 25 December 2011 (Christmas Day) with 996 MW.

The continued deficiency of available supply in Mindanao despite the increasing demand for power has a significant adverse effect on the grid. As such, suppressed demand was observed throughout the grid since the power shortage was looming in the horizon. With limited available capacities to meet the demand for power supply, Mindanao braces for a shortage of power.

In line with this, the government and private sector initiated mitigation measures against the worsening power scenario in the grid. This includes the close monitoring of the power situation in Mindanao and exploring all the possible measures to help mitigate the occurrence of power outages in the grid until new capacities come in.

**C. Status of Transmission Projects**

In the transmission sector in Luzon, the project *Figure 2. Dasmariñas Sub-Station Expansion*, a component of *Expansion* Luzon Transmission Line Upgrading I, which originally aims to provide N-1 (as the third 300 MVA transformer) at the substation but will now be installed as a replacement to the damaged unit in Dasmariñas. Target delivery of transformer and high voltage equipments is by 12 October 2012 and the target date for the completion of this project is by 31 January 2012.



To support the long term power requirements of Samar and improve the delivery of quality and reliable power in the island, NGCP is constructing the 138 kV Paranas (Wright) – Carayman (Calbayog) transmission line. The new line will replace the old 69 kV woodpole transmission line and will address the overloading of Paranas Substation. As of 31 August 2011, both substation and transmission component of this project is expected to be energized with load by 31 November 2011.

In the Mindanao Grid, the Balo-I (Abaga) Villanueva (Kirahon) 230 kV TL Project, a project component the Mindanao 230 kV Backbone Transmission, will provide additional transmission corridor to the 888 MW Agus Hydro Complex (including expected entry of Agus 3 HEP). Currently Agus 2-Kibawe and Balo-i-Tagoloan 138 kV lines serve as Agus Complex’s link to the Grid. Over-time, the N-1 being provided by these lines to the Agus Complex has been lost due to increase in demand. In addition, this project will also serve as an initial step in developing a higher capacity transmission highway from north to south of the grid to meet the

*Figure 3. Bal-oi - Villanueva 230 kV Transmission Line Project*



increasing demand in Davao area.

Another project in is the Mindanao S/S Expansion 2005 (Phase II) involves the installation of additional transformers at Butuan and Sta. Clara Substation in order to meet load growth. In additional this will provide N-1 capability to the other substations to mitigate supply interruption during planned and unplanned outages for transformers. As of 31 August 2011 the Butuan S/S is 92 percent complete and is scheduled to be completed by 31 August 2011 while the Sta.Clara expansion is 90 percent complete and is scheduled to be completed by 30 November 2011.

Figure 4. Mindanao S/S Expansion 2005 (Phase II)



**D. ERC-Approved Capital Expenditure Projects**

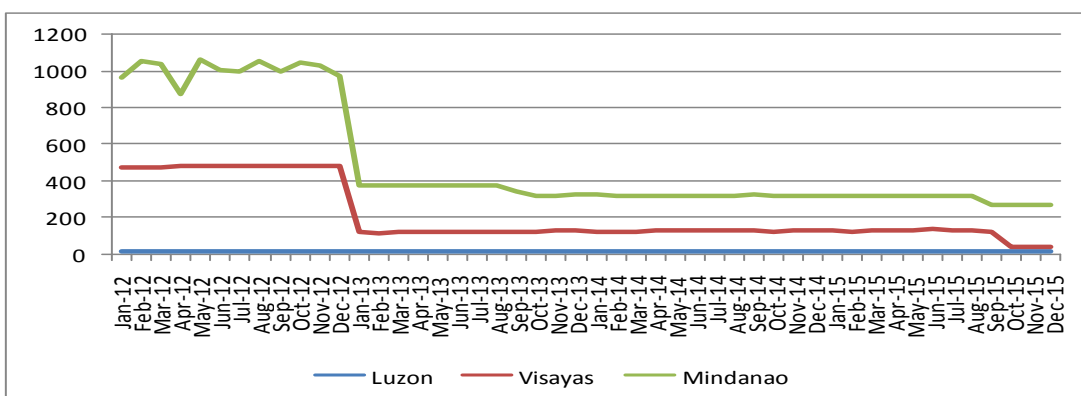
The ERC has approved a total of four (4) Capital Expenditure (CAPEX) Projects applied by South Cotabato II Electric Cooperative, Inc. (SOCOTECO II), Cebu II Electric Cooperative, Inc. (CEBECO II), Surigao del Sur I Electric Cooperative, Inc. (SURSECO I), Batanes Electric Cooperative, Inc. (BATANELCO) for the period May 2011 – August 2011 as reflected in Annex 14.

**E. Transition Supply Contracts (TSCs)**

PSALM has already privatized 79 percent of the NPC generating assets and 76 percent of its contracted capacities from the Independent Power Producers (IPPs). Due to this development, NPC together with PSALM now reduced its controls of the generation sector equivalent to 19 percent or 2,807 MW of generating capacity from almost 90 percent or about 12,500 MW before privatization.

Relative to this, PSALM has given up most of its TSCs with its customers including distribution utilities in Luzon. While significant capacity still remain in the Visayas for NPC/PSALM, these still not enough to suffice the demand of DUs in the area resulting to rationalization of supply that resulted to reduction of TSC capacities. This also happened in Mindanao after the expiration of most of the TSCs with 28 ECs in August 2011 and renewed until December 2012. This however encouraged the DUs to contract with other suppliers in order to satisfy the requirements of their consumers. Further, this also helped the DUs manage their supply mix and attain optimal price.

Figure 5. NPC Contractual Obligations for Luzon, Visayas and Mindanao





## VI. TOTAL ELECTRIFICATION

As of 31 October 2011, the Program has already achieved 99.91 percent of the total potential barangay nationwide. Prior to the launching of ABEP, barangay electrification level only stood at 76.9%, having energized only 32,281 out of 41,975 total barangay coverage. Under the program, the energization of 41,939 barangays was spearheaded by the DOE with assistance from the NEA, NPC-SPUG, and PNOC and its subsidiaries.

Among the remaining 36 unenergized barangays, seven (7) barangays have implementation issues especially in ARMM areas which have right-of-way problem and liquidation issues on previous projects. MERALCO, on the other hand, has committed to accelerate electrification of the 20 barangays yet to be energized in its franchise area. The DOE is closely coordinating with NEA and concerned LUGs on the possible options to pursue electrification of these barangays. *Please note that five barangays (5) were delisted from the target due to no inhabitants and located on permanent danger zone (Albay near Mt. Mayon).*

Table 27. Targets Per Implementors

|              |           |
|--------------|-----------|
| DOE          | 35        |
| BEP          | 1         |
| RAES         | 4         |
| ER 1-94      | 10        |
| MERALCO      | 20        |
| AMORE        | 1         |
| <b>Total</b> | <b>36</b> |

Table 28. Barangay Electrification Status as of 31 October 2011

| Region                    | Potential Barangays | Electrified Barangays | Unelectrified Barangays | Electrification Level (%) |
|---------------------------|---------------------|-----------------------|-------------------------|---------------------------|
| CAR                       | 1,176               | 1,176                 | 0                       | 100.00                    |
| I                         | 3,265               | 3,265                 | 0                       | 100.00                    |
| II                        | 2,311               | 2,311                 | 0                       | 100.00                    |
| III                       | 3,102               | 3,102                 | 0                       | 100.00                    |
| IV-A                      | 4,010               | 3,990                 | 20                      | 99.50                     |
| IV-B                      | 1,458               | 1,458                 | 0                       | 100.00                    |
| V                         | 3,469               | 3,469                 | 0                       | 100.00                    |
| NCR                       | 1,695               | 1,695                 | -                       | 100.0                     |
| <b>SUB-TOTAL LUZON</b>    | <b>20,486</b>       | <b>20,466</b>         | <b>20</b>               | <b>99.90</b>              |
| VI                        | 4,050               | 4,050                 | 0                       | 100.00                    |
| VII                       | 3,003               | 3,003                 | -                       | 100.00                    |
| VIII                      | 4,389               | 4,389                 | 0                       | 100.00                    |
| <b>SUB-TOTAL VISAYAS</b>  | <b>11,442</b>       | <b>11,442</b>         | <b>0</b>                | <b>100.00</b>             |
| IX                        | 1,904               | 1,904                 | 0                       | 100.00                    |
| X                         | 2,020               | 2,020                 | 0                       | 100.00                    |
| XI                        | 1,160               | 1,160                 | 0                       | 100.00                    |
| XII                       | 1,194               | 1,194                 | 0                       | 100.00                    |
| ARMM                      | 2,459               | 2,443                 | 16                      | 99.35                     |
| CARAGA                    | 1,310               | 1,310                 | 0                       | 100.00                    |
| <b>SUB-TOTAL MINDANAO</b> | <b>10,047</b>       | <b>10,031</b>         | <b>16</b>               | <b>99.84</b>              |
| <b>TOTAL PHILIPPINES</b>  | <b>41,975</b>       | <b>41,939</b>         | <b>36</b>               | <b>99.91</b>              |

Source: DOE

NEA reported that attained 100 percent barangay energization under the area coverage of ECs as of December 2009. It is currently developing a Sitio Electrification Program Masterplan to energize the remaining sitios in the country without access to electricity. In addition, NEA is finalizing the Barangay Enhancement Masterplan which aims to upgrade the electric facilities of off-grid barangays. However, these efforts of NEA will be done in coordination with the DOE as part of attaining 90 percent household electrification by 2017.

Following are the developments in various activities that were instrumental to the near completion of barangay electrification:

#### **A. Qualified Third Party**

*Chapter VII, Section 59 of the EPIRA provides that the “provision of electric service in remote and unviable villages that the franchised utility is unable to service for any reason shall be opened to other qualified third parties”.*

Following are the updates on the QTP Program being spearheaded by the DOE:

#### **1) PowerSource Philippines, Incorporated (PSPI) Rio Tuba QTP Project in Bataraza, Palawan**

The current active customer connections of PSPI that are being served with 24-hour electricity services are 1374. PSPI has high collection fee index of above 95% for their electricity tariff in their QTP service area. There was a decrease of about 46 household connections from the previous reporting period due to the active disconnection program imposed by PSPI as the customers think that they have no longer have to keep current on their bills because of the subsidy being availed by PSPI from UC-ME. However, PSPI think that the household connections will go up in the coming few months as customers shall realize that PSPI is strictly imposing disciplined billing payment practices.

The average sales (in kwhrs) for 2011 are around 100,000kwhr per month compared to last year average sales of around 70,000kwhr per month. The substantial increase in electricity sales is due to the subsidy being collected from UC-ME. It is being projected by PSPI that the rise in electricity sales shall continue to go up.

Due to upsurge in load consumption/use, PSPI is working on the additional capacity for their existing Community Energizer Platform Power Generation Project, which only have an installed capacity of 420 kW, consisting of two diesel power plants of 210 kW each, by bringing soon a 70 kW biomass gasifier fuelled by coconut and wood chips. PSPI intends to commission the biomass plant by the first quarter of next year. Said biomass plant intends to take a third of their present load from their existing generation system.

#### **2) PSPI Malapascua QTP Project in Bantayan, Cebu**

PSPI was not deterred to undertake additional in missionary areas despite the long gestation of its pilot QTP project in Rio Tuba, Bataraza, Palawan. At present, it is working on the full documentation for the filing of its 2<sup>nd</sup> QTP Project in Malapascua, Bantayan, Cebu. It has already secured a waiver agreement with the concerned Electric Cooperative, Cebu Electric II Cooperative, Incorporated and is now coordinating with NPC-SPUG for the QTP Service Contract as one of the requisite documents for packaging their QTP application for submission to DOE and endorsement to ERC.

PSPI is also actively undertaking project sites identification for the possible roll-out of their planned multi-investments for QTP. It has initially identified Liminangcong in the Province of Palawan as their third potential QTP project.

### 3) QTP Project in Semirara Island, Municipality of Caluya, Antique

The recent corporate restructuring of Semirara Mining Corporation (SMC) created a subsidiary group, DMCI Power to serve as the QTP applicant for the three barangays in Semirara Island, Barangays Alegria, Tinogboc and Semirara waived by the Antique Electric Cooperative (ANTECO) for possible take-over by a QTP. As a result, DMCI Power has to make the necessary amendments and modifications on the previous documentation prepared by SMC to be consistent with its proposed QTP project for the three (3) barangays in the island.

Accordingly, DMCI Power requested ANTECO to revise its previous Board Resolution it has issued and furnished to NEA, ERC and Semirara Mining Corporation taking into consideration the DOE's Department Circular No. DC-2005-121-011 (QTP Participation Guidelines), such as the recognition of the DOE and ERCs' mandate in the actual selection of the QTP to be authorized to operate in waived areas.

### 4) PRES Project in Masbate

After PAMATEC/ETDE, the Project Contractor, completed installation of the PV systems in 108 barangays benefitting 5,129 household and mini-grid systems in 102 barangays with 12,183 households' beneficiaries, the DOE, in close coordination with NPC, worked out the development of necessary contractual and/or commercial arrangements suitable for PRES project as well as timelines and action plan to ensure the target barangays under the PRES project may be assured of least-cost electricity services that is sustainable.

Although NPC-SPUG is acting as Interim QTP and had put in place administrative guidelines for the operation of the PRES Project, the preparation of the draft O&M Contractor's Agreement by DOE and NPC is in reference to Article 6 of the Financial Protocol between the Philippines and French Governments requiring the designation of a private party to operate and maintain the electric services provided for under the PRES Project

The DOE also suggested to NPC that it convenes a meeting with a composite team composed of DOE, NEDA, DOF and NEA to study and review the technical and economic aspects of the draft O&M Service Agreement particularly on the cost structure, subsidy computation and project duration as well as seek a common ground in finalizing the draft bidding documents including the timeline and schedule for bidding the subject Project consistent with existing government procurement and privatization policies.

## B. Implementation of E.R. 1-94 Program

As specified under Energy Regulations 1-94 (ER 1-94) as amended, the DOE ensures that communities hosting generating facilities or energy resource development projects are benefited. It is a way of recognizing the contribution of host communities for sharing and using their territory to put up generating facilities to energize the rest of the country.

Table 29. Summary of Financial Benefits as of October 2011 (In PhP Billion)

| Particulars                   | EF   | DLF  | RWMHEEF | Total |
|-------------------------------|------|------|---------|-------|
| Accrued Financial Benefit     | 2.54 | 2.96 | 2.27    | 6.77  |
| Approved                      | 2.33 | 0.94 | 1.21    | 4.48  |
| Available/Collectible Balance | 0.21 | 1.02 | 1.06    | 2.29  |

Source: DOE

ER 1-94 provides for funds that can be accessed by host communities to further foster progress in their respective areas. However, availment of such benefits requires host communities to submit proposals which may be under any of the following: electrification fund (EF), development and livelihood fund (DLF) and reforestation, watershed management, health and/or environment enhancement fund (RWMHEEF).

From May 2011 to October 2011, the DOE approved 148 projects with a total amount of PhP159M funded under E.R. 1-94 program from which 111 projects were funded under EF amounting to PhP66.1M, 23 under DLF amounting to PhP38.37M and 14 under RWMHEEF amounting to PhP54.53M.

The total accrued financial benefit from inception is PhP 7.59 billion from which PhP 4.72 billion was obligated for the implementation of projects. The available funds as of October 2011 stood at around PhP2.87 billion.

### **C. Challenges**

The main challenge that faces the power sector is the security of supply. With the country under the Aquino Administration enjoying interests from investors and the government bidding out various infrastructure projects under the public-private partnership (PPP) program in various parts of the country, it will not take time that the current capacity additions will be diluted by the surge of demand.

As indicated in the Philippine Power Development Plan (PDP) 2013 -2030, the country's demand for electricity will grow by about 4.5 percent per year. With this, the country may need a total additional capacity of about 14,400 MW during the period. To date, there are about 650 MW of capacity that would about to be commissioned between years 2013 and 2015 while there are about 1,172 MW committed capacity. These committed power projects are those which have complied with the necessary permits and clearances of various agencies and concerned local government and in the process of financial closing.

While the government is receiving expressions of interest to expand existing plant or put up new plants with a total capacity of 5,023 MW, these are still at the different stage of development. Thus, there is still a possibility that these could not proceed to development status. With these, the government may need to involve itself once again into power generation to avoid power shortages in the future and keep hold of the current momentum being enjoyed as an investment attractive economy.

## **LIST OF ANNEXES**

Annex 1. TransCo Inspection Report Based on Concession Agreement

| No.            | Inspection Report No. | Location   | Name of Project/ transmission facilities                                    | Inspection Date           |
|----------------|-----------------------|--|---|---------------------------|
| <b>LUZON</b>   |                       |  |   |                           |
| 1              | PUC-11-18             | North Luzon  | New Clark Substation  | Feb.23 to 25, 2011        |
| 2              | PUC-11-18             | North Luzon  | New Clark – Concepcion Transmission Lines, Clark and Concepcion Substations | Feb. 23 to 25, 2011       |
| 3              | PUC-11-19             | North Luzon  | Upgrading of San Manuel, Concepcion, Mexico Substations                     | Feb. 21 to 22, 2011       |
| 4              | PUC-11-19             | North Luzon  | Upgrading of San Manuel – Concepcion – Mexico Transmission Lines            | Feb. 21 to 22, 2011       |
| 5              | NLRD1-11-01           | Olongapo, Hermosa, Subic, Limay and Botolan  | North Luzon District 5  | March 28 to April 1, 2011 |
| 6              | NLRD1-11-03           | Bauang S/S, San Esteban S/S, Bantay S/S, Curimao S/S, Laoag S/S                              | North Luzon District 1  | May 9 to 13, 2011         |
| 7              | NLRD4-11-04           | Santiago S/S, Cauayan S/S, Gamu S/S, Ilagan S/S, Tuguegarao, Bayombong, Lagawe S/S           | North Luzon District 4  | May 23 to 27, 2011        |
| 8              | NLRD6-11-05           | Central Luzon Area Control Center Mexico S/S Cabanatuan S/S Pantabangan S/S Cruz na Daan S/S | North Luzon District 6  | June 13 to 17, 2011       |
| 9              | NLRD3-11-08           | San Manuel, Nagsaag Kadampat, Labrador, Mangaldan Substation, Pangasinan                     | North Luzon District 3  | July 25 to 29, 2011       |
| 10             | NLRD7-11-09           | San Jose, Araneta Dolores, Malaya, Balintawak  | North Luzon District 7  | August 8 to 11, 2011      |
| 11             | SLRD2-11-10           | Tayabas, Gumaca, Makban, Kalayaan, Caliraya  | South Luzon District 2  | August 22 to 26, 2011     |
| 12             | NLRD7-11-26           | San Jose Del Monte, Bulacan  | San Jose 750MVA Transformer Project   | January 25 to 28, 2011    |
| 13             | NP-11-16              | Kadampat, Pangasinan and San Jose, Bulacan   | 2x90MVAR Shunt Reactor  | July 25 to 29, 2011       |
| <b>VISAYAS</b> |                       |  |   |                           |
| 1              | VISD3-11-02           | Bacolod, Cadiz, Kabankalan, Mabinay, Amlan   | Visayas District 3  | April 13 to 15, 2011      |
| 2              | PUC-11-21             | Amlan, Mabinay & Bacolod S/S   | Visayas PCB Replacement Project   | April 13 to 15, 2011      |
| 3              | VISD2-11-07           | Cebu, Talisay, Compostela, Naga, Suba, Ubay, Garcia, Hernandez, and Bohol Substations        | Visayas District 2  | July 11 to 15, 2011       |

| No.             | Inspection Report No. | Location   | Name of Project/ transmission facilities        | Inspection Date          |
|-----------------|-----------------------|--|---|--------------------------|
| 4               | PUC-11-22             | Corella, Ubay, Bohol                                     | Bohol Backbone 138 kV Transmission Project      | March 9 to 11, 2011      |
| 5               | VISD-11-18            | Sta. Barbara, Dingle, San Juan, Panit-an, Baldoza        | Visayas District 4                              | October 24 to 27, 2011   |
| <b>MINDANAO</b> |                       |  |   |                          |
| 1               | PUC-11-20             | Zamboanga Sibugay  | Zamboanga 138kV Transmission Project            | March 9 to 11, 2011      |
| 2               | MRD2-11-06            | Overton, Lugait, Balo-I Substation and Agus 6 Switchyard | Mindanao District 2                             | June 27 to July 1, 2011  |
| 3               | PUC-11-23             | Cagayan De Oro, Abaga, Kirahon                           | Abaga-Kirahon 230kV Transmission Project        | August 15 to 18, 2011    |
| 4               | PUC-11-23             | Cagayan De Oro, Abaga, Kirahon                           | Abaga-Kirahon 230kV Substation Project          | August 15 to 18, 2011    |
| 5               | PUC-11-24             | Kirahon, Misamis Oriental, Maramag, Bukidnon, Mindanao   | Kirahon-Maramag 230kV Transmission Line Project | August 15 to 18, 2011    |
| 6               | MIND1-11-11           | Zamboanga, Lunzuran, Sangali, Sta. Clara, Aurora         | Mindanao District 1                             | September 5 to 9, 2011   |
| 7               | MIND4-11-12           | Butuan, Nasipit, Anislagan, San Francisco, Bislig        | Mindanao District 4                             | September 12 to 16, 2011 |
| 8               | MIND5-11-13           | Davao, Kidapawan, Bunawan, Maco, Matanao, Nabunturan     | Mindanao District 5                             | September 19 to 23, 2011 |
| 9               | MIND6-14              | Gen. Santos, Tacurong, Sultan Kudarat                    | Mindanao District 6                             | September 26 to 30, 2011 |
| 10              | MIND3-11-15           | Carmen, Tagoloan, Jasaan, Kibawe, Maramag                | Mindanao District 3                             | October 3 to 7, 2011     |

Source: TRANSCO

## Annex 2. NGCP Related Petitions to ERC as of October 2011

| ERC DECISION/<br>CASE NUMBER    | DATE OF FILING    | NATURE OF PETITION  | GROUNDS FOR FILING  | STATUS        |
|---------------------------------|-------------------|---|---|---------------|
| <b>ERC Case No. 2011-140 RC</b> | 20 October 2011   | In the Matter of the Application for the Approval of the Maximum Allowable Revenue for Calendar Year 2012 (Mar2012) and the Performance Incentive Scheme (PIS) Compliance in accordance with the alternative form of rate Setting Methodology Under the Rules for Setting the Transmission Wheeling Rates | <ul style="list-style-type: none"> <li>• Issue a Provisional Authority to implement and commence the billing and collection of the Mar2012 in the amount of PhP47,775.38Mn and the PIS in the amount of PhP503.12Mn beginning the billing period of 26 December 2011 to 25 January 2012;</li> <li>• After due notice and hearing, approve the full recovery of the Mar2012 in the amount of PhP47,775.38Mn and the PIS in the amount of PhP503.12Mn beginning the billing period of 26 December 2011 to 25 January 2012;</li> <li>• Approve System Operator and Metering Service Provider Charges to be applied and charged to NGCP's customers in CY 2012; and</li> <li>• Approve the fifty percent (50%) of PhP14.32Mn (or PhP7.16Mn) as RBRT from co-location and rental of equipment</li> </ul>   | No status yet |
| <b>ERC Case No. 2011-134RC</b>  | 20 September 2011 | In the Matter of the Application for Approval of the Capital Expenditures for the Acquisition of the Panay Energy Development Corporation (PEDC) Assets pursuant to Section 9 of Republic Act No. 9136  | <ul style="list-style-type: none"> <li>• To immediately issue a provisional approval authorizing NGCP to acquire the PEDC Assets, including the lot where the switchyard is constructed, upon payment to PEDC of the amount equivalent to NGCP's valuation of the assets to be charged from the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period</li> <li>• After due notice and hearing, approve the CAPEX Application for the acquisition of the PEDC assets, including the lot where the switchyard is constructed, as transmission assets pursuant to the provision of R.A No. 9136, its Implementing Rules and Regulations, and ERC Resolution No. 16, Series of 2011, subject to payment to PEDC of its fair market price to be charged from the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period.</li> <li>• In the event that NGCP exceeds the level of the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period on account of the</li> </ul> | No status yet |



| ERC DECISION/<br>CASE NUMBER          | DATE OF FILING           | NATURE OF PETITION  | GROUNDS FOR FILING  | STATUS   |
|---------------------------------------|--------------------------|---|---|--|
|                                       |                          |   | <p>acquisition of the PEDC assets, the difference in amount between the actual CAPEX and the ERC-approved levels be considered exempted and excluded from the computation of the CAPEX Efficiency Adjustment as provided in Article IX of the RTWR.</p>   |  |
| <p><b>ERC Case No. 2011-133RC</b></p> | <p>19 September 2011</p> | <p>In the Matter of the Application for the Approval of the Capital Expenditure for the acquisition of the Cebu Energy Development Corporation (CEDC) Assets pursuant to section 9 Republic act No. 9136, with prayer for Provisional Authority</p> | <ul style="list-style-type: none"> <li>• Immediately issue a Provisional Approval authorizing NGCP to acquire the CEDC Assets, including the lot where the switchyard is constructed, upon payment to CEDC of the amount equivalent to NGCP's valuation of the assets to be charged from the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period.</li> <li>• After due notice and hearing, approve the CAPEX application for the acquisition of the CEDC Assets, including the lot where the switchyard is constructed, as transmission assets pursuant to the provisions of R.A. No. 9136, its Implementing Rules and Regulations, and ERC Resolution No. 16, series of 2011 subject to payment to CEDC of its fair market price to be charged from the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period</li> <li>• In the event that NGCP exceeds the level of the CAPEX approved for 2011 or in any year of the 3<sup>rd</sup> Regulatory Period on account of the acquisition of the CEDC Assets, the difference in amount between the actual CAPEX and the ERC-approved levels to be considered exempted and excluded from the computation of the CAPEX Efficiency adjustment as provided in Article IX of the RTWR.</li> </ul> | <p>No status yet</p>   |
| <p><b>ERC Case No. 2011-112RC</b></p> | <p>12 August 2011</p>    | <p>In the Matter of the Application for Approval of Force Majeure (FM) event regulated FM Pass through for typhoons Basyang and Juan in accordance with the Rules for setting Transmission Wheeling Rates.</p>                                      | <ul style="list-style-type: none"> <li>• Declare the Typhoons Basyang and Juan as Force Majeure events</li> <li>• Approve the expenditures incurred for the restoration/rehabilitation/repair of the damaged transmission facilities and proposed pass-through amount representing return on and of the capital expenditure associated with the emergency responses and repair and rehabilitation of facilities damaged due to the said events.</li> <li>• Grant provisional authority to implement and bill the FME Pass-</li> </ul>   | <p>On November 22, 2010, ERC issued the Final Determination.</p> |

| ERC DECISION/<br>CASE NUMBER | DATE OF FILING | NATURE OF PETITION | GROUNDS FOR FILING   | STATUS |
|------------------------------|----------------|--------------------|--|--------|
|                              |                |                    | through amount to Luzon customers from 26 September 2011 to 25 December 2015 or until such time that the amount incurred is fully recovered; and<br><br>• Exclude the proposed pass-through Amount from the side constraint calculation. |        |

Source: TRANSCO

Annex 3 – Summary of MERALCO 2011 Residential Unbundled Power Rates

**0 to 200 kWh (P/kWh)**

| BILL SUBGROUP    | Jan           | Feb           | Mar           | Apr            | May           | Jun           | Jul           | Aug           | Sep           | Oct           |
|------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Generation       | 4.0539        | 4.9047        | 5.8183        | 6.7582         | 5.4862        | 5.5740        | 5.6334        | 6.0769        | 5.4113        | 4.3604        |
| Transmission     | 0.7281        | 0.8773        | 0.7369        | 0.8195         | 0.7742        | 0.6201        | 0.9082        | 1.0067        | 0.9594        | 0.9750        |
| System Loss      | 0.5761        | 0.7062        | 0.7755        | 0.8445         | 0.7193        | 0.6911        | 0.7011        | 0.7515        | 0.6491        | 0.5435        |
| Distribution *   | 1.8832        | 1.5017        | 1.5017        | 1.8555         | 1.8555        | 1.8555        | 1.8555        | 1.8555        | 1.8555        | 1.8555        |
| Subsidies**      | 0.1249        | 0.1264        | 0.1388        | 0.1474         | 0.1555        | 0.1487        | 0.1219        | 0.1106        | 0.1368        | 0.1442        |
| Universal Charge | 0.1003        | 0.1003        | 0.1003        | 0.1003         | 0.1003        | 0.1003        | 0.1003        | 0.1003        | 0.1003        | 0.0479        |
| <b>TOTAL***</b>  | <b>7.4665</b> | <b>8.2166</b> | <b>9.0715</b> | <b>10.5254</b> | <b>9.0910</b> | <b>8.9897</b> | <b>9.3204</b> | <b>9.9015</b> | <b>9.1124</b> | <b>7.9265</b> |

**201 to 300 kWh (P/kWh)**

| BILL SUBGROUP    | Jan           | Feb           | Mar           | Apr            | May           | Jun           | Jul           | Aug            | Sep           | Oct           |
|------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|
| Generation       | 4.0539        | 4.9047        | 5.8183        | 6.7582         | 5.4862        | 5.5740        | 5.6334        | 6.0769         | 5.4113        | 4.3604        |
| Transmission     | 0.7281        | 0.8773        | 0.7369        | 0.8195         | 0.7742        | 0.6201        | 0.9082        | 1.0067         | 0.9594        | 0.9750        |
| System Loss      | 0.5761        | 0.7062        | 0.7755        | 0.8445         | 0.7193        | 0.6911        | 0.7011        | 0.7515         | 0.6491        | 0.5435        |
| Distribution *   | 2.1868        | 1.8053        | 1.8053        | 2.2306         | 2.2306        | 2.2306        | 2.2306        | 2.2306         | 2.2306        | 2.2306        |
| Subsidies**      | 0.1249        | 0.1264        | 0.1388        | 0.1474         | 0.1555        | 0.1487        | 0.1219        | 0.1106         | 0.1368        | 0.1442        |
| Universal Charge | 0.1003        | 0.1003        | 0.1003        | 0.1003         | 0.1003        | 0.1003        | 0.1003        | 0.1003         | 0.1003        | 0.0479        |
| <b>TOTAL***</b>  | <b>7.7701</b> | <b>8.5202</b> | <b>9.3751</b> | <b>10.9005</b> | <b>9.4661</b> | <b>9.3648</b> | <b>9.6955</b> | <b>10.2766</b> | <b>9.4875</b> | <b>8.3016</b> |

**301 to 400 kWh(P/kWh)**

| BILL SUBGROUP    | Jan-10        | Feb-10        | Mar-10        | Apr-10         | May-10        | Jun-10        | Jul-10         | Aug-10         | Sep-10        | Oct-10        |
|------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|---------------|---------------|
| Generation       | 4.0539        | 4.9047        | 5.8183        | 6.7582         | 5.4862        | 5.5740        | 5.6334         | 6.0769         | 5.4113        | 4.3604        |
| Transmission     | 0.7281        | 0.8773        | 0.7369        | 0.8195         | 0.7742        | 0.6201        | 0.9082         | 1.0067         | 0.9594        | 0.9750        |
| System Loss      | 0.5761        | 0.7062        | 0.7755        | 0.8445         | 0.7193        | 0.6911        | 0.7011         | 0.7515         | 0.6491        | 0.5435        |
| Distribution *   | 2.4731        | 2.0916        | 2.0916        | 2.5844         | 2.5844        | 2.5844        | 2.5844         | 2.5844         | 2.5844        | 2.5844        |
| Subsidies**      | 0.1249        | 0.1264        | 0.1388        | 0.1474         | 0.1555        | 0.1487        | 0.1219         | 0.1106         | 0.1368        | 0.1442        |
| Universal Charge | 0.1003        | 0.1003        | 0.1003        | 0.1003         | 0.1003        | 0.1003        | 0.1003         | 0.1003         | 0.1003        | 0.0479        |
| <b>TOTAL***</b>  | <b>8.0564</b> | <b>8.8065</b> | <b>9.6614</b> | <b>11.2543</b> | <b>9.8199</b> | <b>9.7186</b> | <b>10.0493</b> | <b>10.6304</b> | <b>9.8413</b> | <b>8.6554</b> |

**Over 400kWh (P/kWh)**

| <b>BILL SUBGROUP</b> | <b>Jan</b>    | <b>Feb</b>    | <b>Mar</b>     | <b>Apr</b>     | <b>May</b>     | <b>Jun</b>     | <b>Jul</b>     | <b>Aug</b>     | <b>Sep</b>     | <b>Oct</b>    |
|----------------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Generation           | 4.0539        | 4.9047        | 5.8183         | 6.7582         | 5.4862         | 5.5740         | 5.6334         | 6.0769         | 5.4113         | 4.3604        |
| Transmission         | 0.7281        | 0.8773        | 0.7369         | 0.8195         | 0.7742         | 0.6201         | 0.9082         | 1.0067         | 0.9594         | 0.9750        |
| System Loss*         | 0.5761        | 0.7062        | 0.7755         | 0.8445         | 0.7193         | 0.6911         | 0.7011         | 0.7515         | 0.6491         | 0.5435        |
| Distribution         | 2.9718        | 2.5903        | 2.5903         | 3.2006         | 3.2006         | 3.2006         | 3.2006         | 3.2006         | 3.2006         | 3.2006        |
| Subsidies**          | 0.1249        | 0.1264        | 0.1388         | 0.1474         | 0.1555         | 0.1487         | 0.1219         | 0.1106         | 0.1368         | 0.1442        |
| Universal Charge     | 0.1003        | 0.1003        | 0.1003         | 0.1003         | 0.1003         | 0.1003         | 0.1003         | 0.1003         | 0.1003         | 0.0479        |
| <b>TOTAL***</b>      | <b>8.5551</b> | <b>9.3052</b> | <b>10.1601</b> | <b>11.8705</b> | <b>10.4361</b> | <b>10.3348</b> | <b>10.6655</b> | <b>11.2466</b> | <b>10.4575</b> | <b>9.2716</b> |

\* Includes Distribution, Supply and Metering Charges  
 \*\* Subsidies covered by customers consuming 101 kWh consumption and up  
 \*\*\* Total rates excluding Government Taxes  
 Source: MERALCO Website

*Annex 4. NPC Generation Charges in PhP/kWh*

| <b>Month &amp; YEAR</b> |           | <b>LUZON</b> | <b>VISAYAS</b> | <b>MINDANAO</b> |
|-------------------------|-----------|--------------|----------------|-----------------|
| <b>2003</b>             |           |              |                |                 |
|                         | January   | 2.4573       | 2.3429         | 1.2914          |
|                         | February  | 2.4664       | 2.3520         | 1.3005          |
|                         | March     | 2.4664       | 2.3520         | 1.3005          |
|                         | April     | 2.4664       | 2.3520         | 1.3005          |
|                         | May       | 2.4009       | 2.5095         | 1.3050          |
|                         | June      | 2.4009       | 2.5095         | 1.3050          |
|                         | July      | 2.4009       | 2.5095         | 1.3050          |
|                         | August    | 2.0065       | 2.5095         | 1.3050          |
|                         | September | 2.0065       | 2.5095         | 1.3050          |
|                         | October   | 2.4962       | 2.6429         | 1.2933          |
|                         | November  | 2.4962       | 2.6429         | 1.2965          |
|                         | December  | 2.4897       | 2.6364         | 1.2666          |
| <b>2004</b>             |           |              |                |                 |
|                         | January   | 2.4897       | 2.7199         | 1.2666          |
|                         | February  | 2.3887       | 2.8391         | 1.3219          |
|                         | March     | 2.3887       | 2.8391         | 1.3219          |
|                         | April     | 2.3887       | 2.8391         | 1.3219          |
|                         | May       | 2.4614       | 2.9118         | 1.4499          |
|                         | June      | 2.5981       | 2.9338         | 1.8317          |
|                         | July      | 2.5981       | 2.9338         | 1.8317          |
|                         | August    | 2.5981       | 2.8349         | 1.8317          |
|                         | September | 2.5981       | 2.8349         | 1.8317          |
|                         | October   | 3.9662       | 3.1888         | 2.2787          |
|                         | November  | 3.9384       | 3.1610         | 2.2509          |
|                         | December  | 3.9384       | 3.1610         | 2.2509          |
| <b>2005</b>             |           |              |                |                 |
|                         | January   | 3.9384       | 3.1610         | 2.2509          |
|                         | February  | 3.9384       | 3.1610         | 2.2509          |
|                         | March     | 3.9384       | 3.1610         | 2.2509          |
|                         | April     | 3.9384       | 3.1610         | 2.2509          |
|                         | May       | 4.4080       | 3.2823         | 2.5307          |
|                         | June      | 4.4080       | 3.2823         | 2.5307          |
|                         | July      | 4.4080       | 3.2823         | 2.5307          |
|                         | August    | 4.4080       | 3.2823         | 2.5307          |
|                         | September | 4.4080       | 3.2823         | 2.5307          |
|                         | October   | 4.4080       | 3.2823         | 2.5307          |
|                         | November  | 4.4080       | 3.2823         | 2.5307          |
|                         | December  | 4.5303       | 3.3654         | 2.5965          |

*Annex 4. NPC Generation Charges in PhP/kWh*

| <b>Month &amp; YEAR</b> |           | <b>LUZON</b> | <b>VISAYAS</b> | <b>MINDANAO</b> |
|-------------------------|-----------|--------------|----------------|-----------------|
| <b>2006</b>             |           |              |                |                 |
|                         | January   | 4.5303       | 3.3654         | 2.5965          |
|                         | February  | 4.5303       | 3.3654         | 2.5965          |
|                         | March     | 4.5303       | 3.3654         | 2.5965          |
|                         | April     | 4.5303       | 3.3654         | 2.5965          |
|                         | May       | 4.5303       | 3.3654         | 2.5965          |
|                         | June      | 4.5303       | 3.2259         | 2.5965          |
|                         | July      | 4.5303       | 3.4043         | 2.5965          |
|                         | August    | 4.9100       | 3.4043         | 2.6205          |
|                         | September | 4.9100       | 3.4043         | 2.6205          |
|                         | October   | 4.9100       | 3.4043         | 2.6205          |
|                         | November  | 4.9100       | 3.4043         | 2.6205          |
|                         | December  | 4.9100       | 3.4043         | 2.6205          |
| <b>2007</b>             |           |              |                |                 |
|                         | January   | 4.9100       | 3.4043         | 2.6205          |
|                         | February  | 4.9100       | 3.4043         | 2.6205          |
|                         | March     | 4.8670       | 3.0892         | 2.6160          |
|                         | April     | 4.8670       | 3.0892         | 2.6160          |
|                         | May       | 4.7857       | 3.0892         | 2.6160          |
|                         | June      | 4.7857       | 2.9056         | 2.6160          |
|                         | July      | 4.6636       | 2.9056         | 2.6160          |
|                         | August    | 4.6636       | 2.9056         | 2.6160          |
|                         | September | 4.5887       | 2.9056         | 2.6160          |
|                         | October   | 4.3344       | 2.8343         | 2.5523          |
|                         | November  | 4.3344       | 2.8343         | 2.5523          |
|                         | December  | 3.6745       | 2.8343         | 2.5523          |
| <b>2008</b>             |           |              |                |                 |
|                         | January   | 4.3184       | 2.8343         | 2.5523          |
|                         | February  | 3.6469       | 2.8343         | 2.5523          |
|                         | March     | 3.6469       | 2.8043         | 2.5523          |
|                         | April     | 3.8896       | 2.8043         | 2.5523          |
|                         | May       | 3.8896       | 2.9056         | 2.5523          |
|                         | June      | 3.1780       | 2.9934         | 2.5277          |
|                         | July      | 3.1780       | 2.9934         | 2.5277          |
|                         | August    | 3.1780       | 2.9934         | 2.5277          |
|                         | September | 3.1780       | 2.9934         | 2.5277          |
|                         | October   | 3.1780       | 2.9934         | 2.5277          |
|                         | November  | 3.1780       | 2.9934         | 2.5277          |
|                         | December  | 3.3611       | 2.9934         | 2.5277          |
| <b>2009</b>             |           |              |                |                 |

*Annex 4. NPC Generation Charges in Php/kWh*

| <b>Month &amp; YEAR</b> |           | <b>LUZON</b> | <b>VISAYAS</b> | <b>MINDANAO</b> |
|-------------------------|-----------|--------------|----------------|-----------------|
|                         | January   | 3.5589       | 2.9934         | 2.5319          |
|                         | February  | 3.5589       | 2.9934         | 2.5319          |
|                         | March     | 4.0271       | 3.8310         | 3.0030          |
|                         | April     | 4.0271       | 3.8310         | 3.0030          |
|                         | May       | 4.0271       | 3.8309         | 3.0030          |
|                         | June      | 4.0271       | 3.8309         | 3.0030          |
|                         | July      | 4.0271       | 3.8309         | 3.0030          |
|                         | August    | 4.0271       | 3.8309         | 2.8459          |
|                         | September | 4.0271       | 3.8309         | 2.8459          |
|                         | October   | 4.0271       | 3.8309         | 2.8459          |
|                         | November  | 4.0271       | 3.8309         | 2.8459          |
|                         | December  | 4.0271       | 3.8309         | 2.8459          |
| <b>2010</b>             |           |              |                |                 |
|                         | January   | 4.0271       | 3.8309         | 2.8459          |
|                         | February  | 4.0271       | 3.7710         | 2.8459          |
|                         | March     | 4.5046       | 4.0557         | 2.9425          |
|                         | April     | 4.3761       | 4.0367         | 2.9630          |
|                         | May       | 4.3930       | 4.1113         | 2.9570          |
|                         | June      | 4.3431       | 4.0250         | 2.8948          |
|                         | July      | 4.5649       | 4.0686         | 2.9189          |
|                         | August    | 4.6187       | 4.0167         | 2.9180          |
|                         | September | 4.6103       | 4.0156         | 2.9166          |
|                         | October   | 4.6096       | 4.0156         | 2.9176          |
|                         | November  | 4.6201       | 4.0230         | 2.9193          |
|                         | December  | 4.6484       | 4.0890         | 2.6651          |
| <b>2011</b>             |           |              |                |                 |
|                         | January   | 4.6576       | 4.0967         | 2.6665          |
|                         | February  | 4.6602       | 4.0967         | 2.6692          |
|                         | March     | 4.6727       | 4.1004         | 2.6729          |
|                         | April     | 4.6786       | 4.0996         | 2.6751          |
|                         | May       | 4.6735       | 4.0971         | 2.6739          |
|                         | June      | 5.0196       | 4.0953         | 2.6745          |
|                         | July      | 5.0140       | 4.0976         | 2.6742          |
|                         | August    | 5.0056       | 4.0726         | 2.6719          |
|                         | September | 5.0154       | 4.0768         | 2.9286          |
|                         | October   | 5.0105       | 4.0743         | 2.9279          |

Source: NPC Website

*Annex 5. Status of Rules Change Proposal in RCC*

| Proposed Changes   | Rationale of Changes   | Status   |
|--|--|--|
| Proposed new WESM Manual on Registration, Suspension and Deregistration Criteria and Procedures. | The proposed new WESM Manual sets out the rules and procedures on registration and suspension set forth in the WESM Rules and the DOE Circular No. DC2010-08-0010 dated 23 August 2010 on the implementation of the disconnection policy.  | On 04 May 2011, the RCC Deliberated and approved by the RCC on 04 May 2011 with general amendments, which were subsequently submitted to the PEM Board on 12 May 2011, for approval. |
| Proposed amendments to the WESM Rules and Billing & Settlement Manual.                           | The proposed changes specify a prescribed period within which the Market Operator shall issue the final statement adjustments. Specifically, the MO should already issue the adjustments within twelve (12) calendar months after the dispute on the final statement has been resolved or six (6) calendar months after the error has been identified.   | On 04 May 2011, the RCC deliberated and approved the following as general amendments, which were subsequently submitted to the PEM Board on 12 May 2011, for approval.               |
| Proposed Changes to the WESM Rules on Dispute Resolution Provisions.                             | The urgent rules change proposal introduces changes to the existing WESM dispute resolution structure/mechanism where the mediator and arbitrators shall no longer form part of the Dispute Resolution Group (DRG) and the DRG shall no longer be a PEM Board Committee. The proposal likewise provides that the mediators and arbitrators for dispute resolution cases shall be sourced from a pool of accredited mediators and arbitrators from certified alternative dispute resolution providers.  | The proposed urgent amendments were approved by the RCC during its meeting on 08 June 2011.  |
| Proposed Amendments to the WESM Manual on the Management of Must-Run Units.                      | The proposed amendments involve revisions on the compensation and settlement mechanism to comply with ERC Order dated 6 February 2008 in ERC Case No. 2006-007 RC, as well as provide for regional application of the methodology for allocating the MRU settlement. For this purpose, regional application means that the application of cost recovery will be applied only to the region where the must-run unit is implemented. The proposal likewise involves revisions on the flowchart to reflect the current procedures being followed by the System Operator (SO) in designating and scheduling of MRUs. | Submitted by PEMC on 07 June 2011  |
| Proposed New WESM Manual on the Segregation of Line Rental.                                      | The proposed new WESM Manual documents the manner by which the line rental trading amount is computed in the WESM and provides the methodology for segregating line rental trading amounts into cost of losses and congestion.   | It was approved by the PEM Board during its meeting on 25 August 2011.   |



Annex 6 – Status of Technical Committee's Review and Monitoring of Technical Matters under the Grid Code, Distribution Code and the WESM Rules

| Proposed Changes   | Rationale of Changes/Review  | Status  |
|--|--|---|
| Proposed Amendments to the "Must-Offer" Rule;                                      | In general, the TC does not agree with the said proposal to include the coal requirement as a constraint in not offering all its available capacity considering that this commercial in nature.  | The Technical Committee submitted its comments regarding the proposal to the RCC on 5 April 2011. This amendment is proposed the Aboitiz Power Corp.  |
| Proposed WESM Manual for Registration, Suspension and Deregistration               | The TC recommended the use of information contained in the Certificate of Compliance issued by the ERC, such as the generator's maximum and minimum stable loading (Pmax/min) and ramp rates.  | The Technical Committee submitted its comments regarding the proposal to the RCC on 5 April 2011.   |
| Review of Forced and Scheduled Outages, including Deactivated and Reserve Shutdown | The review suggests the need to harmonize the definition and the use of these terms to the current market set up consistent with the Grid Code and the WESM Rules and Manuals.   | On 09 June 2011, the TC submitted the result of its review of the power plant outage classifications such as forced and scheduled outages, and deactivated and reserve shutdown to the MSC. |
| Review of Dispatch Tolerance Limits  | Upon the request of the MSC, the TC commenced its technical review of the WESM dispatch tolerance limit, which is initially set at +/- 3 %. The initial results of the review showed that under the WESM Rules Sections 3.8.7.1 and 3.8.7.2, dispatch tolerances must be issued by the System Operator for each type of plant and location in accordance with the Grid Code and Distribution Code. | The TC has requested inputs from NGCP on the dispatch tolerance standards, which will serve as reference for the TC's review.   |
| Proposed Definition of Adverse Effect  | To determine the extent of impact to the grid of a non-compliance to the WESM Rules, the TC has requested from the NGCP-SO information on actual incidents of material incidences of non-compliance with the RTD schedule/ dispatch instruction that have affected the safety of the grid leading to problems involving power quality, system reliability, system loss and safety.                 | The TC has agreed to adopt the definition of "material effect" under the Grid Code.   |

Source: PEMC

*Annex 7. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)*

| Billing Month |          | Metered Quantity | Spot Quantity (Load), MWh | %     | Bilateral Contract Quantity, MWh | %   |
|---------------|----------|------------------|---------------------------|-------|----------------------------------|-----|
| 1             | Jul-2006 | 3,094,164.95     | 1,355,434.37              | 44%   | 1,738,730.58                     | 56% |
| 2             | Aug-2006 | 3,147,800.36     | 1,159,428.23              | 37%   | 1,988,372.13                     | 63% |
| 3             | Sep-2006 | 3,314,855.13     | 1,291,334.84              | 39%   | 2,023,520.30                     | 61% |
| 4             | Oct-2006 | 2,873,285.25     | 1,224,467.60              | 43%   | 1,648,817.65                     | 57% |
| 5             | Nov-2006 | 3,234,958.03     | 1,069,288.10              | 33%   | 2,165,669.93                     | 67% |
| 6             | Dec-2006 | 2,972,091.65     | 519,152.06                | 17%   | 2,452,939.59                     | 83% |
| 7             | Jan-2007 | 3,035,805.04     | 589,925.05                | 19%   | 2,445,879.99                     | 81% |
| 8             | Feb-2007 | 3,102,610.89     | 510,281.30                | 16%   | 2,592,329.59                     | 84% |
| 9             | Mar-2007 | 2,980,658.77     | 536,155.65                | 18%   | 2,444,503.12                     | 82% |
| 10            | Apr-2007 | 3,407,504.68     | 698,602.96                | 21%   | 2,708,901.72                     | 79% |
| 11            | May-2007 | 3,460,944.49     | 503,878.03                | 15%   | 2,957,066.46                     | 85% |
| 12            | Jun-2007 | 3,561,655.99     | 805,535.91                | 23%   | 2,756,120.08                     | 77% |
| 13            | Jul-2007 | 3,408,973.90     | 531,237.60                | 16%   | 2,877,736.29                     | 84% |
| 14            | Aug-2007 | 3,286,050.22     | 460,225.65                | 14%   | 2,825,824.57                     | 86% |
| 15            | Sep-2007 | 3,362,494.13     | 358,578.07                | 11%   | 3,003,916.06                     | 89% |
| 16            | Oct-2007 | 3,229,031.96     | 247,585.19                | 8%    | 2,981,446.77                     | 92% |
| 17            | Nov-2007 | 3,204,655.78     | 346,596.90                | 11%   | 2,858,058.88                     | 89% |
| 18            | Dec-2007 | 3,083,441.24     | 371,343.26                | 12%   | 2,712,097.98                     | 88% |
| 19            | Jan-2008 | 3,131,009.80     | 411,372.54                | 13%   | 2,719,637.26                     | 87% |
| 20            | Feb-2008 | 3,212,635.82     | 454,532.74                | 14%   | 2,758,103.08                     | 86% |
| 21            | Mar-2008 | 3,041,008.30     | 354,398.37                | 12%   | 2,686,609.93                     | 88% |
| 22            | Apr-2008 | 3,634,855.57     | 634,329.07                | 17%   | 3,000,526.50                     | 83% |
| 23            | May-2008 | 3,323,367.13     | 356,234.23                | 11%   | 2,967,132.90                     | 89% |
| 24            | Jun-2008 | 3,538,106.32     | 400,132.11                | 11%   | 3,137,974.21                     | 89% |
| 25            | Jul-2008 | 3,435,104.78     | 408,863.87                | 12%   | 3,026,240.91                     | 88% |
| 26            | Aug-2008 | 3,399,912.16     | 372,803.00                | 11%   | 3,027,109.16                     | 89% |
| 27            | Sep-2008 | 3,530,050.75     | 511,447.58                | 14%   | 3,018,603.17                     | 86% |
| 28            | Oct-2008 | 3,421,671.57     | 466,154.42                | 13.6% | 2,955,517.15                     | 86% |
| 29            | Nov-2008 | 3,447,266.38     | 535,759.02                | 15.5% | 2,911,507.37                     | 84% |
| 30            | Dec-2008 | 3,151,245.74     | 545,175.13                | 17.3% | 2,606,070.61                     | 83% |

*Annex 7. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)*

| Billing Month |          | Metered Quantity | Spot Quantity (Load), MWh | %     | Bilateral Contract Quantity, MWh | %   |
|---------------|----------|------------------|---------------------------|-------|----------------------------------|-----|
| 31            | Jan-2009 | 2.906.720.56     | 604.622.65                | 20.8% | 2.302.097.92                     | 79% |
| 32            | Feb-2009 | 3.358.810.66     | 766.465.14                | 22.8% | 2.592.345.53                     | 77% |
| 33            | Mar-2009 | 3.222.969.29     | 537.701.69                | 16.7% | 2.685.267.60                     | 83% |
| 34            | Apr-2009 | 3.503.547.55     | 414.910.72                | 11.8% | 3.088.636.83                     | 88% |
| 35            | May-2009 | 3.463.438.29     | 516.030.34                | 14.9% | 2.947.407.95                     | 85% |
| 36            | Jun-2009 | 3.608.313.89     | 475.456.08                | 13.2% | 3.132.857.82                     | 87% |
| 37            | Jul-2009 | 3.538.571.31     | 357.675.26                | 10.1% | 3.180.896.05                     | 90% |
| 38            | Aug-2009 | 3.671.459.51     | 586.189.83                | 16.0% | 3.085.269.69                     | 84% |
| 39            | Sep-2009 | 3.652.903.81     | 486.078.85                | 13.3% | 3.166.824.96                     | 87% |
| 40            | Oct-2009 | 3.347.101.84     | 512.979.44                | 15.3% | 2.834.122.40                     | 85% |
| 41            | Nov-2009 | 3.575.986.76     | 474.059.82                | 13.3% | 3.101.926.94                     | 87% |
| 42            | Dec-2009 | 3.381.576.00     | 447.970.83                | 13.2% | 2.933.605.16                     | 87% |
| 43            | Jan-2010 | 3.391.691.08     | 464.968.76                | 13.7% | 2.926.722.32                     | 86% |
| 44            | Feb-2010 | 3.709.258.54     | 678.908.20                | 18.3% | 3.030.350.34                     | 82% |
| 45            | Mar-2010 | 3.496.870.27     | 479.469.01                | 13.7% | 3.017.401.26                     | 86% |
| 46            | Apr-2010 | 3.785.877.48     | 587.784.31                | 15.5% | 3.198.093.17                     | 84% |
| 47            | May-2010 | 4.025.236.25     | 632.741.76                | 15.7% | 3.392.494.49                     | 84% |
| 48            | Jun-2010 | 4.120.067.20     | 711.151.61                | 17.3% | 3.408.915.59                     | 83% |
| 49            | Jul-2010 | 3.705.460.47     | 594.644.27                | 16.0% | 3.110.816.20                     | 84% |
| 50            | Aug-2010 | 3.900.844.43     | 462.747.56                | 11.9% | 3.438.096.86                     | 88% |
| 51            | Sep-2010 | 3.893.171.32     | 321.815.88                | 8.3%  | 3.571.355.44                     | 92% |
| 52            | Oct-2010 | 3.721.843.57     | 363.704.17                | 9.8%  | 3.358.139.40                     | 90% |
| 53            | Nov-2010 | 3.791.123.99     | 448.742.73                | 11.8% | 3.342.381.26                     | 88% |
| 54            | Dec-2010 | 3.618.918.64     | 403.623.82                | 11.2% | 3.215.294.82                     | 89% |
| 55            | Jan-2011 | 4.065.400.56     | 272.481.78                | 6.7%  | 3.792.918.77                     | 93% |
| 56            | Feb-2011 | 4.405.384.21     | 470.203.49                | 10.7% | 3.935.180.72                     | 89% |
| 57            | Mar-2011 | 4.072.738.35     | 263.789.55                | 6.5%  | 3.808.948.79                     | 94% |
| 58            | Apr-2011 | 4,313,514.71     | 202,777.98                | 5%    | 4,110,736.73                     | 95% |
| 59            | May-2011 | 4,675,217.40     | 399,466.39                | 9%    | 4,275,751.00                     | 91% |
| 60            | Jun-2011 | 4,665,692.14     | 453,082.12                | 10%   | 4,212,610.01                     | 90% |

Annex 7. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)

| Billing Month |          | Metered Quantity | Spot Quantity (Load), MWh | %   | Bilateral Contract Quantity, MWh | %   |
|---------------|----------|------------------|---------------------------|-----|----------------------------------|-----|
| 61            | Jul-2011 | 4,496,424.04     | 358,118.31                | 8%  | 4,138,305.73                     | 92% |
| 62            | Aug-2011 | 4,588,527.67     | 280,049.63                | 6%  | 4,308,478.03                     | 94% |
| 63            | Sep-2011 | 4,591,257.49     | 364,979.67                | 8%  | 4,226,277.81                     | 92% |
| 64            | Oct-2011 | 4,359,048.50     | 435,802.47                | 10% | 3,923,246.03                     | 90% |

Source: PEMC

*Annex 8. Demand and Energy Offers (MW)*

| Billing Month |          | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers | Average Capacity on Outage |
|---------------|----------|-------------|----------------------------|----------------|-----------------------|----------------------------|
| 1             | Jul-2006 | 6,111       | 7,185                      | 4,778          | 6,242                 | 2,634                      |
| 2             | Aug-2006 | 5,888       | 5,950                      | 4,634          | 6,027                 | 2,094                      |
| 3             | Sep-2006 | 6,113       | 6,705                      | 4,887          | 6,446                 | 1,743                      |
| 4             | Oct-2006 | 5,895       | 6,653                      | 4,323          | 5,818                 | 1,866                      |
| 5             | Nov-2006 | 5,894       | 5,808                      | 4,715          | 5,769                 | 2,223                      |
| 6             | Dec-2006 | 5,869       | 5,925                      | 4,468          | 5,257                 | 3,188                      |
| 7             | Jan-2007 | 5,739       | 5,794                      | 4,407          | 5,250                 | 1,815                      |
| 8             | Feb-2007 | 6,021       | 5,965                      | 4,529          | 5,371                 | 1,737                      |
| 9             | Mar-2007 | 6,108       | 5,747                      | 4,845          | 5,362                 | 1,846                      |
| 10            | Apr-2007 | 6,559       | 6,268                      | 4,991          | 5,284                 | 1,769                      |
| 11            | May-2007 | 6,590       | 6,831                      | 5,249          | 5,766                 | 770                        |
| 12            | Jun-2007 | 6,547       | 6,308                      | 5,187          | 5,631                 | 1,137                      |
| 13            | Jul-2007 | 6,413       | 5,384                      | 5,124          | 5,099                 | 1,454                      |
| 14            | Aug-2007 | 6,339       | 6,015                      | 4,880          | 5,675                 | 953                        |
| 15            | Sep-2007 | 6,376       | 6,073                      | 4,894          | 5,568                 | 1,440                      |
| 16            | Oct-2007 | 6,103       | 6,260                      | 4,872          | 5,723                 | 1,725                      |
| 17            | Nov-2007 | 6,088       | 5,964                      | 4,659          | 5,833                 | 1,608                      |
| 18            | Dec-2007 | 6,092       | 5,989                      | 4,645          | 5,529                 | 1,106                      |
| 19            | Jan-2008 | 5,949       | 6,495                      | 4,564          | 5,594                 | 1,166                      |
| 20            | Feb-2008 | 6,034       | 5,880                      | 4,676          | 5,410                 | 1,618                      |
| 21            | Mar-2008 | 6,205       | 5,664                      | 4,725          | 5,337                 | 1,800                      |
| 22            | Apr-2008 | 6,619       | 6,584                      | 5,301          | 5,949                 | 1,149                      |
| 23            | May-2008 | 6,590       | 7,141                      | 5,035          | 6,344                 | 967                        |
| 24            | Jun-2008 | 6,681       | 6,733                      | 5,159          | 6,639                 | 860                        |
| 25            | Jul-2008 | 6,512       | 6,401                      | 5,164          | 5,909                 | 1,168                      |
| 26            | Aug-2008 | 6,373       | 6,795                      | 4,948          | 6,189                 | 1,459                      |
| 27            | Sep-2008 | 6,448       | 6,516                      | 5,120          | 6,534                 | 1,300                      |
| 28            | Oct-2008 | 6,520       | 6,316                      | 5,124          | 5,825                 | 1,845                      |
| 29            | Nov-2008 | 6,395       | 6,361                      | 4,986          | 5,828                 | 1,204                      |
| 30            | Dec-2008 | 6,338       | 6,826                      | 4,711          | 6,327                 | 946                        |
| 31            | Jan-2009 | 6,050       | 6,512                      | 4,191          | 5,603                 | 1,472                      |
| 32            | Feb-2009 | 6,421       | 6,240                      | 4,853          | 5,969                 | 1,281                      |
| 33            | Mar-2009 | 6,638       | 6,721                      | 5,167          | 6,315                 | 1,104                      |
| 34            | Apr-2009 | 6,810       | 7,220                      | 5,068          | 6,374                 | 1,383                      |
| 35            | May-2009 | 6,842       | 7,493                      | 5,157          | 6,788                 | 1,250                      |
| 36            | Jun-2009 | 6,932       | 7,374                      | 5,203          | 6,876                 | 1,432                      |
| 37            | Jul-2009 | 6,819       | 7,482                      | 5,258          | 6,875                 | 980                        |
| 38            | Aug-2009 | 6,833       | 7,263                      | 5,255          | 6,692                 | 1,577                      |
| 39            | Sep-2009 | 6,870       | 7,044                      | 5,228          | 7,007                 | 1,592                      |
| 40            | Oct-2009 | 6,501       | 6,532                      | 4,935          | 6,511                 | 2,427                      |
| 41            | Nov-2009 | 6,585       | 7,474                      | 5,141          | 6,912                 | 1,024                      |

*Annex 8. Demand and Energy Offers (MW)*

| Billing Month |          | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers | Average Capacity on Outage |
|---------------|----------|-------------|----------------------------|----------------|-----------------------|----------------------------|
| 42            | Dec-2009 | 6,564       | 7,195                      | 5,070          | 6,720                 | 1,176                      |
| 43            | Jan-2010 | 6,391       | 6,266                      | 4,902          | 5,813                 | 2,071                      |
| 44            | Feb-2010 | 6,877       | 6,783                      | 5,435          | 5,592                 | 2,520                      |
| 45            | Mar-2010 | 7,037       | 6,347                      | 5,683          | 5,864                 | 1,867                      |
| 46            | Apr-2010 | 7,296       | 7,169                      | 5,574          | 6,079                 | 1,696                      |
| 47            | May-2010 | 7,558       | 7,152                      | 6,101          | 6,932                 | 631                        |
| 48            | Jun-2010 | 7,643       | 7,791                      | 6,027          | 6,618                 | 1,245                      |
| 49            | Jul-2010 | 7,242       | 7,447                      | 5,605          | 6,247                 | 1,712                      |
| 50            | Aug-2010 | 7,042       | 7,049                      | 5,699          | 6,780                 | 1,737                      |
| 51            | Sep-2010 | 7,039       | 7,170                      | 5,656          | 6,480                 | 2,193                      |
| 52            | Oct-2010 | 7,044       | 6,731                      | 5,576          | 5,986                 | 2,445                      |
| 53            | Nov-2010 | 6,842       | 6,857                      | 5,512          | 6,229                 | 2,214                      |
| 54            | Dec-2010 | 6,902       | 7,028                      | 5,543          | 6,354                 | 2,121                      |
| 55            | Jan-2011 | 6,587       | 6,778                      | 5,035          | 6,299                 |                            |
| 56            | Feb-2011 | 6,864       | 7,161                      | 5,366          | 6,796                 |                            |
| 57            | Mar-2011 | 6,973       | 7,655                      | 5,484          | 7,279                 |                            |
| 58            | Apr-2011 | 7,037       | 7,419                      | 5,384          | 6,953                 |                            |
| 59            | May-2011 | 7,507       | 7,326                      | 6,059          | 6,892                 |                            |
| 60            | Jun-2011 | 7,530       | 7,338                      | 5,828          | 6,964                 |                            |
| 61            | Jul-2011 | 7,404       | 7,742                      | 5,814          | 6,722                 |                            |
| 62            | Aug-2011 | 7,188       | 7,394                      | 5,699          | 6,847                 |                            |
| 63            | Sep-2011 | 7,099       | 7,039                      | 5,686          | 6,789                 |                            |

Source: PEMC

*Note: For the average capacity on outage column, data for the previous months pertain to outage based on ACNO (available capacity not offered)  
Starting Feb 2010, data will be based on per unit; the same is also published in monthly reports and WESM exchange.*

Annex 9. Generation Mix (%)

| Billing Month | Hydro    | Geo    | Coal   | Nat Gas | D/O    | Wind   | Biofuel |
|---------------|----------|--------|--------|---------|--------|--------|---------|
| 1             | Jul-06   | 12.53% | 9.28%  | 33.67%  | 43.16% | 1.27%  | 0.09%   |
| 2             | Aug-06   | 21.78% | 8.89%  | 24.27%  | 44.91% | 0.08%  | 0.07%   |
| 3             | Sep-06   | 18.37% | 9.29%  | 29.71%  | 42.49% | 0.09%  | 0.04%   |
| 4             | Oct-06   | 13.81% | 6.34%  | 28.65%  | 49.74% | 1.25%  | 0.21%   |
| 5             | Nov-06   | 15.72% | 7.03%  | 26.93%  | 47.25% | 2.90%  | 0.17%   |
| 6             | Dec-06   | 17.15% | 6.58%  | 30.53%  | 35.12% | 10.24% | 0.38%   |
| 7             | Jan-07   | 11.72% | 6.61%  | 30.30%  | 50.47% | 0.61%  | 0.30%   |
| 8             | Feb-07   | 10.76% | 9.57%  | 28.08%  | 49.97% | 1.46%  | 0.15%   |
| 9             | Mar-07   | 8.62%  | 9.46%  | 33.48%  | 45.65% | 2.66%  | 0.14%   |
| 10            | Apr-07   | 6.67%  | 8.83%  | 31.52%  | 46.03% | 6.84%  | 0.11%   |
| 11            | May-07   | 5.12%  | 7.47%  | 36.34%  | 48.21% | 2.80%  | 0.06%   |
| 12            | Jun-07   | 9.29%  | 8.88%  | 32.39%  | 44.63% | 4.80%  | 0.02%   |
| 13            | Jul-07   | 8.93%  | 9.57%  | 32.21%  | 39.69% | 9.56%  | 0.04%   |
| 14            | Aug-07   | 9.29%  | 10.14% | 33.72%  | 44.87% | 1.88%  | 0.09%   |
| 15            | Sep-07   | 11.80% | 10.62% | 29.68%  | 47.24% | 0.61%  | 0.04%   |
| 16            | Oct-07   | 16.15% | 11.26% | 31.15%  | 39.86% | 1.35%  | 0.23%   |
| 17            | Nov-07   | 17.07% | 11.54% | 31.76%  | 38.46% | 0.91%  | 0.28%   |
| 18            | Dec-07   | 16.09% | 11.71% | 30.97%  | 37.42% | 3.61%  | 0.20%   |
| 19            | Jan-2008 | 11.32% | 11.60% | 31.77%  | 43.24% | 1.83%  | 0.25%   |
| 20            | Feb-2008 | 11.76% | 11.48% | 29.86%  | 43.77% | 2.86%  | 0.26%   |
| 21            | Mar-2008 | 11.92% | 10.85% | 21.28%  | 52.86% | 2.88%  | 0.21%   |
| 22            | Apr-2008 | 7.68%  | 9.93%  | 29.26%  | 48.43% | 4.63%  | 0.07%   |
| 23            | May-2008 | 12.08% | 10.07% | 27.65%  | 49.28% | 0.85%  | 0.08%   |
| 24            | Jun-2008 | 14.92% | 10.23% | 28.65%  | 45.09% | 1.09%  | 0.03%   |
| 25            | Jul-2008 | 12.88% | 9.40%  | 29.65%  | 42.99% | 5.04%  | 0.04%   |
| 26            | Aug-2008 | 15.07% | 11.42% | 21.23%  | 47.02% | 5.18%  | 0.08%   |
| 27            | Sep-2008 | 14.91% | 10.41% | 24.68%  | 45.40% | 4.54%  | 0.05%   |
| 28            | Oct-2008 | 15.37% | 9.31%  | 32.54%  | 39.82% | 2.84%  | 0.12%   |
| 29            | Nov-2008 | 10.92% | 9.59%  | 36.02%  | 40.69% | 2.61%  | 0.18%   |
| 30            | Dec-2008 | 11.44% | 9.28%  | 33.34%  | 45.08% | 0.57%  | 0.29%   |
| 31            | Jan-2009 | 11.61% | 12.99% | 36.68%  | 37.97% | 0.34%  | 0.40%   |
| 32            | Feb-2009 | 10.16% | 10.24% | 35.38%  | 42.23% | 1.81%  | 0.17%   |
| 33            | Mar-2009 | 7.77%  | 10.10% | 32.95%  | 46.79% | 2.31%  | 0.09%   |
| 34            | Apr-2009 | 6.17%  | 9.72%  | 32.54%  | 46.65% | 4.76%  | 0.15%   |
| 35            | May-2009 | 11.42% | 8.92%  | 29.58%  | 44.95% | 4.95%  | 0.17%   |
| 36            | Jun-2009 | 14.27% | 8.46%  | 26.88%  | 45.88% | 4.44%  | 0.08%   |
| 37            | Jul-2009 | 13.85% | 8.33%  | 30.58%  | 45.82% | 1.38%  | 0.04%   |
| 38            | Aug-2009 | 17.95% | 7.75%  | 26.92%  | 43.92% | 3.42%  | 0.04%   |
| 39            | Sep-2009 | 17.01% | 7.12%  | 24.69%  | 47.59% | 3.56%  | 0.04%   |
| 40            | Oct-2009 | 21.46% | 8.08%  | 20.64%  | 46.80% | 2.92%  | 0.11%   |
| 41            | Nov-2009 | 11.41% | 8.84%  | 30.12%  | 46.82% | 2.62%  | 0.19%   |
| 42            | Dec-2009 | 9.76%  | 8.91%  | 30.80%  | 48.50% | 1.79%  | 0.24%   |

*Annex 9. Generation Mix (%)*

| <b>Billing Month</b> | <b>Hydro</b> | <b>Geo</b> | <b>Coal</b> | <b>Nat Gas</b> | <b>D/O</b> | <b>Wind</b> | <b>Biofuel</b> |        |
|----------------------|--------------|------------|-------------|----------------|------------|-------------|----------------|--------|
| 43                   | Jan-2010     | 9.58%      | 9.76%       | 30.48%         | 45.93%     | 3.97%       | 0.28%          |        |
| 44                   | Feb-2010     | 8.19%      | 8.04%       | 42.71%         | 32.69%     | 8.27%       | 0.10%          |        |
| 45                   | Mar-2010     | 6.45%      | 8.56%       | 46.90%         | 28.70%     | 9.30%       | 0.08%          |        |
| 46                   | Apr-2010     | 4.53%      | 7.46%       | 43.11%         | 37.75%     | 7.00%       | 0.15%          |        |
| 47                   | May-2010     | 3.86%      | 6.51%       | 44.52%         | 40.50%     | 4.57%       | 0.04%          |        |
| 48                   | Jun-2010     | 4.69%      | 6.46%       | 42.54%         | 40.69%     | 5.58%       | 0.04%          |        |
| 49                   | Jul-2010     | 8.75%      | 6.47%       | 35.74%         | 41.20%     | 7.81%       | 0.02%          |        |
| 50                   | Aug-2010     | 11.25%     | 6.51%       | 35.38%         | 41.44%     | 5.28%       | 0.14%          |        |
| 51                   | Sep-2010     | 11.36%     | 6.56%       | 33.22%         | 44.17%     | 4.62%       | 0.06%          |        |
| 52                   | Oct-2010     | 9.87%      | 7.46%       | 33.21%         | 43.92%     | 5.46%       | 0.08%          |        |
| 53                   | Nov-2010     | 12.15%     | 7.51%       | 34.93%         | 42.51%     | 2.64%       | 0.26%          |        |
| 54                   | Dec-2010     | 9.70%      | 7.70%       | 37.60%         | 42.70%     | 2.00%       | 0.30%          |        |
| 55                   | Jan-2011     | 8.30%      | 18.00%      | 39.10%         | 33.10%     | 1.10%       | 0.30%          | 0.006% |
| 56                   | Feb-2011     | 7.66%      | 16.58%      | 34.94%         | 39.66%     | 0.93%       | 0.22%          | 0.009% |
| 57                   | Mar-2011     | 7.07%      | 15.25%      | 38.49%         | 38.16%     | 0.72%       | 0.25%          | 0.071% |
| 58                   | Apr-2011     | 8.3%       | 18.0%       | 39.8%          | 32.9%      | 0.7%        | 0.312%         | 0.013% |
| 59                   | May-2011     | 7.6%       | 16.7%       | 35.0%          | 39.4%      | 1.0%        | 0.218%         | 0.023% |
| 60                   | Jun-2011     | 7.1%       | 15.2%       | 38.4%          | 38.0%      | 1.1%        | 0.239%         | 0.050% |
| 61                   | Jul-2011     | 5.6%       | 15.9%       | 39.8%          | 37.6%      | 0.8%        | 0.219%         | 0.122% |
| 62                   | Aug-2011     | 4.4%       | 14.6%       | 42.2%          | 35.7%      | 2.9%        | 0.056%         | 0.036% |
| 63                   | Sep-2011     | 5.8%       | 15.1%       | 41.1%          | 36.9%      | 1.0%        | 0.049%         | 0.000% |
| 64                   | Oct-11       | 13.7%      | 14.3%       | 34.6%          | 34.3%      | 3.1%        | 0.100%         | 0.006% |

Source: PEMC



Annex 10. Effective Settlement Prices

| EFFECTIVE SETTLEMENT PRICES (PhP/MWh) |               |                  |                   |                        |
|---------------------------------------|---------------|------------------|-------------------|------------------------|
|                                       | Billing Month | ESP (w/ Surplus) | ESP (w/o Surplus) | Cumulative Average ESP |
| 1                                     | Jul-2006      | 3,255.36         | 3,094.12          | 3,152                  |
| 2                                     | Aug-2006      | 3,767.94         | 3,577.67          | 3,373                  |
| 3                                     | Sep-2006      | 4,129.05         | 4,129.05          | 3,624                  |
| 4                                     | Oct-2006      | 4,159.09         | 4,159.09          | 3,750                  |
| 5                                     | Nov-2006      | 6,092.03         | 5,746.92          | 4,115                  |
| 6                                     | Dec-2006      | 9,807.99         | 8,731.92          | 4,542                  |
| 7                                     | Jan-2007      | 3,981.62         | 3,791.67          | 4,481                  |
| 8                                     | Feb-2007      | 4,932.45         | 4,810.36          | 4,501                  |
| 9                                     | Mar-2007      | 5,936.19         | 5,370.34          | 4,560                  |
| 10                                    | Apr-2007      | 8,738.61         | 8,592.97          | 4,871                  |
| 11                                    | May-2007      | 7,555.25         | 6,484.51          | 4,962                  |
| 12                                    | Jun-2007      | 7,164.04         | 6,031.63          | 5,062                  |
| 13                                    | Jul-2007      | 8,768.71         | 8,350.31          | 5,223                  |
| 14                                    | Aug-2007      | 4,626.97         | 4,348.65          | 5,196                  |
| 15                                    | Sep-2007      | 4,309.14         | 3,538.37          | 5,147                  |
| 16                                    | Oct-2007      | 6,244.44         | 3,599.09          | 5,119                  |
| 17                                    | Nov-2007      | 5,276.00         | 2,618.23          | 5,056                  |
| 18                                    | Dec-2007      | 6,793.73         | 6,425.61          | 5,098                  |
| 19                                    | Jan-2008      | 2,551.23         | 2,278.66          | 5,010                  |
| 20                                    | Feb-2008      | 5,729.20         | 5,389.93          | 5,024                  |
| 21                                    | Mar-2008      | 6,723.81         | 6,373.18          | 5,060                  |
| 22                                    | Apr-2008      | 6,006.01         | 5,545.63          | 5,085                  |
| 23                                    | May-2008      | 2,315.63         | 1,734.50          | 5,005                  |
| 24                                    | Jun-2008      | 3,370.16         | 2,100.68          | 4,933                  |
| 25                                    | Jul-2008      | 16,600.93        | 7,872.34          | 5,037                  |
| 26                                    | Aug-2008      | 4,124.77         | 4,124.77          | 5,016                  |
| 27                                    | Sep-2008      | 3,911.62         | 3,911.62          | 4,981                  |
| 28                                    | Oct-2008      | 4,009.38         | 4,009.38          | 4,955                  |
| 29                                    | Nov-2008      | 5,520.95         | 4,833.61          | 4,954                  |
| 30                                    | Dec-2008      | 1,244.97         | 786.69            | 4,831                  |
| 31                                    | Jan-2009      | 1,881.33         | 1,797.76          | 4,733                  |
| 32                                    | Feb-2009      | 3,062.87         | 2,893.06          | 4,662                  |
| 33                                    | Mar-2009      | 3,395.09         | 2,774.35          | 4,614                  |
| 34                                    | Apr-2009      | 4,350.10         | 3,798.38          | 4,598                  |
| 35                                    | May-2009      | 2,871.07         | 2,516.38          | 4,548                  |
| 36                                    | Jun-2009      | 2,519.61         | 2,207.39          | 4,497                  |
| 37                                    | Jul-2009      | 3,294.88         | 2,041.02          | 4,459                  |
| 38                                    | Aug-2009      | 2,291.13         | 1,986.39          | 4,395                  |
| 39                                    | Sep-2009      | 2,080.29         | 1,148.78          | 4,328                  |
| 40                                    | Oct-2009      | 1,445.37         | 1,396.63          | 4,264                  |

| <b>EFFECTIVE SETTLEMENT PRICES (PhP/MWh)</b> |          |                         |                          |                               |
|--|----------|-------------------------|--------------------------|-------------------------------|
| <b>Billing Month</b>                         |          | <b>ESP (w/ Surplus)</b> | <b>ESP (w/o Surplus)</b> | <b>Cumulative Average ESP</b> |
| 41   | Nov-2009 | 2,287.51                | 2,089.83                 | 4,221                         |
| 42   | Dec-2009 | 3,656.20                | 3,304.74                 | 4,205                         |
| 43   | Jan-2010 | 4,559.03                | 4,425.10                 | 4,209                         |
| 44   | Feb-2010 | 11,286.94               | 10,999.48                | 4,393                         |
| 45   | Mar-2010 | 13,383.73               | 12,253.53                | 4,541                         |
| 46   | Apr-2010 | 8,873.98                | 8,725.72                 | 4,635                         |
| 47   | May-2010 | 8,467.56                | 7,933.40                 | 4,714                         |
| 48   | Jun-2010 | 8,737.16                | 8,265.95                 | 4,807                         |
| 49   | Jul-2010 | 10,542.92               | 9,089.57                 | 4,902                         |
| 50   | Aug-2010 | 5,952.68                | 5,034.90                 | 4,906                         |
| 51   | Sep-2010 | 8,980.91                | 7,508.47                 | 4,936                         |
| 52   | Oct-2010 | 10,276.10               | 9,543.00                 | 4,993                         |
| 53   | Nov-2010 | 7,492.27                | 7,011.72                 | 5,024                         |
| 54   | Dec-2010 | 6,824.19                | 6,394.00                 | 5,043                         |
| <b>Billing Month</b>                         |          | <b>Customer ESSP</b>    |                          |                               |
| 55   | Jan-2011 | 3,388                   |                          |                               |
| 56   | Feb-2011 | 3,453                   |                          |                               |
| 57   | Mar-2011 | 2,554                   |                          |                               |
| 58   | Apr-2011 | 3,404                   |                          |                               |
| 59   | May-2011 | 6,408                   |                          |                               |
| 60   | Jun-2011 | 4,189                   |                          |                               |
| 61   | Jul-2011 | 5,179                   |                          |                               |
| 62   | Aug-2011 | 4,395                   |                          |                               |
| 63   | Sep-2011 | 5,035                   |                          |                               |
| 64   | Oct-2011 | 8,192                   |                          |                               |

Source: PEMC

## Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011

| Committed / Indicative | Name of the Project                      | Project Proponent                                 | Location                                 | Rated Capacity (MW) | Project Status   | Target Commissioning   |
|------------------------|--|---|--|---------------------|--|--|
|                        | <b>COAL</b>                              |   |  | <b>3,035.00</b>     |  |  |
| <b>Committed</b>       | <b>2 X 300 MW Coal-Fired Power Plant</b> | <b>GN Power</b>                                   | <b>Mariveles, Bataan</b>                 | <b>600</b>          | <b>Under construction</b>  | <b>Unit 1 (300 MW) - August 2012<br/>Unit 2 (300 MW) - October 2012</b>  |
| Indicative             | Puting Bato Coal Fired Power Plant       | Trans-Asia Oil and Energy Development Corporation | Brgy. Puting Bato West, Calaca, Batangas | 135                 | Purchase of land signed on January 2010; EPC contractor was awarded to DMCI; DENR-ECC issued on April 2010; on-going negotiations with financial institutions and Semirara Corporation for the coal supply.  | September 2014   |
| Indicative             | 2 X 300 MW Coal-Fired Power Plant        | Redondo Peninsula Energy, Inc.                    | Sitio Naglatore, Cawag, Subic            | 600                 | Environmental Compliance Certificate Unit 1 on 2007 and Unit II on Q4 2011, Grid Impact Studies, other permits obtained; on-going financing arrangements; request for proposal of engineering, equipment procurement and construction of plant issued with award to be given on Dec. 2011; site preparation construction ongoing; 52% owned by Meralco PowerGen Corp. (MPGC) | Phase I - Q4 2014<br>Phase II - Q2 2015                                  |
| Indicative             | Quezon Power Expansion Project           | Quezon Power Phils.                               | Mauban, Quezon                           | 500                 | Development Stage  | December 2016  |
| Indicative             | SLPGC Coal-Fired Power Plant             | Southwest Luzon Power Generation Corporation      | Brgy. San Rafael, Calaca, Batangas       | 600                 | Land Lease Agreement with PSALM secured; SEC registration approved; on-going negotiations with off-takers; ECC application submitted to DENR; on-going GIS with NGCP   | Phase I - 2014<br>Phase II - 2017  |
| Indicative             | 2 X 300 Masinloc Expansion               | AES Masinloc Power Partners Co., Inc.             | Zambales                                 | 600                 | Grid Impact Studies obtained on January 7, 2011; Undergoing consultation with international / local banks; ECC Permit by August 2011.  | Unit 3 (300 MW) - 1st Quarter 2015<br>Unit 4 (300 MW) - 2nd Quarter 2018 |

Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011

| Committed / Indicative | Name of the Project   | Project Proponent                       | Location  | Rated Capacity (MW) | Project Status   | Target Commissioning  |
|------------------------|---|---|---|---------------------|--|-----------------------|
|                        | <b>DIESEL</b>   |   |   | <b>171.00</b>       |  |                       |
| <b>Committed</b>       | <b>CIP 2 Bunker Fired Power Plant</b>   | <b>CIP II Power Corporation (TAOil)</b> | <b>Bacnotan, La Union</b>                           | <b>21</b>           | <b>Completed ECC<br/>Ongoing GIS; EPC contractor awarded;<br/>financing from internal funds;<br/>construction started February 2011</b>  | <b>February 2012</b>  |
| Indicative             | Aero Derivative Combined Cycle Power Plant                                    | Calamba Aero Power Corporation          | Calamba, Laguna                                     | 150                 | On-going securing of permits and other regulatory requirements; granted clearance by DOE for the conduct of GIS  | June 2013             |
|                        | <b>NATURAL GAS</b>  |   |   | <b>850.00</b>       |  |                       |
| Indicative             | 2 X 100 MW Gas Turbine Power Project<br>2 X 50 MW Steam Turbine Power Project | Energy World International, Ltd         | Brgy. Ibabang Polo, Grande Island, Pagbilao, Quezon | 300                 | Various permits obtained; with financing from Standard Chartered Bank; awaiting DOE's permits for the LNG terminal   | December 2013         |
| Indicative             | San Gabriel Power Plant   | First Gas Power Corp.                   | San Gabriel, Batangas                               | 550                 | Various permits obtained; Negotiations for financing arrangements to commence in 3Q 2011 with target completion in 2Q 2012; Discussion with OEM and EPC providers ongoing; Selection of equipment supplier and EPC provider by end 2011 to 1Q 2012   | 4th Quarter 2013      |
|                        | <b>GEOTHERMAL</b>   |   |   | <b>140.00</b>       |  |                       |
| <b>Committed</b>       | <b>Maibarara Geothermal Power Project</b>                                     | <b>Maibarara Geothermal, Inc.</b>       | <b>Sto. Tomas, Batangas</b>                         | <b>20</b>           | <b>Obtained Geothermal Service Contract with DOE; ECC obtained in August 2010; BOI Registration obtained in January 2011; Selected IEE Corp &amp; Fuji Electric as main and subcontractors for the power plant EPC; Secured project financing with RCBC and BPI Capital; GIS from NGCP</b> | <b>September 2013</b> |

## Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011

| Committed / Indicative | Name of the Project                         | Project Proponent                      | Location                             | Rated Capacity (MW) | Project Status   | Target Commissioning            |
|------------------------|---|--|--------------------------------------|---------------------|--|---------------------------------|
|                        |   |  |                                      |                     | <b>completed in March 2011; Set signing of ESA with aggregator TAOil on Aug. 4, 2011</b>   |                                 |
| Indicative             | Tanawon Geothermal Project                  | Energy Development Corporation         | Bacman Geothermal Field, Sorsogon    | 40                  | ECC certificate ongoing; LGU endorsement obtained; Water rights secured; turnkey contract for bidding  | September 2015                  |
| Indicative             | Rangas Geothermal Project                   | Energy Development Corporation         | Bacman Geothermal Field, Sorsogon    | 40                  | ECC certificate ongoing; LGU endorsement obtained; Water rights secured; Turnkey contract for bidding  | September 2015                  |
| Indicative             | Manito-Kayabon Geothermal Project           | Energy Development Corporation         | Bacman Geothermal Field, Sorsogon    | 40                  | ECC certificate obtained; LGU endorsement obtained; Water rights secured;  | March 2017                      |
|                        | <b>HYDROPOWER</b>                           |  |                                      | <b>150.00</b>       |  |                                 |
| Indicative             | Kanan Hydro Power Project                   | Kanan Hydro Electric Power Corp.       | Gen. Nakar, Quezon Province          | 150                 | Fully complied with RE requirements; awaiting RE contract signing  | December 2020                   |
|                        | <b>WIND</b>                                 |  |                                      | <b>453.50</b>       |  |                                 |
| <b>Committed</b>       | <b>Pililla Wind Power Project</b>           | <b>Alternergy Wind One Corporation</b> | <b>Pililla, Rizal</b>                | <b>67.5</b>         | <b>AWOC to finance 100% of the project</b>   | <b>Q4 2012 (Subject to FIT)</b> |
| Indicative             | Pasuquin East Wind Energy Project Phase One | Energy Logistics Philippines, Inc.     | Pasuquin, Ilocos Norte               | 45                  | ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors commitment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets | June 2013 (Subject to FIT)      |
| Indicative             | Burgos Wind Power Project                   | Energy Development Corporation         | Nagsurot-Saoit, Burgos, Ilocos Norte | 86                  | DOE Service contracts obtained; Civil Aviation Authority clearance obtained; DENR-ECC obtained; LGU endorsement obtained   | December 2013 (Subject to FIT)  |

## Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011

| Committed / Indicative | Name of the Project                                 | Project Proponent                         | Location   | Rated Capacity (MW) | Project Status   | Target Commissioning           |
|------------------------|---|---|--|---------------------|--|--------------------------------|
| Indicative             | Mabitac Wind Power Project                          | Altenergy Sembrano Wind Corporation       | Mabitac, Rizal                                   | 90                  |  | 2013                           |
| Indicative             | Pasuquin East Wind Energy Project Phase Two         | Energy Logistics Philippines, Inc.        | Pasuquin, Ilocos Norte                           | 75                  | ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors commitment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets | February 2014 (Subject to FIT) |
| Indicative             | Cavinti Wind Power Project                          | Altenergy Cavinti Wind Corporation        | Cavinti, Laguna                                  | 50                  |  | 2014                           |
| Indicative             | Abra de Ilog Wind Power Project                     | Altenergy Abra de Ilog Wind Corporation   | Abra de Ilog, Mindoro                            | 40                  |  | 2015                           |
|                        | <b>BIOMASS</b>                                      |   |  | <b>56.30</b>        |  |                                |
| <b>Committed</b>       | <b>Green Future Biomass Project</b>                 | <b>Green Future Innovations Inc.</b>      | <b>Isabela</b>                                   | <b>13</b>           | <b>Construction started October 2010; 4.3 Billion loan from Banco de Oro already approved; permits and other requirements obtained</b>   | <b>April 2012</b>              |
| Indicative             | Unisan Biogas Project                               | Unisan Biogen Corporation                 | Quezon Province                                  | 11.2                | LGU permits obtained; BOI certification obtained; EPC contract with Areva Bioenergy India; awaiting financial closure  | December 2013                  |
| Indicative             | Lucky PPH Biomass project                           | Lucky PPH International                   | Isabela  | 3.6                 | Various permits obtained; awaiting loan approval from Land Bank; awaiting PSA approval with ISELCO   | December 2013                  |
| Indicative             | 17.5 MW Nueva Ecija Biomass Power Project           | Green Power Nueva Ecija Philippines, Inc. | Brgy. Tambo-Tabuating, San Leonardo, Nueva Ecija | 17.5                | Various permits issued, MOA on the Establishment of Trust Account Obtained; ECC issued, Biomass Supply Contract obtained   | December 2014                  |
| Indicative             | San Jose City I Power Corporations' Biomass Project | San Jose City I Power Corporation         | Nueva Ecija                                      | 11                  | Various permits obtained; awaiting financial closure   | December 2014                  |

Annex 11. Private Sector Initiated Power Projects (Luzon) as of November 2011

| Committed / Indicative      | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|-----------------------------|---------------------|-------------------|----------|---------------------|----------------|----------------------|
| <b>Total Rated Capacity</b> |                     |                   |          | <b>4,855.80</b>     |                |                      |

**\* Committed Project(s)**

- COAL
- DIESEL / OIL
- NATURAL GAS
- GEOHERMAL
- HYDROPOWER
- WIND
- BIOMASS



## Annex 12. Private Sector Initiated Power Projects (Visayas) as of November 2011

| Committed / Indicative | Name of the Project                                       | Project Proponent   | Location                                 | Rated Capacity (MW) | Project Status   | Target Commissioning                              |
|------------------------|---|---|--|---------------------|--|---|
|                        | <b>COAL</b>   |   |  | <b>446.00</b>       |  |   |
| Indicative             | CEDC Expansion Project (2 X 82 MW Coal-Fired Power Plant) | Cebu Energy Development Corporation   | Brgy. Daanlungsod, Toledo City, Cebu     | 164                 | Securing necessary permits; secured clearance from DOE for the conduct of GIS.   | 2015  |
| Indicative             | PEDC Expansion Project (1 X 82 MW Coal-Fired Power Plant) | Panay Energy Development Corporation  | Brgy. Ingore, La Paz, Iloilo             | 82                  | Securing necessary permits; secured clearance from DOE for the conduct of GIS.   | 2015  |
| Indicative             | 2 x 100 MW Concepcion Coal-fired power plant              | Palm Thermal Consolidated Holdings Corp. (Formerly DMCI Concepcion Power Corp.) | Concepcion, Iloilo                       | 200                 | Acquired land on Nov. 2010; permits and other requirements obtained; on-going negotiations with offtakers and DUs; on-going negotiation for financing, target financial closing is Q2 2012; secured clearance from DOE for the conduct of GIS. | 1st Unit - 3rd Qtr. 2014<br>2nd Unit - Sept. 2016 |
|                        | <b>GEOHERMAL</b>  |   |  | <b>100.00</b>       |  |   |
| <b>Committed</b>       | <b>Nasulo Geothermal</b>                                  | <b>Energy Development Corporation</b>   | <b>Nasuji, Valencia, Negros Oriental</b> | <b>20</b>           | <b>Obtaining necessary permits and requirements; Turnkey contracts for bidding</b>   | <b>December 2013</b>                              |



Annex 12. Private Sector Initiated Power Projects (Visayas) as of November 2011

| Committed / Indicative | Name of the Project  | Project Proponent                             | Location                | Rated Capacity (MW) | Project Status  | Target Commissioning |
|------------------------|--|---|-------------------------|---------------------|---|----------------------|
| Indicative             | Dauin Geothermal   | Energy Development Corporation                | Dauin, Negros Oriental  | 40                  | On-going feasibility studies; LGU endorsement obtained; water rights obtained   | 2017                 |
| Indicative             | Southern Leyte Geothermal Project (formerly Cabalian Geothermal Project) | Energy Development Corporation                | Southern Leyte          | 40                  | ECC obtained; LGU Endorsement obtained;   | 2019                 |
|                        | <b>HYDROPOWER</b>  |   |                         | <b>8.00</b>         |   |                      |
| <b>Committed</b>       | <b>Villasiga HEP</b>   | <b>Sunwest Water &amp; Electric Co., Inc.</b> | <b>Sibalom, Antique</b> | <b>8</b>            | <b>LGU endorsement done;<br/>Water Permit done;<br/>Reconnaissance Permit done;<br/>ECC certificate done;<br/>DOE Hydropower Service Contract done;<br/>BOI Registration done; with financing from Land Bank of the Philippines</b> | <b>December 2012</b> |
|                        | <b>WIND</b>  |   |                         | <b>54.00</b>        |   |                      |

## Annex 12. Private Sector Initiated Power Projects (Visayas) as of November 2011

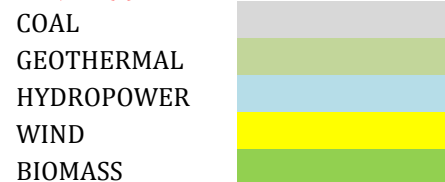
| Committed / Indicative | Name of the Project                        | Project Proponent                                 | Location                         | Rated Capacity (MW) | Project Status  | Target Commissioning                                |
|------------------------|--|---|----------------------------------|---------------------|---|---|
| Indicative             | Guimaras Wind Power Project (8 MW & 46 MW) | Trans-Asia Oil and Energy Development Corporation | San Lorenzo, Guimaras Island     | 54                  | Securing various LGU permit; obtained DENR land classification; obtained ECC permit; submitted application for NCIP non coverage certificate to DENR; Grid Impact Studies under negotiation   | 8 MW - July 2012<br>46 MW - January 2013            |
|                        | <b>BIOMASS</b>                             |   |                                  | <b>116.00</b>       |   |   |
| <b>Committed</b>       | <b>Asian Energy System Biomass Project</b> | <b>Asian Energy System Corporation</b>            | <b>Cebu</b>                      | <b>4</b>            | <b>Obtained necessary permits; Obtained ECC on February 2010; Loan approval from DBP granted on 25 May 2011.</b>  | <b>2015</b>   |
| Indicative             | 2 x 17.5 MW Green Power Panay              | Green Power Panay Philippines, Inc.               | Brgy. Cabalabaguan, Mina, Iloilo | 35                  | Various permits obtained (ECC, NWRB, LGU, DAR, NCIP, etc.); Electricity Supply Agreement with Ileo I (3 MW) and Ileo II (7 MW); Biomass supply contract obtained; Certificate of Endorsement from DOE obtained on April 30, 2010; Signed Engineering, Procurement and Construction Contract with Poyry Energy, Inc. | Phase I - December 2013<br>Phase II - December 2014 |
| Indicative             | Asea One Biomass Project                   | Asea One Power Corporation                        | Banga, Aklan                     | 12                  | Obtaining necessary permits; Signed PSA with AKELCO; on-going negotiation for financing and EPC contractor  | December 2013                                       |

Annex 12. Private Sector Initiated Power Projects (Visayas) as of November 2011

| Committed / Indicative | Name of the Project                  | Project Proponent                    | Location     | Rated Capacity (MW) | Project Status   | Target Commissioning |
|------------------------|--------------------------------------|--------------------------------------|--------------|---------------------|--|----------------------|
| Indicative             | Negros Biomass Power Project Phase 2 | Green Power Negros Philippines, Inc. | Negros       | 35                  | Obtaining necessary permits, negotiation with NGCP on the conduct of GIS is on-going; negotiation with local banks for financing is on-going | December 2014        |
| Indicative             | Asea One Biomass Project             | Asea One Power Corporation           | Ajuy, Iloilo | 30                  | Obtained necessary permits; signed PSA with ILECO; awaiting financial closure  | December 2014        |

**Total Rated Capacity 724.00**

**\* Committed Project(s)**



Annex 13. Private Sector Initiated Power Projects (Mindanao) as of November 2011

| Committed / Indicative | Name of the Project                                   | Project Proponent                             | Location  | Rated Capacity (MW) | Project Status  | Target Commissioning  |
|------------------------|---|---|---|---------------------|---|-----------------------|
|                        | <b>COAL</b>   |   |   | <b>700.00</b>       |   |                       |
| Indicative             | 2 X 100 MW Southern Mindanao Coal Fired Power Station | Conal Holdings Corp.                          | Maasim, Sarangani   | 200                 | Various permits obtained; BDO, DBP, RCBC and UCPB have obtained their respective pre-clearances to enter into the transaction; financial closure expected by October 2011; Issuance of Notice to Proceed to the EPC Contractor is scheduled on November 2011; Testing and commissioning will commence 29 months after Notice to Proceed | 2014                  |
| Indicative             | 2 X 150 MW Coal-Fired Therma South Energy Project     | Therma South Inc. (Aboitiz Power Corporation) | Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur | 300                 | Project cost Php 24B; Secured right to land; on-going negotiation for financing; various permits obtained; secured SEC, BIR, BOC, BOI, ECC permits  | 1st Quarter 2014      |
| Indicative             | Steag Expansion Project                               | Steag State Power Corp.                       | Phividec, Misamis Oriental  | 200                 | On-going feasibility study; on -going discussions with NPC/PSALM regarding the common facilities  | December 2014         |
|                        | <b>OIL</b>  |   |   | <b>27.50</b>        |   |                       |
| <b>Committed</b>       | <b>2 X 13.75 MW Bunker Fired Power Plant</b>          | <b>Mindanao Energy Systems, Inc.</b>          | <b>Tablon, Cagayan de Oro</b>   | <b>27.5</b>         | <b>Waiting for ERC approval on the Power Supply Agreement with CEPALCO</b>  | <b>December 2011</b>  |
|                        | <b>GEO THERMAL</b>                                    |   |   | <b>50.00</b>        |   |                       |
| <b>Committed</b>       | <b>Mindanao 3 Geothermal</b>                          | <b>Energy Development Corporation</b>         | <b>Kidapawan, North Cotabato</b>  | <b>50</b>           | <b>Ongoing resource assessment; DENR ECC obtained; Land use permits obtained</b>  | <b>September 2014</b> |

Annex 13. Private Sector Initiated Power Projects (Mindanao) as of November 2011

| Committed / Indicative | Name of the Project                     | Project Proponent                        | Location                           | Rated Capacity (MW) | Project Status  | Target Commissioning                     |
|------------------------|---|--|------------------------------------|---------------------|---|--|
|                        | <b>HYDROPOWER</b>                       |  |                                    | <b>265.00</b>       |   |  |
| Committed              | 2 X 4 MW Cabulig Mini-Hydro Power Plant | Mindanao Energy Systems, Inc.            | Plaridel, Jasaan, Misamis Oriental | 8                   | RE Service contract from DOE obtained; civil works started in November 2009; actual accomplishments as of Dec. 2010 is 27.33%   | December 2012                            |
| Indicative             | Agus 3 Hydroelectric Plant              | Lanao Hydropower Development Corporation | Lanao del Norte                    | 225                 | Updated feasibility study; secured ECC; signed Joint Sales agreement with NPC; Submitted application to DOE for the issuance of service contract on 07 June 2011.               | December 2015                            |
| Indicative             | Tagoloan Hydropower                     | Mindanao Hydro Power Corp.               | Bukidnon                           | 20                  | Completed feasibility study   | December 2016                            |
| Indicative             | 12 MW Tamugan Hydropower Project        | Hedcor                                   | Baguio District, Davao City        | 12                  | Permits/government requirements already obtained: Certificate of Endorsement from DOE, GIS by NGCP, registered as Pioneering project from BOI                                   | July 2018                                |
|                        | <b>WIND</b>                             |  |                                    | <b>5.00</b>         |   |  |
| Indicative             | 5 MW Camiguin Island Wind Power         | Energy Development Corporation           | Camiguin                           | 5                   | Issued service contract; on going negotiations with lot owners  | September 2015 (subject to FIT approval) |
|                        | <b>BIOMASS</b>                          |  |                                    | <b>35.00</b>        |   |  |
| Indicative             | Bukidnon Biomass Power Project          | Green Power Bukidnon Philippines, Inc.   | Maramag, Bukidnon                  | 35                  | Permits and other requirements obtained; selection process is on-going among local banks; letter of intent executed on March 24, 2009 with Poyry Energy, Inc. as EPC contractor | September 2013                           |

Annex 13. Private Sector Initiated Power Projects (Mindanao) as of November 2011

| Committed / Indicative      | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|-----------------------------|---------------------|-------------------|----------|---------------------|----------------|----------------------|
| <b>Total Rated Capacity</b> |                     |                   |          | <b>1,082.50</b>     |                |                      |

**\* Committed Project(s)**

- COAL
- OIL
- GEOHERMAL
- HYDROPOWER
- WIND
- BIOMASS



Annex 14 - ERC-Approved Capital Expenditure Projects (May 2011 – August 2011)

| APPLICANT  | PROJECT   | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED        |
|--|---|--|--|---------------------|-----------------------------|
| South Cotabato II Electric Cooperative, Inc. (SOCOTECO II) | <b>2009 Network Projects</b>  |  |  |                     |                             |
|  | Ligaya Substation Uprating  | Uprating of the Ligaya Substation from 5 MVA to 10 MVA   | <ul style="list-style-type: none"> <li>To meet the increasing load and power needs of the customers</li> <li>To provide the reliable, environmentally acceptable service at reasonable cost</li> </ul> | 9,091,705.00        | August 11, 2009/May 2, 2011 |
|  | Installation of 5 MVA Substation at the Municipality of Tupi                                  | Construction of new 5 MVA Substation at the Municipality of Tupi (adjacent Municipality of Polomolok)  | <ul style="list-style-type: none"> <li>To address the overloading problem of the existing 10 MVA Polomolok Substation and the power quality problem at the Municipality of Tupi</li> </ul>             | 41,354,082.00       |                             |
|  | Installation of Voltage Regulator at Purok Pulutana and at the Municipality of Malungon       | Installation of 3-167 KVA Voltage Regulator at Purok Pulutana and 2-300 KVAR Capacitor at Malungon     | <ul style="list-style-type: none"> <li>To improve the power quality and the system capacity</li> </ul>   | 2,622,573.00        |                             |
|  | Installation of Voltage Regulator at the Municipality of Glan                                 | Installation of 2-57.2 KVA Voltage Regulator at P189 Glan  | <ul style="list-style-type: none"> <li>To improve the power quality in the area to year 2020</li> </ul>  | 750,000.00          |                             |
|  | Rehabilitation with Conductor Uprating of Leon Liedo Street to National Highway, 3 Phase Line | 2.8 km conductor uprating project feeder 14-1 from Liedo Street going to the National Highway          | <ul style="list-style-type: none"> <li>To improve the ampacity rating of the conductor and to develop feeder 14-1 into a loop system that can carry additional loads</li> </ul>                        | 888,290.00          |                             |
|  | Rehabilitation with Conductor Uprating at Rajah Muda, Barangay Bula                           | Conductor uprating for the portion of Rajah Muda, Barangay Bula using 1/0 insulated aluminum conductor | <ul style="list-style-type: none"> <li>To enhance the power reliability, safety, and efficiency in the area</li> </ul>   | 70,375.00           |                             |
|  | Additional Circuit Feeder going to the Municipality of Maitum                                 | Creation of another circuit feeder (feeder 13-3) going to Municipality of Maitum                       | <ul style="list-style-type: none"> <li>To provide first rate power quality and improve power reliability</li> <li>To enhance the reliability performance of the substation</li> </ul>                  | 2,772,290.00        |                             |
|  | Installation of Down Line Feeder Sectionalizing Equipment                                     | Installation of one (1) sectionalizing device and fuse cut out at Feeder 6-3                           | <ul style="list-style-type: none"> <li>To develop a very reliable system</li> </ul>  | 1,897,500.00        |                             |

| APPLICANT | PROJECT   | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhp) | DATE FILED/ APPROVED |
|-----------|---|--|--|---------------------|----------------------|
|           | Installation of Down Line Feeder Sectionalizing Equipment                                       | Installation of one (1) sectionalizing device and thirty (30) units of cut out fuse at Feeder 3-2  | <ul style="list-style-type: none"> <li>To develop a very reliable system</li> </ul>  | 952,500.00          |                      |
|           | Installation of Down Line Electronically Controlled Recloser at Feeder 7-3                      | Installation of Down Line Electronically Controlled Recloser at Feeder 7-3   | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 750,000.00          |                      |
|           | Installation of Down Line Electronically Controlled Recloser at Feeder 1-3                      | Installation of down line electronically controlled recloser at feeder 1-3   | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 750,000.00          |                      |
|           | Installation of Down Line Electronically Controlled Recloser at Feeder 11-1                     | Installation of Down Line Electronically Controlled Recloser at Feeder 11-1  | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 750,000.00          |                      |
|           | Procurement of Three (3) Units 15 kV (Noja) Outdoor Type Circuit Breaker                        | Procurement of three units 15 kV (Noja) outdoor type circuit breaker   | <ul style="list-style-type: none"> <li>To provide insurance against possible breakdown or failure of an equipment/component</li> </ul>                       | 1,750,000.00        |                      |
|           | Acquisition of 69 kV Subtransmission Lines from the National Transmission Corporation (TRANSCO) | Acquisition of the following lines: <ul style="list-style-type: none"> <li>➤ Klinan – New Society 69 kV Line – 8.56 km</li> <li>➤ New Society – Lanoy 69 kV Line – 5.50 km</li> <li>➤ Lanoy – GSDP 69 kV Line – 1.27 km</li> <li>➤ Cargill – Siguel 69 kV Line – 10.13 km</li> <li>➤ Klinan – Dolephil 69 kV Line – 10.81 km</li> <li>➤ Klinan - Sari 69 kV Line – 17.36 km</li> <li>➤ Sari – Glan 69 kV Line (with 1 ABS – 40.21 km</li> <li>➤ GSC Airport 69 kV Line– 1.68 km</li> <li>➤ Klinan - Maasim SC 69 kV Line (with 2 ABS) – 51.46 km</li> <li>➤ Maasim – Kiamba SC 69 kV Line (with 2 ABS) – 44.01 km</li> </ul> | <ul style="list-style-type: none"> <li>To improve reliability</li> </ul>   | 13,765,143.00       |                      |
|           | Construction of Primary Lines   | Extension of primary distribution lines in the Municipalities of Polomolok, Maasim and General Santos City, with an estimated length of 3.962 kms of 3-phase primary lines and 2.462 kms of single phase line and meterings  | <ul style="list-style-type: none"> <li>To guarantee the availability of power for forecasted/anticipated eight (8) large load customers</li> </ul>           | 6,012,654.00        |                      |
|           | Installation of Free Service Drop and kWhr Meter  | Installation of free service drop of 30 meters, #6 duplex wire and kWh meters each for the forecasted/anticipated 6,087 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 14,670,422.00       |                      |



| APPLICANT                    | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|------------------------------|---|---|--|---------------------|----------------------|
|                              | Purchase and Installation of Distribution Transformers and Accessories                                | Purchase and installation of 77 units of distribution transformers (DT) of various capacity and DT accessories for the forecasted/anticipated 6,087 residential customers | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 7,720,273.00        |                      |
|                              | Construction of Low Voltage Lines   | Construction of 51 meters low voltage line for the forecasted/anticipated 6,087 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 10,003,341.00       |                      |
| <b>2010 Network Projects</b> |   |   |  |                     |                      |
|                              | Power Factor Correction Projects (Capacitor Installation)   | Correction of power factor of 93.7%   | <ul style="list-style-type: none"> <li>To improve the systems power factor to 99%</li> </ul>   | 10,000,000.00       |                      |
|                              | Rehabilitation with Conductor Uprating of Aparente Road 3 Phase Line                                  | Rehabilitation of the 1.8 km phase line and uprating for feeder 14-2 at Apparente Street, Barangay City Heights   | <ul style="list-style-type: none"> <li>To enhance power efficiency and reliability</li> </ul>  | 502,290.00          |                      |
|                              | Looping of 69 kV Line to have a Dual Feed Substation (m1, m14)  | Creation of a 4.65 km 69 kV subtransmission line from Leon Liedo Street going to Crossing Makar   | <ul style="list-style-type: none"> <li>To increase reliability level</li> </ul>  | 13,080,619          |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment   | Installation of forty- five (45) pieces fuse cut out at Feeder 11-1   | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 247,500.00          |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment   | Installation of one (1) sectionalizing device and fuse cut out at Feeder 7-2  | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 660,000.00          |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment   | Installation of eighteen (18) pieces cut out fuse assembly at Feeder 3-1  | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 99,000.00           |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment   | Installation of two (2) sectionalizing device at feeder 4-1   | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 2,394,500.00        |                      |
|                              | Rehabilitation and Reconductoring of Duplex Secondary Lines at Barangay Bula (1.5 km total length)    | Rehabilitation and Reconductoring of Duplex Secondary Lines at Barangay Bula  | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 250,000.00          |                      |
|                              | Installation of Supervisory Control and Data Acquisition (SCADA) for 20/25 MVA Main Office Substation | Installation of SCADA for 20/25 MVA Main Office Substation  | <ul style="list-style-type: none"> <li>To improve data gathering and analysis on real time</li> </ul>  | 3,000,000.00        |                      |

| APPLICANT                    | PROJECT   | DESCRIPTION   | RATIONALE   | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|------------------------------|---|---|---|---------------------|----------------------|
|                              | Installation of Supervisory Control and Data Acquisition (SCADA) for 20/25 MVA Leon Liedo Substation      | Installation of SCADA for 20/25 MVA Leon Liedo Substation   | <ul style="list-style-type: none"> <li>To improve data gathering and analysis on real time</li> </ul>   | 3,000,000.00        |                      |
|                              | Installation of Supervisory Control and Data Acquisition (SCADA) Control Station with Complete Facilities | Installation of SCADA Control Station with complete facilities at the Main Office Substation  | <ul style="list-style-type: none"> <li>To improve data gathering and analysis on real time</li> </ul>   | 5,000,000.00        |                      |
|                              | Procurement of one (1) unit 69 kV Outdoor Breaker and Control   | Procurement of one (1) 69 kV outdoor breaker and control  | <ul style="list-style-type: none"> <li>To avoid/eliminate possible breakdown or failure of an equipment/component</li> </ul>                      | 2,600,000.00        |                      |
|                              | Procurement of one (1) unit 15 kV (Siemens) Outdoor Type Circuit Breaker                                  | Procurement of one (1) unit 15 kV (Siemens) Outdoor Type Circuit Breaker  | <ul style="list-style-type: none"> <li>To avoid/eliminate possible breakdown or failure of an equipment/component</li> </ul>                      | 1,900,000.00        |                      |
|                              | Procurement of one (1) Set Station Class 69 kV Lightning Arresters  | Procurement of one (1) Set Station Class 69 kV Lightning Arresters  | <ul style="list-style-type: none"> <li>To avoid/eliminate possible breakdown or failure of an equipment/component</li> </ul>                      | 500,000.00          |                      |
|                              | Procurement of Two (2) Sets Station Class 15 kV Lightning Arresters                                       | Procurement of Two (2) Sets Station Class 15 kV Lightning Arresters   | <ul style="list-style-type: none"> <li>To avoid/eliminate possible breakdown or failure of an equipment/component</li> </ul>                      | 150,000.00          |                      |
|                              | Construction of Primary Lines   | Extension of primary distribution lines in the Municipalities of Polomolok, Maasim and General Santos City, with an estimated length of 3.704 kms of 3-phase primary lines and 2.757 kms of single phase line and meterings | <ul style="list-style-type: none"> <li>To guarantee the availability of power for prospective six (6) large load customers</li> </ul>             | 5,722,903.00        |                      |
|                              | Installation of Free Service Drop and Kwh Meter   | Installation of free service drop of 30 mtrs, #6 duplex wire and kWh meters each for the forecasted/anticipated 6,226 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul> | 15,005,753.00       |                      |
|                              | Purchase and Installation of Distribution Transformers and Accessories                                    | Purchase and installation of 62 units of distribution transformers (DT) of various capacity and DT accessories for the forecasted/anticipated 6,226 residential customers   | <ul style="list-style-type: none"> <li>To ensure electric facilities for new customers</li> </ul>   | 6,623,477.00        |                      |
|                              | Construction of Low Voltage Lines   | Construction of 41 meter low voltage line for the forecasted/anticipated 6,226 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul> | 8,115,735.00        |                      |
| <b>2011 Network Projects</b> |   |   |   |                     |                      |
|                              | Supervisory Control and Data Acquisition (SCADA) for 20/25 MVA Lanoy Calumpang                            | Installation of SCADA for 20/25 MVA Lanoy Calumpang Substation  | <ul style="list-style-type: none"> <li>To improve data gathering and analysis on real time</li> </ul>   | 3,000,000.00        |                      |

| APPLICANT                    | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|------------------------------|---|---|--|---------------------|----------------------|
|                              | Construction of Primary Lines   | Extension of primary distribution lines in the Municipalities of Polomolok, Maasim and General Santos City with an estimated length of 1.211 kms. Of 3-phase primary lines and 3.070 kms of single phase line and meterings | <ul style="list-style-type: none"> <li>To guarantee the availability of electric power for prospective new five (5) large load customers</li> </ul>          | 2,669,366.00        |                      |
|                              | Installation of Free Service Drop and Kwh Meter                             | Installation of free service drop of 30 meters, #6 duplex wire and kWh meter each for the prospective 6,368 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul>            | 15,347,699.00       |                      |
|                              | Purchase and Installation of Distribution Transformers and Accessories      | Purchase and installation of 54 units of distribution transformers (DT) of various capacity and DT accessories for the forecasted/anticipated 6,368 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 5,473,281.00        |                      |
|                              | Construction of Low Voltage Lines   | Construction of 36 meters low voltage line for the prospective 6,368 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul>            | 7,091,859.00        |                      |
| <b>2012 Network Projects</b> |   |   |  |                     |                      |
|                              | Installation of 25 MVA Substation in-between M1 and M14                     | Installation of 25 MVA Substation in-between M1 and M14   | <ul style="list-style-type: none"> <li>To address substation capacity deficiency including customers requirements</li> </ul>                                 | 40,000,000.00       |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment                   | Installation of one (1) sectionalizing device and twelve (12) units of cut out fuse at Feeder 4-3   | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 748,500.00          |                      |
|                              | Installation of Down Line Feeder Sectionalizing Equipment                   | Installation of one (1) sectionalizing device at Feeder 9-3   | <ul style="list-style-type: none"> <li>To improve system reliability</li> </ul>  | 866,250.00          |                      |
|                              | Installation of Down Line Electronically Controlled Recloser at Feeder 13-1 | Installation of Down Line Electronically Controlled Recloser at Feeder 13-1   | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 750,000.00          |                      |
|                              | Construction of primary Lines   | Extension of primary distribution lines in the Municipalities of Polomolok, Maasim and General Santos City, with an estimated length of 2.719 kms of 3-phase primary lines and metering                                     | <ul style="list-style-type: none"> <li>To guarantee the availability of power for prospective three (3) large load customers</li> </ul>                      | 2,595,227.00        |                      |
|                              | Installation of Free Service Drop and kWh Meter                             | Installation of free service drop of 30 mtrs, #6 duplex wire and kWh meters each for the prospective 6,513 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul>            | 5,349,685.00        |                      |
|                              | Purchase and Installation of Distribution Transformers and Accessories      | Purchase and installation of 53 units of distribution transformers (DT) of various capacity and DT accessories for the prospective 6,513 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 15,695,883.00       |                      |

| APPLICANT                        | PROJECT  | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|----------------------------------|--|--|--|---------------------|----------------------|
|                                  | Construction of Low Voltage Lines  | Construction of 35 meters low voltage line for the prospective 6,513 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul>            | 6,931,713.00        |                      |
| <b>2013 Network Projects</b>     |  |  |  |                     |                      |
|                                  | Installation of 25 MVA Substation in-between Calumpang and Fishport Substation     | Installation of 25 MVA Substation in-between Calumpang and Fishport Substation   | <ul style="list-style-type: none"> <li>To reduce technical losses and improve power reliability</li> </ul>   | 58,435,561.00       |                      |
|                                  | Installation of Down Line Feeder Electronically Controlled Recloser at Feeder 13-3 | Installation of Down Line Feeder Electronically Controlled Recloser at Feeder 13-3   | <ul style="list-style-type: none"> <li>To ensure public protection and safety</li> </ul>   | 750,000.00          |                      |
|                                  | Supervisory Control and Data Acquisition (SCADA) for 20/25 MVA Fishport Substation | Installation of SCADA for 20/25 MVA Fishport Substation  | <ul style="list-style-type: none"> <li>To improve data gathering and analyses on real time</li> </ul>  | 3,000,000.00        |                      |
|                                  | Supervisory Control and Data Acquisition (SCADA) for 20 MVA New Society Substation | Installation of SCADA for 20 MVA New Society Substation  | <ul style="list-style-type: none"> <li>To improve data gathering and analyses on real time</li> </ul>  | 3,000,000.00        |                      |
|                                  | Construction for Primary Lines   | Extension of primary distribution lines in the Municipalities of Polomolok, Maasim and General Santos City, with an estimated length of 1.533 kms of 3-phase primary lines and meterings | <ul style="list-style-type: none"> <li>To guarantee the availability of power for prospective three (3) new customers</li> </ul>                             | 2,206,049.00        |                      |
|                                  | Installation of Free Service Drop and kWh Meter                                    | Installation of free service drop of 30 meters, #6 duplex wire and kWh meters each for the prospective 8,660 residential customers   | <ul style="list-style-type: none"> <li>To ensure availability of electric power for forecasted/anticipated residential customers in various areas</li> </ul> | 5,892,688.00        |                      |
|                                  | Construction of Low Voltage Lines  | Construction of 39 meters low voltage for the prospective 6,660 residential customers  | <ul style="list-style-type: none"> <li>To ensure availability of electric power for prospective residential customers in various areas</li> </ul>            | 7,635,296.00        |                      |
| <b>2009 Non-Network Projects</b> |  |  |  |                     |                      |
|                                  | Procurement of Laptop Computers  | Procurement of twenty-six (26) units high-end laptop computers   | <ul style="list-style-type: none"> <li>To improve the performance of the engineers and technical staff</li> <li>To eliminate computational errors</li> </ul> | 910,000.00          |                      |
|                                  | Acquisition of Engineering Softwares   | Procurement of engineering softwares   | <ul style="list-style-type: none"> <li>To identify and quantify distribution system and efficiently manage distribution system data</li> </ul>               | 500,000.00          |                      |

| APPLICANT                        | PROJECT  | DESCRIPTION   | RATIONALE   | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|----------------------------------|--|---|---|---------------------|----------------------|
|                                  | Acquisition of Calport Metering Equipment                              | Acquisition of Calport 300 metering equipment   | <ul style="list-style-type: none"> <li>To test the accuracy and diagnose problems in the connection of electronic type of kWh meters installed</li> </ul>   | 4,000,000.00        |                      |
|                                  | Procurement of Metering Laboratory                                     | Procurement of an advance meter equipment test laboratory   | <ul style="list-style-type: none"> <li>To test the effectiveness and efficiency of meters</li> <li>To ensure efficient and reliable service to the customers by upgrading the system and equipment</li> </ul> | 1,500,000.00        |                      |
|                                  | Sub-office Online Wireless Connection                                  | Centralized and comprehensive online wireless connection of ten (10) sub-offices to main office     | <ul style="list-style-type: none"> <li>To improve and align operations</li> </ul>   | 2,065,000.00        |                      |
|                                  | Procurement of Read and Bill System using Rugged Meter Reading Device  | Procurement of read and bill system using rugged meter reading device                               | <ul style="list-style-type: none"> <li>To develop a fast, accurate and on-time billing to customers</li> </ul>  | 2,600,000.00        |                      |
|                                  | Purchase of Five (5 Units Honda XR 200 Motorcycle                      | Purchase of five (5) units Honda XR 200 motorcycle for the use of the Technical Services Department | <ul style="list-style-type: none"> <li>To improve response time in serving customers specially in remote and rural areas</li> </ul>   | 500,000.00          |                      |
| <b>2010 Non-Network Projects</b> |  |   |   |                     |                      |
|                                  | Acquisition of Hotline/Live-Line Maintenance Tools                     | Use of hotline/live-line maintenance tools  | <ul style="list-style-type: none"> <li>To lessen frequency of interruption and shorten duration of power shutdowns</li> </ul>   | 2,600,000.00        |                      |
|                                  | Procurement of Power Quality Analyzer                                  | Procurement of Fluke 435 three-phase power quality analyzer   | <ul style="list-style-type: none"> <li>To address power quality problems</li> </ul>   | 550,000.00          |                      |
|                                  | Procurement of Thermal Scanner   | Purchase of thermal scanner   | <ul style="list-style-type: none"> <li>To detect equipment and distribution line hot spots</li> </ul>   | 1,500,000.00        |                      |
|                                  | Substation Communication Improvement for Maasim and Kiamba Substations | Purchase of portable two-way radios with multi-features and channel choices                         | <ul style="list-style-type: none"> <li>To improve communication between Maasim and Kiamba Substations</li> </ul>  | 500,000.00          |                      |
|                                  | Purchase of One (1) Isuzu Pick-Up                                      | Purchase of one (1) unit Isuzu pick-up for the use of the West Business unit                        | <ul style="list-style-type: none"> <li>To improve customer service</li> </ul>   | 1,700, 000.00       |                      |
|                                  | Purchase of One (1) Isuzu Pick-Up                                      | Purchase of one (1) unit Isuzu pick-up for the use of the East Business unit                        | <ul style="list-style-type: none"> <li>To improve customer service</li> </ul>   | 1,700, 000.00       |                      |
|                                  | Purchase of One (1) Isuzu Pick-Up                                      | Purchase of one (1) unit Isuzu pick-up for the use of the Technical Services Department             | <ul style="list-style-type: none"> <li>To improve customer service</li> </ul>   | 1,700, 000.00       |                      |

| APPLICANT   | PROJECT   | DESCRIPTION  | RATIONALE   | PROJECT COST (MPhp) | DATE FILED/ APPROVED          |  |
|---|---|--|---|---------------------|-------------------------------|--|
|   | <b>2011 Non-Network Projects</b>  |  |   |                     |                               |  |
|   | Acquisition of Plotter Printer  | Purchase of plotter printer  | <ul style="list-style-type: none"> <li>To improve productivity</li> </ul>   | 959,500.00          |                               |  |
|   | Purchase of One (1) Unit Isuzu Service Utility Vehicle (S.U.V.)                       | Purchase of One (1) Unit Isuzu Service Utility Vehicle (S.U.V.) for the use of the Institutional Services Department | <ul style="list-style-type: none"> <li>To improve customer service</li> </ul>   | 1,700,000.00        |                               |  |
|   | Purchase of Three (3) Units Honda XR-200 Motorcycles                                  | Purchase of Three (3) Units Honda XR-200 motorcycles for the use of the Central Business Unit                        | <ul style="list-style-type: none"> <li>To improve response time in serving customers specially those in remote and rural areas</li> </ul> | 300,000.00          |                               |  |
|   | Purchase of Three (3) Units Honda XR-200 Motorcycles                                  | Purchase of Three (3) Units Honda XR-200 motorcycles for the use of the West Business Unit                           | <ul style="list-style-type: none"> <li>To improve response time in serving customers specially those in remote and rural areas</li> </ul> | 300,000.00          |                               |  |
|   | Purchase of Three (3) Units Honda XR-200 Motorcycles                                  | Purchase of Three (3) Units Honda XR-200 motorcycles for the use of the East Business Unit                           | <ul style="list-style-type: none"> <li>To improve response time in serving customers specially those in remote and rural areas</li> </ul> | 300,000.00          |                               |  |
|   | Purchase of Three (3) Units Maintenance truck with Boom                               | Purchase of three (3) units maintenance truck with boom  | <ul style="list-style-type: none"> <li>To improve systems reliability</li> </ul>  | 7,500,000.00        |                               |  |
|   | <b>2012 Non-Network Projects</b>  |  |   |                     |                               |  |
|   | Purchase of One (1) Unit Isuzu Pick Up  | Purchase of One (1) Unit Isuzu Pick Up for the use of Central Business Unit  | <ul style="list-style-type: none"> <li>To improve customer service</li> </ul>   | 1,700,000.00        |                               |  |
|   | Purchase of Twelve (12) Units Honda XR-200 Motorcycles                                | Purchase of one (1) unit Isuzu pick up for the use of meter readers  | <ul style="list-style-type: none"> <li>To improve response time in serving customers specially those in remote and rural areas</li> </ul> | 1,200,000.00        |                               |  |
| <b>Cebu II Electric Cooperative, Inc. (CEBECO II)</b> | <b>2011 Network Projects</b>  |  |   |                     |                               |  |
|   | Procurement and Installation of Voltage Regulators, Reclosers and Disconnect Switches | Procurement and installation of several units of voltage regulators, reclosers and switches at various feeders       | <ul style="list-style-type: none"> <li>To improve system reliability and minimize the energy not served of the system</li> </ul>          | 12,949,000.00       | January 7, 2011/June 21, 2011 |  |
|   | Installation of 10 MVA Carmen Substation  | Procurement and installation of a new 10 MVA Substation in the Municipality of Carmen                                | <ul style="list-style-type: none"> <li>To provide power reliability and additional substation and capacity</li> </ul>                     | 40,326,000.00       |                               |  |

| APPLICANT                    | PROJECT  | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|------------------------------|--|--|--|---------------------|----------------------|
|                              | 69 kV Subtransmission Line Refurbishment Project             | Procurement and replacement of deteriorating structures of the existing 69 kV subtransmission lines  | <ul style="list-style-type: none"> <li>To improve the existing Compostela-Medellin 69 kV subtransmission lines</li> </ul>  | 9,213,000.00        |                      |
|                              | Secondary Distribution Lines Development                     | Procurement and installation of #1/0 and #2/0 Aluminum Concrete Steel Reinforced (ACSR) conductors with a combined length of 50.76km and associated line hardware              | <ul style="list-style-type: none"> <li>To address the increase in the number of consumers</li> </ul>   | 10,818,000.00       |                      |
|                              | Additional Distribution Transformers                         | Procurement and installation of fifty-one (51) pieces pole mounted distribution transformers of various kVA ratings  | <ul style="list-style-type: none"> <li>To address consumer load growth</li> </ul>  | 3,917,000.00        |                      |
|                              | Additional Kilowatt Hour (kWh) Meters and Service Drop Wires | Procurement and installation of 4,040 new kWh meters and 121,200 meters of service drop wires and accessories  | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>   | 15,707,000.00       |                      |
| <b>2012 Network Projects</b> |  |  |  |                     |                      |
|                              | Primary Lines Development                                    | Reconductoring of primary backbone lines of Guinsay Substation Feeder 1 from 2/0 Aluminum Concrete Steel Reinforced (ACSR) to 336.4 ACSR                                       | <ul style="list-style-type: none"> <li>To improve power reliability, voltage variation and system loss reduction</li> </ul>  | 12,113,000.00       |                      |
|                              | 69 kV Subtransmission Line Development Project               | Construction of 21.0 km 69 kV Subtransmission lines from Daan Bantayan to Medellin   | <ul style="list-style-type: none"> <li>To provide a single outage contingency provision to mitigate the frequent power outages brought by power transmission and generation constraints</li> </ul> | 38,107,000.00       |                      |
|                              | Construction of Second Dayhagon Feeder                       | Procurement and installation of conductors, poles, line hardwares and switching/protection devices for the construction of the second feeder of the 10 MVA Dayhagon Substation | <ul style="list-style-type: none"> <li>To address load growth and minimize the energy not served or delivered</li> </ul>   | 4,314,000.00        |                      |
|                              | Secondary Distribution Lines Development                     | Procurement and installation #1/0 and #2/0 Aluminum Concrete Reinforced (ACSR) conductors with a combined length of 51.35km and associated line hardware                       | <ul style="list-style-type: none"> <li>To address the increase in the number of consumers</li> </ul>   | 11,540,000.00       |                      |
|                              | Additional Distribution Transformers                         | Procurement and installation of fifty-one (51) pieces pole mounted distribution transformers of various kVA ratings  | <ul style="list-style-type: none"> <li>To address consumer load growth</li> </ul>  | 4,173,000.00        |                      |
|                              | Additional Kilowatt-hour (kWh) Meters and Service Drop Wires | Procurement and installation of 3,971 new kWh meters and 119,130 meters of service drop wires and accessories  | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>   | 16,406,000.00       |                      |

| APPLICANT                    | PROJECT  | DESCRIPTION   | RATIONALE   | PROJECT COST (MPhp) | DATE FILED/ APPROVED |
|------------------------------|--|---|---|---------------------|----------------------|
| <b>2013 Network Projects</b> |  |   |   |                     |                      |
|                              | 69 kV Subtransmission Line Development Project               | Installation of new customer accessories and kilowatt-hour meter in compliance with the connection standard set by PEC and PDC                                  | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>  | 38,107,000.00       |                      |
|                              | Secondary Distribution Lines Development                     | Procurement and installation of #1/0 and #2/0 Aluminum Concrete Steel Reinforced (ACSR) conductors with a combined length of 50.68 and associated line hardware | <ul style="list-style-type: none"> <li>To address the consumer load growth</li> </ul>   | 12,262,000.00       |                      |
|                              | Additional Distribution Transformers                         | Procurement and installation of fifty-one (51) pieces pole mounted distribution transformers of various kVA ratings   | <ul style="list-style-type: none"> <li>To address load growth</li> </ul>  | 4,429,000.00        |                      |
|                              | Additional Kilowatt Hour (kWh) Meters and Service Drop Wires | Procurement and installation of 3,906 new kWh meters and 117,180 meters of service drop wires and accessories   | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>  | 17,077,000.00       |                      |
| <b>2014 Network Projects</b> |  |   |   |                     |                      |
|                              | Secondary Distribution Lines Development                     | Procurement and installation of #1/0 and #2/0 Aluminum Concrete Steel Reinforced (ACSR) conductors with a combined length of 50.91 and associated line hardware | <ul style="list-style-type: none"> <li>To address the increase in the number of consumers</li> </ul>  | 12,984,000.00       |                      |
|                              | Additional Distribution Transformers                         | Procurement and installation of fifty-two (52) pieces pole mounted distribution transformers of various kVA ratings   | <ul style="list-style-type: none"> <li>To address the consumer load growth</li> </ul>   | 4,788,000.00        |                      |
|                              | Additional Kilowatt Hour (kWh) Meters and Service Drop Wires | Procurement and installation of 3,842 new kWh meters and 115,260 meters of drop wires and accessories   | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>  | 17,717,000.00       |                      |
| <b>2015 Network Projects</b> |  |   |   |                     |                      |
|                              | Secondary Distribution Lines Development                     | Procurement and installation of #1/0 and #2/0 Aluminum Concrete Steel Reinforced (ACSR) conductors with a combined length of 50.96 and associated line hardware | <ul style="list-style-type: none"> <li>To address the increase in the number of consumers of different classes in the developing urban and rural areas</li> </ul> | 13,707,000.00       |                      |
|                              | Additional Distribution Transformers                         | Procurement and installation of fifty-two (52) pieces pole mounted distribution transformers of various kVA ratings   | <ul style="list-style-type: none"> <li>To address the consumer load growth</li> </ul>   | 5,050,000.00        |                      |
|                              | Additional Kilowatt Hour (kWh) Meters and Service Drop Wires | Procurement and installation of 3,780 new kWh meters and 113,417.01 meters of service drop wires and accessories  | <ul style="list-style-type: none"> <li>To accommodate new customers</li> </ul>  | 18,392,000.00       |                      |



| APPLICANT                        | PROJECT  | DESCRIPTION   | RATIONALE   | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|----------------------------------|--|---|---|---------------------|----------------------|
| <b>2011 Non-Network Projects</b> |  |   |   |                     |                      |
|                                  | Purchase of Vehicles   | Procurement and maintenance of 31 units motorcycles, 7 units service trucks and 2 units boom trucks                   | <ul style="list-style-type: none"> <li>To improve mobility and response time in serving customers</li> </ul>  | 14,225,000.00       |                      |
|                                  | Purchase of Geographic Information System (GIS) and Segregator | Procurement of one (1) Geographic Information System (GIS) and one (1) Segregator                                     | <ul style="list-style-type: none"> <li>To increase operations efficiency through system automation, centralized data gathering and monitoring</li> </ul>  | 3,600,000.00        |                      |
|                                  | Construction and Refurbishment of Offices                      | Construction of Carmen, Medillin, and Daan Bantayan Action Centers and Carmen Substation Lot                          | <ul style="list-style-type: none"> <li>To improve consumer service efficiency and optimize available working space</li> </ul>   | 11,500,000.00       |                      |
|                                  | Purchase of Generator Sets                                     | Procurement of one (1) generator set for Bogo CEBECO II Office  | <ul style="list-style-type: none"> <li>To maximize office work output such as billing, collection, and resolution of consumer complaints by providing uninterrupted power to both offices</li> </ul>            | 1,048,000.00        |                      |
|                                  | Insulation Power Factor Test Tool                              | Procurement of power factor test tool   | <ul style="list-style-type: none"> <li>To increase the level of accuracy of substation power transformers and other power equipment particularly during the conduct of annual preventive maintenance</li> </ul> | 1,800,000.00        |                      |
|                                  | Hot Line Tools and Equipment                                   | Procurement of twelve (12) units hot line tools and insulated boom truck  | <ul style="list-style-type: none"> <li>To minimize power interruptions through maintenance/repair works on energized lines</li> </ul>   | 475,000.00          |                      |
|                                  | Computers, Softwares, and Accessories                          | Procurement of three (3) units desktops, four (4) units laptops, two (2) units servers and forty (40) units softwares | <ul style="list-style-type: none"> <li>To upgrade the level of computer operating system and data processing</li> </ul>   | 978,000.00          |                      |
|                                  | Personnel Trainings and Seminars                               | Personnel trainings and seminars comprising of eight (8) sessions management seminars                                 | <ul style="list-style-type: none"> <li>Provision for personnel competence</li> </ul>  | 600,000.00          |                      |
|                                  | Communication Equipment  | Procurement of one (1) unit repeater, eleven (11) units hand held radio and nine (9) units base radio                 | <ul style="list-style-type: none"> <li>To upgrade and speed-up relaying of information</li> </ul>   | 461,000.00          |                      |
|                                  | Meter Test Rack  | Procurement of equipment for testing and calibrating single and three phase energy meters                             | <ul style="list-style-type: none"> <li>To increase the level of accuracy of demand monitoring/registration of member-consumers' billing</li> </ul>  | 1,300,000.00        |                      |

| APPLICANT                        | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|----------------------------------|---|---|--|---------------------|----------------------|
|                                  |   |   | meters   |                     |                      |
| <b>2012 Non-Network Projects</b> |   |   |  |                     |                      |
|                                  | Purchase of Vehicles  | Procurement and maintenance of 13 units motorcycles, 8 units service trucks and 2 units boom trucks                             | <ul style="list-style-type: none"> <li>To improve mobility and response time in serving customers</li> </ul>   | 14,220,000.00       |                      |
|                                  | Purchase of Supervisory Control and Data Acquisition (SCADA) System | Procurement of one (1) Supervisory Control and Data Acquisition (SCADA) System  | <ul style="list-style-type: none"> <li>To increase operations efficiency through system automation, centralized data gathering and monitoring</li> </ul>   | 2,675,000.00        |                      |
|                                  | Construction and Refurbishment of Offices                           | Construction of San Remegio Action Center and Refurbishment of Bogo and Danao offices   | <ul style="list-style-type: none"> <li>To improve customer service efficiency and optimize available working space</li> </ul>  | 35,310,000.00       |                      |
|                                  | Purchase of Generator Sets  | Procurement of one (1) generator set for Danao City CEBECO II Office  | <ul style="list-style-type: none"> <li>To maximize office work output such as billing, collection, and resolution of consumer complaints by providing uninterrupted power of both offices</li> </ul> | 42,000.00           |                      |
|                                  | Hot Line Tools and Equipment  | Procurement of eight (8) units hot line tools and insulated boom truck for emergency and maintenance works                      | <ul style="list-style-type: none"> <li>To minimize power interruptions through maintenance/repair works on energized lines</li> </ul>  | 5,941,000.00        |                      |
|                                  | Computers, Softwares, and Accessories                               | Purchase of two (2) units printers, three (3) units uninterrupted power supplies (UPS) and ten (10) units softwares             | <ul style="list-style-type: none"> <li>To modernize outdated computers and upgrade the level of operating system and data processing</li> </ul>  | 182,000.00          |                      |
|                                  | Personnel Trainings and Seminars                                    | Personnel training and seminars comprising of three (3) sessions competency trainings and ten (10) sessions management seminars | <ul style="list-style-type: none"> <li>Provision for personnel competence</li> </ul>   | 310,000.00          |                      |
|                                  | Communication Equipment   | Purchase of one (1) unit repeater   | <ul style="list-style-type: none"> <li>To upgrade and speed-up relaying of information</li> </ul>  | 161,000.00          |                      |
| <b>2013 Non-Network Projects</b> |   |   |  |                     |                      |
|                                  | Purchase of Vehicles  | Purchase and maintenance of 3 units of motorcycles, 6 units service trucks and 1 unit boom truck                                | <ul style="list-style-type: none"> <li>To improve mobility and response time in serving customers</li> </ul>   | 9,892,000.00        |                      |
|                                  | Construction and Refurbishment of Offices                           | Construction of Tabogon and Bogo Action Centers and refurbishment of Compostela office  | <ul style="list-style-type: none"> <li>To improve customer service efficiency and optimize available</li> </ul>  | 8,014,000.00        |                      |

| APPLICANT                        | PROJECT                                   | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|----------------------------------|---|--|--|---------------------|----------------------|
|                                  |   |  | working space  |                     |                      |
|                                  | Hot Line Tools and Equipment              | Procurement of ten (10) hot line tools and insulated boom truck for emergency and maintenance works                            | <ul style="list-style-type: none"> <li>To minimize power interruptions through maintenance/repair works on energized lines</li> </ul>                    | 315,000.00          |                      |
|                                  | Computers, Softwares, and Accessories     | Procurement of three (3) units desk tops, four (4) units lap tops and ten (10) units software                                  | <ul style="list-style-type: none"> <li>To modernize outdated computers and upgrade the level of computer operating system and data processing</li> </ul> | 454,000.00          |                      |
|                                  | Trainings and Seminars                    | Personnel training and seminars comprising of nine (9) sessions competency trainings and ten (10) sessions management seminars | <ul style="list-style-type: none"> <li>Provision for personnel competence</li> </ul>   | 767,000.00          |                      |
|                                  | Communication Equipment                   | Procurement of five (5) units hand held radio and five (5) units base radio  | <ul style="list-style-type: none"> <li>To upgrade and speed-up relaying of information</li> </ul>  | 180,000.00          |                      |
| <b>2014 Non-Network Projects</b> |   |  |  |                     |                      |
|                                  | Purchase of Vehicles                      | Procurement and maintenance of 4 units motorcycles, 2 units service trucks and 1 unit boom truck                               | <ul style="list-style-type: none"> <li>To improve mobility and response time in serving customers</li> </ul>   | 2,965,000.00        |                      |
|                                  | Construction and Refurbishment of Offices | Construction of Catmon Action Center   | <ul style="list-style-type: none"> <li>To improve customer service efficiency and optimize available working space</li> </ul>                            | 3,675,000.00        |                      |
|                                  | Hot Line Tools and Equipment              | Procurement of five (5) hot line tools and insulated boom truck for emergency and maintenance works                            | <ul style="list-style-type: none"> <li>To minimize power interruptions through maintenance/repair works on energized lines</li> </ul>                    | 245,000.00          |                      |
|                                  | Computers, Software and Accessories       | Procurement of two (2) units printers, three units uninterrupted power supply (UPS) and ten (10) units software                | <ul style="list-style-type: none"> <li>To modernize outdated computers and upgrade the level of computer operating system and data processing</li> </ul> | 209,000.00          |                      |
|                                  | Personnel Trainings and Seminars          | Personnel trainings and seminars comprising of ten (10) sessions management seminars   | <ul style="list-style-type: none"> <li>Provision for personnel competence</li> </ul>   | 98,000.00           |                      |
|                                  | Communication Equipment                   | Procurement of two (2) units repeater  | <ul style="list-style-type: none"> <li>To upgrade and speed-up relaying of information</li> </ul>  | 368,000.00          |                      |
|                                  | Purchase of Vehicles                      | Procurement and maintenance of 9 units motorcycles, 3 units service trucks and 1 unit boom truck                               | <ul style="list-style-type: none"> <li>To improve mobility and response time in serving customers</li> </ul>   | 9,969,000.00        |                      |
|                                  | Construction and Refurbishment of Offices | Refurbishment of Tuburan and Tabuelan Offices  | <ul style="list-style-type: none"> <li>To improve customer service efficiency and optimize available working space</li> </ul>                            | 5,243,000.00        |                      |

| APPLICANT   | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED            |
|---|---|---|--|---------------------|---------------------------------|
|   | Hot Line Tools and Equipment  | Procurement of five (5) hot line tools and insulated boom truck for emergency and maintenance works   | <ul style="list-style-type: none"> <li>To minimize power interruptions through maintenance/repair works on energized lines</li> </ul>  | 203,000.00          |                                 |
|   | Computers, Software and Accessories   | Procurement of ten (10) units software  | <ul style="list-style-type: none"> <li>To modernize outdated computers and upgrade the level of computer operating system and data processing</li> </ul>   | 166,000.00          |                                 |
|   | Trainings and Seminars  | Personnel training and seminars comprising of ten (10) sessions management seminars   | <ul style="list-style-type: none"> <li>Provision for personnel competence</li> </ul>   | 105,000.00          |                                 |
| <b>Surigao Del Sur I Electric Cooperative, Inc. (SURSECO I)</b> | <b>Projects for 2009</b>  |   |  |                     |                                 |
|   | Repair and installation of 5MVA Power Transformer   | Repair and installation of 5MVA power transformer in Tabon Substation   | <ul style="list-style-type: none"> <li>To address load growth and provisions for additional substation capacity</li> <li>To address power demand of MG Mining</li> </ul>                           | 4,612,298.81        | December 1, 2009/ July 25, 2011 |
|   | Conversion and upgrading of a Single Phase Line to Three (3) Phase Line and Extension of Three (3) Phase Line | Conversion and upgrading of a single phase line to a three (3) phase line from Nursery to Sikahoy, and extension of three (3) phase line from Sikahoy to Mendoza  | <ul style="list-style-type: none"> <li>To address load growth</li> <li>To improve overall technical loss of the distribution feeders</li> </ul>  | 7,072,259.31        |                                 |
|   | Procurement, Replacement, and Installation of Kilowatt-hour (kWh) Meters                                      | Procurement, replacement, and installation of two thousand four hundred (2,400) units of defective kWh meter of various types   | <ul style="list-style-type: none"> <li>To promote accuracy in the meter registration of energy sales</li> </ul>  | 2,688,000.00        |                                 |
|   | Procurement of Additional Poles and Replacement of Rotten Place   | Procurement of additional poles and replacement of one hundred twenty (120) rotten poles  | <ul style="list-style-type: none"> <li>To address load growth and improve power quality and system reliability</li> <li>To promote safety in the maintenance of the distribution system</li> </ul> | 1,720,107.20        |                                 |
|   | Conversion of Lines from One (1) Phase Line to Vee (V) Phase Line   | Conversion of existing one (1) phase line to Vee (V) phase line involving the lines in the following: 1) from Barangay Biton to barangay Portlamon, Hinatuan; and 2) from Barangay San Juan to Barangay Pamanlinan, Bislig City                             | <ul style="list-style-type: none"> <li>To address load growth, reduce technical losses and improve voltage quality</li> </ul>  | 3,052,029.33        |                                 |
|   | Expansion of Distribution Line and Construction of One (1) Phase Line   | Expansion of distribution line involving the construction of one (1) phase line to serve unenergized Sitios within its franchise area namely: 1) Sitio Mabog, San Jose City, 2) Sitio Puerto, Maharlika, Bislig City, 3) Sitio Dreamland, Tagbina, 4) Sitio | <ul style="list-style-type: none"> <li>To comply with the government's thrust of one hundred percent (100%) energization through the Department of Energy's (DOE)</li> </ul>                       | 8,169,911.59        |                                 |

| APPLICANT                | PROJECT   | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|--------------------------|---|--|--|---------------------|----------------------|
|                          |   | Haguimitan, Lingig, and 5) Sitios Tabuk in Santo Niño, Bil-At in Loyola, and Mahaba in San Juan, all in the Municipality of Hinatuan   | “O Ilaw” program   |                     |                      |
|                          | Procurement and Replacement of Inefficient Transformers               | Procurement of the following Distribution Transformers (DTs): 1) ten (10) units of 10 kVA DT; 2) 10 units of 15 kVA DT; 3) five (5) units of 25 kVA DT; 4) four (4) units of 37.5 kVA DT; and five (5) one (1) unit of 50 kVA DT   | <ul style="list-style-type: none"> <li>To address load growth and improve power quality</li> </ul>   | 1,120,000.00        |                      |
|                          | Procurement of Computer Software and Equipment                        | Procurement of a computer software (SynerGee) and a thermal scanner  | <ul style="list-style-type: none"> <li>To monitor and properly evaluate distribution of electric system</li> </ul>   | 2,184,000.00        |                      |
|                          | Construction of a 69 kV Subtransmission Line                          | Construction of four hundred forty meters (440 m) of 69 kV subtransmission lines to serve the Tabon Substation   | <ul style="list-style-type: none"> <li>To improve power quality, and provide connection for the delivery of power to the 10 MVA Tabon Substation</li> </ul>  | 771,307.28          |                      |
| <b>Projects for 2010</b> |   |  |  |                     |                      |
|                          | Procurement, Replacement, and Installation of kWh Meters              | Procurement, replacement, and installation of two thousand four hundred (2,400) units of defective kWh meter of various types  | <ul style="list-style-type: none"> <li>To promote accuracy in the meter registration of energy sales</li> </ul>  | 2,688,000.00        |                      |
|                          | Procurement of Additional Poles and Replacement of Rotten Poles       | Procurement of additional poles and replacement of one hundred nine (109) rotten poles   | <ul style="list-style-type: none"> <li>To address load growth and improve power quality and system reliability</li> <li>To promote safety in the maintenance of the distribution system</li> </ul> | 1,623,753.60        |                      |
|                          | Conversion of Lines from One (1) Phase Line to Vee (V) Phase Line     | Conversion of existing one (1) phase line to Vee (V) phase line involving the following lines: 1) from kilometer four (4) to Barangay Lawigan, Bislig City; 2) from Barangay Kahayag to Barangay Coletto; 3) from Barangay San Vicente to Barangay Tidman  | <ul style="list-style-type: none"> <li>To address load growth, reduce technical losses and improve voltage quality</li> </ul>  | 1,951,887.53        |                      |
|                          | Expansion of Distribution Line and Construction of One (1) Phase Line | Expansion of distribution line involving the construction of one (1) phase line to serve the unenergized Sitios within its franchise area, namely: 1) Sitio Pagasa, Tagbina, 2) Sitios Kopot, Katipunan, Mahogany, Agsaban and Paradise in Barangay Tagpupuran, all in the municipality of Lingig, 3) Sitios Barobo of San Juan, Kasikuhan and Agsaban, Talisay, all in the municipality of Hinatuan | <ul style="list-style-type: none"> <li>To comply with the government’s thrust of one hundred percent (100%) energization through the Department of Energy’s (DOE) “O Ilaw” program</li> </ul>      | 4,255,777.49        |                      |

| APPLICANT                | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|--------------------------|---|---|--|---------------------|----------------------|
|                          | Procurement of Distribution Transformers (DTs)                                  | Procurement of the following DTs in such number of units and capacities, namely; 1) ten (10) units of 10 kVA DT; 2) ten (10) units of 15 kVA DT; 3) five (5) units of 25 kVA DT; 4) four (4) units of 37.5 kVA DT; and 5) one (1) unit of 50 kVA DT                           | <ul style="list-style-type: none"> <li>To address load growth and improve the distribution system</li> </ul>   | 1,120,000.00        |                      |
|                          | Procurement and Installation of three (3) units of 69 kV Circuit Breakers (CBs) | Procurement and installation of three (3) units of 69 kV CBs for installation of in all substations   | <ul style="list-style-type: none"> <li>To provide protection and security of substations</li> <li>To promote reliability of operations of substations</li> </ul>                                   | 14,153,085.32       |                      |
|                          | Procurement of Tools and Equipment  | Procurement of tools and equipment such as load logger, meter seal, ampart gun, and ampart connection of various sizes  | <ul style="list-style-type: none"> <li>To monitor properly evaluate distribution of electric service</li> </ul>  | 4,325,511.12        |                      |
|                          | Procurement of Maintenance Vehicles   | Procurement of various types of vehicles  | <ul style="list-style-type: none"> <li>To enhance quality of service</li> </ul>  | 10,000,000.00       |                      |
| <b>Projects for 2011</b> |   |   |  |                     |                      |
|                          | Procurement, Replacement, and Installation of kWh Meters                        | Procurement, replacement, and installation of two thousand four hundred (2,400) units of defective kWh meter of various types   | <ul style="list-style-type: none"> <li>To promote accuracy in the meter registration of energy sales</li> </ul>  | 2,688,000.00        |                      |
|                          | Procurement of Additional Poles and Replacement of Rotten Poles                 | Procurement of additional poles and replacement of one hundred eleven (111) rotten poles  | <ul style="list-style-type: none"> <li>To address load growth and improve power quality and system reliability</li> <li>To promote safety in the maintenance of the distribution system</li> </ul> | 1,637,081.60        |                      |
|                          | Conversion of Lines from One (1) Phase Line                                     | Conversion of existing one (1) phase line to Vee (V) phase line involving the following lines: 1) from Barangay Dughan to Barangay Gamut; 2) from Barangay Santa Juana to Barangay San Vicente II; and 2) from Barangay Gamut to Barangay Javier, Barobo                      | <ul style="list-style-type: none"> <li>To address growth, reduce technical losses, and improve voltage quality</li> </ul>  | 2,711,005.85        |                      |
|                          | Expansion of Distribution Line and Construction of One (1) Phase Line           | Expansion of distribution line involving the construction of one (1) phase line to serve unenergized Sitios within its franchise areas, namely; 1) Sitio Tapnigidan, Osmeña, Tagbina, and 2) Sitio Makape, Magsaysay including the vicinity of the National Highway in Barobo | <ul style="list-style-type: none"> <li>To comply with the government's thrust of one hundred percent (100%) energization through the DOE's "O Ilaw" program</li> </ul>                             | 1,639,378.05        |                      |
|                          | Acquisition of a 69 kV Subtransmission Line                                     | Acquisition of a 69 kV subtransmission line consisting of a wooden pole structures of 69 kV subtransmission line # 366 MCM conductors and overhead lines  | <ul style="list-style-type: none"> <li>To address load growth and improve the distribution system</li> </ul>   | 12,415,200.00       |                      |

| APPLICANT                | PROJECT   | DESCRIPTION   | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|--------------------------|---|---|--|---------------------|----------------------|
|                          | Procurement of Tools and Equipment                                    | Procurement of ampact connection of various sizes and meter seals   | <ul style="list-style-type: none"> <li>To monitor and properly evaluate distribution of electric service</li> </ul>  | 5,009,795.12        |                      |
| <b>Projects for 2012</b> |   |   |  |                     |                      |
|                          | Procurement, Replacement, and Installation of kWh Meters              | Procurement, replacement, and installation of two thousand four hundred (2,400) units of defective kWh meter of various types   | <ul style="list-style-type: none"> <li>To promote accuracy in the meter registration of energy sales</li> </ul>  | 2,688,000.00        |                      |
|                          | Procurement of Additional Poles and Replacement of Rotten Poles       | Procurement of additional poles and replacement of seventy-four (74) rotten poles   | <ul style="list-style-type: none"> <li>To address load growth and improve power quality and system reliability</li> <li>To promote safety in the maintenance of the distribution system</li> </ul> | 923,845.44          |                      |
|                          | Conversion of Lines from One (1) Phase Line                           | Conversion of existing one (1) phase line to Vee (V) phase line of the following lines: from Barangay Tangonon to Quarry, Barangay Villaverde, Tagbina to Junction, Sayon, Tagbina; and from Barangay Tagasaka to Barangay Loyola, Hinatuan   | <ul style="list-style-type: none"> <li>To address load growth, reuce technical losses and improve voltage quality</li> </ul>   | 1,139,114.43        |                      |
|                          | Expansion of Distribution Line and Construction of One (1) Phase Line | Expansion of distribution line involving the construction of one (1) phase lien to serve unenergized Sitios within its Franchise area namely: 1) SitioP5 Poblacion, Barobo, 2) Sitio Hollywood, Mamis, Barobo, 3) Sitio Binooyan, San Jose , Barabo, and 4) Sitio Kinagbangan, Tangonon | <ul style="list-style-type: none"> <li>To comply with the government's thrust of one hundred percent (100%) energization through the DOE's "O llaw" program</li> </ul>                             | 3,109,689.54        |                      |
|                          | Procurement of DTs  | Procurement of the following DTs: 1) ten (10) units of 10 kVA DT; 2) ten (10) units of 15 kVA DT; 3) five (5) units of 25 kVA DT; 4) four (4) units of 37.5 kVA DT; and one (1) unit of 50 kVA DT   | <ul style="list-style-type: none"> <li>To address the load growth and improve the distribution system</li> </ul>   | 1,120,000.00        |                      |
|                          | Procurement of Tools and Equipment                                    | Procurement of ampact connection of various sizes and meter seals   | <ul style="list-style-type: none"> <li>To monitor and properly evaluate distribution of electric service</li> </ul>  | 4,069,395.12        |                      |
|                          | Procurement, Replacement, and Installation of kWh Meters              | Procurement, replacement, and installation of two thousand four hundred (2,400) units of defective kWh meter of various types   | <ul style="list-style-type: none"> <li>To promote accuracy in the meter registration of energy sales</li> </ul>  | 2,688,000.00        |                      |
|                          | Procurement of Additional Poles and Replacement of Rotten Poles       | Procurement of additional poles and replacement of forty-sixty (46) rotten poles  | <ul style="list-style-type: none"> <li>To address load growth and improve power quality and system reliability</li> <li>To promote safety in the</li> </ul>  | 562,451.68          |                      |

| APPLICANT   | PROJECT  | DESCRIPTION  | RATIONALE  | PROJECT COST (MPhP) | DATE FILED/ APPROVED |                                  |
|---|--|--|--|---------------------|----------------------|----------------------------------|
|   |  |  | maintenance of the distribution system   |                     |                      |                                  |
|   | Conversion of Lines from One (1) Phase Line to Vee (V) Phase Line  | Conversion of existing one (1) phase line to Vee (V) phase line of the following lines: 1) from Barangay Mahabo to Anibongan; 2) from Barreda Street to Caramcam, Barangay Mangangoy; and 3) from km 8 Nursery to Barangay Tabon to Barangay San Jose, Bislig City | <ul style="list-style-type: none"> <li>To address load growth, reduce technical losses, and improve voltage quality</li> </ul>   | 1,245,025.14        |                      |                                  |
|   | Expansion of Distribution Line and Construction of One (1) Phase Line  | Expansion of distribution involving the construction of one (1) phase line to serve unenergized Sitios within its franchise area, namely: 1) Sitio Napanpanan, Raja, Kabunsuan, 2) Sitio Banacud, Hinatuan, and 3) Sitio Tanduan, Gamut                            | <ul style="list-style-type: none"> <li>To comply with the government's thrust of one hundred percent (100%) energization through the DOE's "O Ilaw" program</li> </ul> | 2,556,816.29        |                      |                                  |
|   | Procurement of DTs   | Procurement of the following DTs: 1) ten (10) units of 10 kVA DT; 2) ten (10) units of 15 kVA DT; 3) five (5) units of 25 kVA DT; 4) four (4) units of 37.5 kVA DT; and 5) one (1) unit of 50 kVA DT   | <ul style="list-style-type: none"> <li>To address load growth and improve the distribution system</li> </ul>   | 1,120,000.00        |                      |                                  |
|   | Procurement of Tools and Equipment   | Procurement of ampact connection of various sizes and meter seals  | <ul style="list-style-type: none"> <li>To monitor and properly evaluate distribution of electric service</li> </ul>  | 4,069,395.12        |                      |                                  |
| <b>Batanes Electric Cooperative, Inc. (BATANELCO)</b> | <b>2010 Projects</b>   |  |  |                     |                      | November 11, 2010/August 1, 2011 |
|   | Replacement of Deteriorated Distribution Transformers (Phase I)  | Replacement of seven (7) 25 kVA transformers, four (4) 15 kVA transformers and three (3) 10-kVA transformers   | <ul style="list-style-type: none"> <li>To avoid serious damage to people and properties</li> </ul>   | 1,000,116.00        |                      |                                  |
|   | Replacement of Rotten/Burned Poles at Batan Island   | Replacement of rotten and burned poles which are likely to fall due to strong winds  | <ul style="list-style-type: none"> <li>To prevent serious damage to people and properties</li> </ul>   | 316,875.00          |                      |                                  |
|   | Replacement of Deteriorated Sectionalizer and Transformer Cut-outs   | Replacement of deteriorated sectionalizer and transformer cut-outs, including replacement of aging lightning arresters   | <ul style="list-style-type: none"> <li>To have reliable protection from short circuits</li> </ul>  | 232,131.40          |                      |                                  |
|   | <b>2011 Projects</b>   |  |  |                     |                      |                                  |
|   | Installation of System Natural Grounding from Taytay to San Juaquin including Replacement of Deteriorated Pole Accessories | Installation of system neutral and grounding to address the floating 1.9 primary line from Taytay Kayhuvukan Basco to Barangay San Juaquin, Basco, including replacement of corroded pole accessories  | <ul style="list-style-type: none"> <li>To avoid voltage fluctuations and power interruptions</li> </ul>  | 185,895.50          |                      |                                  |
|   | Replacement of Deteriorated Primary Conductor from Brgy. Panatayan to Sitio Diura Single                                   | Replacement of deteriorated primary conductor to address the floating 2.3 km single phase primary line from Pahatayan, Mahatao to Sitio Diura, Basco,  | <ul style="list-style-type: none"> <li>To avoid voltage fluctuations and power interruptions</li> </ul>  | 322,708.46          |                      |                                  |



| APPLICANT            | PROJECT  | DESCRIPTION  | RATIONALE   | PROJECT COST (MPhP) | DATE FILED/ APPROVED |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|----------------------|--|--|---|---------------------|----------------------|---|-----------------------------------|---|---|-------------|----|---|---------------|---|---|----------|---|---|----------------|---|---|-------------|---|---|------------|--|
|                      | Phase Line including installation of System Neutral and Grounding  | including replacement of deteriorated pole accessories and conductor and installation of system neutral and grounding  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Procurement of Lineman Tools and Equipment   | Procurement of the following tools:<br><table border="1"> <thead> <tr> <th>No.</th> <th>Tools</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Mechanical Compression Tool &amp; Die</td> <td>3</td> </tr> <tr> <td>2</td> <td>Climber Set</td> <td>10</td> </tr> <tr> <td>3</td> <td>Rubber Gloves</td> <td>4</td> </tr> <tr> <td>4</td> <td>Chainsaw</td> <td>1</td> </tr> <tr> <td>5</td> <td>Linemen Wrench</td> <td>4</td> </tr> <tr> <td>6</td> <td>Hole Digger</td> <td>3</td> </tr> </tbody> </table> | No.   | Tools               | Quantity             | 1 | Mechanical Compression Tool & Die | 3 | 2 | Climber Set | 10 | 3 | Rubber Gloves | 4 | 4 | Chainsaw | 1 | 5 | Linemen Wrench | 4 | 6 | Hole Digger | 3 | <ul style="list-style-type: none"> <li>To improve efficiency and maintain linemen safety</li> </ul> | 464,891.53 |  |
| No.                  | Tools  | Quantity   |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 1                    | Mechanical Compression Tool & Die  | 3  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 2                    | Climber Set  | 10   |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 3                    | Rubber Gloves  | 4  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 4                    | Chainsaw   | 1  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 5                    | Linemen Wrench   | 4  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| 6                    | Hole Digger  | 3  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Replacement of Old Kilowatt Hour Meters  | Replacement of old kilowatt hour meters including all metering equipment   | <ul style="list-style-type: none"> <li>To determine the accurate power consumption of each customer and provide kilowatt hour meters for the new customers</li> </ul> | 333,033.00          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Installation of System Neutral and Grounding of 16 km Floating Primary Line  | Installation of system ground for the 16 kms. Floating primary line in Sabtang   | <ul style="list-style-type: none"> <li>To avoid voltage fluctuations and address the danger posed by the said fluctuations to customers</li> </ul>                    | 473,780.16          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Replacement of Deteriorated Pole Accessories of Three Phase Line from Vatang to Ivana Welcome                                  | Replacement of 2.3 kms section of Feeder 2 at Batan Island from Vatang Bridge to Ivana Welcome including replacement of all pole accessories for the three phase primary line serving the Municipalities of Ivana and Uyugan   | <ul style="list-style-type: none"> <li>To improve reliability and avoid massive power interruptions</li> </ul>  | 969,014.82          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Replacement of Deteriorated Pole Accessories and Wires from Ivana to Uyugan including System Neutral and Grounding             | Replacement of 4kms highly corroded wires and accessories of the Vee-Phase line from Ivana to Itbud sectionalizer, and replacement of fallen or corroded system neutral and grounding  | <ul style="list-style-type: none"> <li>To address safety deficiencies of the line and avoid massive power interruptions</li> </ul>                                    | 1,788,624.64        |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Replacement of Old Kilowatt Hour Meters  | Replacement of old kilowatt hour meters including all metering equipment   | <ul style="list-style-type: none"> <li>To determine the accurate power consumption of each customer and provide kilowatt hour meters for the new customers</li> </ul> | 333,033.00          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
| <b>2013 Projects</b> |  |  |   |                     |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Replacement of Primary Conductor and Deteriorated Pole Accessories including System Neutral and Grounding from Uyugan to Itbud | Replacement of five (5) kms highly corroded wires and accessories of the single phase line from Uyugan to Itbud including replacement of fallen or corroded system neutral and grounding   | <ul style="list-style-type: none"> <li>To address safety deficiencies of the line and avoid massive power interruptions</li> </ul>                                    | 576,265.00          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |
|                      | Partial Replacement of Deteriorated  | Replacement of 15 kms distribution lines at Itbayat  | <ul style="list-style-type: none"> <li>To avoid voltage fluctuations</li> </ul>   | 800,000.00          |                      |   |                                   |   |   |             |    |   |               |   |   |          |   |   |                |   |   |             |   |   |            |  |

| APPLICANT | PROJECT                                 | DESCRIPTION  | RATIONALE   | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|-----------|---|--|---|---------------------|----------------------|
|           | Pole Accessories at Itbayat             | including replacement of corroded pole accessories and guys              | and address the danger posed by the said fluctuations to customers  |                     |                      |
|           | Replacement of Old Kilowatt Hour Meters | Replacement of old kilowatt hour meters including all metering equipment | <ul style="list-style-type: none"> <li>To determine the accurate power consumption of each customer and provide kilowatt hour meters for the new customers</li> </ul> | 333,933.00          |                      |

Source: ERC Website

Annex 15. ECs Average Systems Rates as of January to October 2011

| ELECTRIC COOPERATIVES                         | Average Systems Rates |               |               |               |               |               |               |               |               |               |
|---|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11        | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| <b>REGION I (Ilocos Region)</b>               |                       |               |               |               |               |               |               |               |               |               |
| INEC  | 7.8842                | 8.1872        | 8.0423        | 8.2422        | 8.6763        | 8.6749        | 8.3681        | 8.5562        | 8.0731        | 8.4540        |
| ISECO   | 6.6223                | 7.2181        | 7.8172        | 7.9755        | 7.3976        | 7.3268        | 6.9182        | 6.9399        | 6.7409        | 7.0307        |
| LUELCO  | 8.0679                | 8.9166        | 9.0509        | 9.3557        | 9.1245        | 9.9075        | 10.2229       | 9.4639        | 9.1773        | 8.6588        |
| PANELCO I                                     | 9.4213                | 10.4185       | 11.0721       | 10.4261       | 10.5037       | 10.5493       | 11.5794       | 10.8797       | 10.6655       | 11.1071       |
| CENPELCO                                      | 8.1879                | 8.0219        | 8.3078        | 8.3418        | 8.0253        | 9.4898        | 8.0865        | 8.1427        | 8.2918        | 8.0960        |
| PANELCO III                                   | 7.5814                | 8.4165        | 8.5586        | 9.2228        | 8.4402        | 8.6429        | 8.4292        | 8.2231        | 8.2891        | NDS           |
| <b>Region I Average</b>                       | <b>7.7992</b>         | <b>8.2912</b> | <b>8.5112</b> | <b>8.7337</b> | <b>8.4362</b> | <b>8.8930</b> | <b>8.4908</b> | <b>8.3614</b> | <b>8.2581</b> | <b>8.2767</b> |
| <b>REGION II (Cagayan Valley)</b>             |                       |               |               |               |               |               |               |               |               |               |
| BATANELCO                                     | 6.8877                | 5.7911        | 7.3118        | 8.6844        | 7.6512        | 7.0140        | 7.5738        | 7.7033        | 7.4534        | 8.0291        |
| CAGELCO I                                     | 8.0078                | 8.3910        | 8.5001        | 8.5614        | 8.0031        | 8.1048        | 7.9285        | 7.8957        | 8.1087        | 8.1208        |
| CAGELCO II                                    | 8.2879                | 8.7895        | 9.0851        | 8.9984        | 8.6360        | 8.9817        | 8.7601        | 8.5819        | 8.1982        | 8.3713        |
| ISELCO I                                      | 8.4718                | 9.3360        | 10.0592       | 10.3155       | 9.0659        | 10.1157       | 9.2599        | 8.9304        | 8.1730        | 8.1218        |
| ISELCO II                                     | 8.4194                | 8.5696        | 8.9077        | 8.7871        | 8.5761        | 8.9307        | 8.6919        | 8.5233        | 8.7874        | 7.4554        |
| NUVELCO                                       | 8.5225                | 10.2373       | 10.4722       | 10.9334       | 9.9419        | NDS           | NDS           | NDS           | NDS           | NDS           |
| QUIRELCO                                      | 10.1955               | 10.5034       | 10.7615       | 10.7808       | 10.1909       | 10.3569       | 10.1024       | 9.8407        | 10.2507       | 10.1528       |
| <b>Region II Average</b>                      | <b>8.3892</b>         | <b>9.0855</b> | <b>9.4849</b> | <b>9.6185</b> | <b>8.8124</b> | <b>9.1993</b> | <b>8.7659</b> | <b>8.5626</b> | <b>8.3447</b> | <b>8.0683</b> |
| <b>CAR (Cordillera Administrative Region)</b> |                       |               |               |               |               |               |               |               |               |               |
| ABRECO  | NDS                   | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           |
| BENECO  | 4.6941                | 4.7525        | 4.6473        | 4.7125        | 7.1564        | 7.7017        | 4.9756        | 4.6839        | 4.8358        | 4.9066        |
| IFELCO  | 10.1646               | 9.7764        | 10.3382       | 10.6748       | 10.6629       | 10.3628       | 10.3755       | 10.6046       | 10.2650       | 9.6811        |
| KAELCO  | 9.4644                | 10.1599       | 9.9448        | 10.4273       | 10.4047       | 10.2287       | 9.6209        | 9.2663        | 8.3422        | 9.6757        |
| MOPRECO                                       | 8.5856                | 8.8148        | 9.3480        | 9.8572        | 9.3945        | 9.6045        | 9.3653        | 8.8257        | 8.6678        | 8.5185        |
| <b>CAR Average</b>                            | <b>5.1982</b>         | <b>4.8230</b> | <b>5.2321</b> | <b>5.3755</b> | <b>7.5348</b> | <b>8.0094</b> | <b>5.5556</b> | <b>5.2744</b> | <b>5.3512</b> | <b>5.4124</b> |

| ELECTRIC COOPERATIVES             | Average Systems Rates |               |               |               |               |               |               |               |               |               |
|-----------------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                   | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11        | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| <b>REGION III (Central Luzon)</b> |                       |               |               |               |               |               |               |               |               |               |
| AURELCO-Central Aurora            | 10.1553               | 11.5978       | 10.8383       | 10.8768       | 10.7181       | 10.9967       | 11.1688       | 10.5139       | 10.4040       | 10.2901       |
| NEECO I                           | 10.0272               | 7.9674        | 8.1306        | 8.3220        | 7.7265        | 8.1066        | 9.7655        | 8.2916        | 7.8956        | 7.6996        |
| NEECO II-Area 1                   | 9.2047                | 10.0640       | 10.5377       | 11.1306       | 10.2470       | 10.6379       | 10.0929       | 10.0367       | 10.0514       | 9.7634        |
| NEECO II-Area 2                   | 10.4255               | 10.3173       | 8.8593        | 8.3175        | 7.6495        | 8.6771        | NDS           | NDS           | NDS           | NDS           |
| PELCO I                           | 8.2302                | 9.5021        | 9.6695        | 9.9292        | 9.8306        | 9.5672        | 9.9101        | 9.7501        | 9.6317        | 9.8019        |
| PELCO II                          | 8.0576                | 8.0052        | 8.3589        | 8.3164        | 7.9544        | 8.4588        | 8.4665        | 8.1993        | 8.2111        | NDS           |
| PELCO III                         | 7.7227                | 8.3217        | 8.5850        | 9.0579        | 8.3480        | 8.5233        | 8.3359        | 8.1359        | 8.1770        | 8.0230        |
| PENELCO                           | 8.0669                | 8.8218        | 9.3557        | 10.0739       | 9.2762        | 9.4251        | 8.6535        | 8.2357        | 8.1950        | 8.1598        |
| PRESCO                            | 8.8638                | 9.9337        | 10.0213       | 10.0109       | 9.7480        | 10.4457       | 10.8971       | 10.0861       | 9.9932        | 9.6555        |
| SAJELCO                           | 7.9131                | 8.8376        | 8.7497        | 8.9747        | 9.2322        | 8.8136        | 9.4863        | 9.0116        | 9.1958        | NDS           |
| TARELCO I                         | 7.6721                | 8.5044        | 8.9425        | 9.4902        | 8.6149        | 9.1043        | 8.7620        | 8.6706        | 8.7050        | 8.7999        |
| TARELCO II                        | 6.6903                | 7.3270        | 7.8845        | 8.1140        | 7.3929        | 7.4063        | 7.1432        | 7.0467        | 7.0431        | 7.0406        |
| ZAMECO I                          | 9.2870                | 10.1227       | 10.8355       | 10.7750       | 10.8551       | 11.0910       | 10.7756       | 11.1913       | 10.9305       | 10.7244       |
| ZAMECO II                         | 8.2633                | 9.1592        | 9.3836        | 9.6528        | 9.0474        | 9.9675        | 10.0991       | 9.1972        | 9.1796        | 8.9725        |
| <b>Region III Average</b>         | <b>8.3306</b>         | <b>8.7934</b> | <b>9.0205</b> | <b>9.2798</b> | <b>8.7344</b> | <b>9.0581</b> | <b>9.0144</b> | <b>8.6626</b> | <b>8.6174</b> | <b>8.6108</b> |
| <b>REGION IV-A (Calabarzon)</b>   |                       |               |               |               |               |               |               |               |               |               |
| BATELEC I                         | 7.7977                | 7.5589        | 7.8551        | 7.8796        | 7.6529        | 8.3711        | 8.0779        | 8.0756        | 8.4851        | 8.4625        |
| BATELEC II                        | 7.1016                | 7.2900        | 7.6321        | 7.3300        | 7.3354        | 8.3606        | 7.7783        | 7.6301        | 7.5313        | 7.5313        |
| FLECO                             | 8.1799                | 8.3935        | 9.6278        | 10.4058       | 9.8566        | 9.5951        | 9.7137        | 9.4136        | 9.1640        | 9.1640        |
| QUEZELCO I                        | 7.8622                | 8.1387        | 8.3430        | 8.5203        | 8.5430        | 8.8177        | 8.9880        | 8.5367        | 8.8909        | 8.8909        |
| QUEZELCO II                       | 9.1239                | 9.3710        | 9.9139        | 9.7482        | 9.7796        | 10.1113       | 10.2996       | 9.9270        | 9.7299        | 9.7299        |
| <b>REGION IV-B (Mimaropa)</b>     |                       |               |               |               |               |               |               |               |               |               |
| LUBELCO                           | 7.9965                | 8.8097        | 9.9934        | 8.9742        | 9.0004        | 9.0505        | 10.3044       | 10.7773       | 10.8831       | 11.1908       |
| OMECO                             | 9.3238                | 9.2830        | 11.6847       | 10.5830       | 10.5478       | 10.5689       | 10.6682       | 10.5998       | 10.6421       | 10.6641       |

| ELECTRIC COOPERATIVES              | Average Systems Rates |               |               |               |               |                |               |               |               |               |
|------------------------------------|-----------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|
|                                    | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11         | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| ORMECO                             | 9.5152                | 10.1008       | 11.1060       | 11.0353       | 10.8411       | 10.7688        | 10.7510       | 10.6277       | 11.0263       | 10.5590       |
| MARELCO                            | 9.0085                | 11.1395       | 10.2591       | 10.5209       | 10.8404       | 10.6087        | 10.5204       | 10.3551       | 10.6430       | 10.3810       |
| TIELCO                             | 5.9729                | 6.8893        | 7.6675        | 6.8763        | 6.8168        | 6.8600         | 6.8604        | 6.9361        | 6.8892        | 6.9057        |
| ROMELCO                            | 7.9966                | 8.5920        | 8.9996        | 8.7389        | 8.7924        | 8.8054         | 8.6738        | 8.6815        | 8.7583        | 8.8261        |
| BISELCO                            | 6.6233                | 7.3409        | 8.2645        | 7.7490        | 7.6965        | 8.4611         | 8.0828        | 8.1703        | 8.1953        | 8.4727        |
| PALECO                             | 8.0581                | 8.4144        | 8.4237        | 7.8064        | 8.2758        | 8.2998         | 8.2828        | 8.4318        | 8.5069        | 8.4750        |
| <b>Region IV Average</b>           | <b>9.0161</b>         | <b>9.2620</b> | <b>9.8485</b> | <b>9.5832</b> | <b>9.4469</b> | <b>10.0822</b> | <b>8.5160</b> | <b>8.3010</b> | <b>8.4976</b> | <b>8.4342</b> |
| <b>REGION V (Bicol region)</b>     |                       |               |               |               |               |                |               |               |               |               |
| ALECO                              | 8.4772                | 7.3796        | 7.3645        | 6.8365        | 7.0194        | 9.4355         | 7.3673        | 7.7205        | NDS           | NDS           |
| CANORECO                           | 8.8555                | 8.7306        | 8.9179        | 9.0926        | 8.7960        | 10.1344        | 9.4290        | 9.3117        | 9.2061        | 9.0905        |
| CASURECO I                         | 9.6716                | 9.4122        | 9.7927        | 9.8056        | 9.3882        | 10.6904        | 10.0120       | 9.7032        | 9.8658        | 9.5799        |
| CASURECO II                        | 9.0876                | 10.0828       | 10.2073       | 10.3324       | 10.2302       | 10.4777        | 8.4195        | 8.8985        | 8.7446        | 8.8662        |
| CASURECO III                       | 9.9732                | 9.1722        | 9.3537        | 9.6680        | 9.4387        | 11.2353        | 8.4467        | 9.4583        | 8.8417        | NDS           |
| CASURECO IV                        | 11.0458               | 10.8897       | 11.5292       | 11.5295       | 11.2773       | 11.6489        | 11.0740       | 11.0442       | 11.2391       | 11.3235       |
| FICELCO                            | 9.4697                | 10.0310       | 10.0945       | 10.0738       | 10.1530       | 10.2596        | 10.1491       | 10.2191       | 9.9403        | 9.9846        |
| MASELCO                            | 7.3889                | 7.3854        | 7.3131        | 7.2512        | 7.3823        | 7.3745         | 7.3984        | 7.3902        | 7.3713        | 7.4279        |
| SORECO I                           | 8.7022                | 9.3595        | 9.7699        | 9.8909        | 9.5699        | 10.2046        | 9.3441        | 9.1524        | 8.9827        | 8.9165        |
| SORECO II                          | NDS                   | NDS           | NDS           | NDS           | NDS           | NDS            | NDS           | NDS           | NDS           | NDS           |
| TISELCO                            | 6.5916                | 7.5480        | 7.9552        | 7.9347        | 7.5821        | 7.5408         | 9.0257        | 8.0016        | 8.5995        | NDS           |
| <b>Region V Average</b>            | <b>8.9159</b>         | <b>8.7930</b> | <b>8.9203</b> | <b>8.8405</b> | <b>8.7759</b> | <b>10.0105</b> | <b>8.4536</b> | <b>8.7411</b> | <b>9.0271</b> | <b>9.0484</b> |
| <b>Luzon Average</b>               | <b>8.2631</b>         | <b>8.5688</b> | <b>8.9057</b> | <b>8.9942</b> | <b>8.7834</b> | <b>9.3293</b>  | <b>8.4866</b> | <b>8.3136</b> | <b>8.3295</b> | <b>8.2594</b> |
| <b>REGION VI (Western Visayas)</b> |                       |               |               |               |               |                |               |               |               |               |
| AKELCO                             | 7.6510                | 7.8423        | 7.8504        | 8.1312        | 9.6901        | 9.0310         | 9.8795        | 10.2398       | 10.1682       | 9.4666        |
| ANTECO                             | 8.2957                | 9.0665        | 9.3898        | 9.5669        | 10.5353       | 11.0331        | 10.5328       | 11.0836       | 9.7219        | 10.1891       |

| ELECTRIC COOPERATIVES                | Average Systems Rates |               |               |               |               |               |               |               |               |               |
|--------------------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                                      | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11        | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| CAPELCO                              | 8.7907                | 8.2879        | 9.7724        | 9.0967        | 8.7946        | 9.2492        | 10.5449       | 12.0438       | 10.4357       | 10.1594       |
| GUIMELCO                             | 10.4479               | 10.2574       | 10.4196       | 10.6777       | 10.6293       | 10.9350       | 11.5452       | 11.6681       | 10.3757       | 10.3418       |
| ILECO I                              | 9.2974                | 9.2883        | 9.1492        | 10.1030       | 9.6074        | 9.4987        | 9.6448        | 9.5103        | 9.3699        | 9.4303        |
| ILECO II                             | 7.7961                | 8.9150        | 8.8563        | 9.0771        | 10.1771       | 9.9670        | 11.4634       | 10.2979       | 10.5751       | 10.3931       |
| ILECO III                            | 7.0410                | 8.3352        | 8.1390        | 8.3854        | 8.5704        | 8.8233        | 9.7705        | 8.9762        | 8.7469        | 8.6462        |
| CENECO                               | 5.5250                | 6.1871        | 5.8488        | 7.2312        | 6.6719        | 7.5091        | 7.3540        | 7.6870        | 7.6449        | 7.8916        |
| NOCECO                               | 6.3076                | 6.5767        | 7.1520        | 7.8208        | 8.0422        | 8.4683        | 8.3530        | 8.9839        | 8.3811        | 8.5482        |
| VRESKO                               | 6.9951                | 7.5800        | 7.8218        | 8.7883        | 8.5945        | 8.5455        | 8.8472        | 9.5397        | 9.3455        | 9.3218        |
| <b>Region VI Average</b>             | <b>7.0099</b>         | <b>7.4368</b> | <b>7.5285</b> | <b>8.2714</b> | <b>8.3196</b> | <b>8.6203</b> | <b>8.9002</b> | <b>9.2458</b> | <b>8.9228</b> | <b>8.9263</b> |
| <b>REGION VII (Central Visayas)</b>  |                       |               |               |               |               |               |               |               |               |               |
| BANELCO                              | 8.7730                | 8.7438        | 8.7553        | 8.7048        | 8.7083        | 8.7109        | 8.6721        | 8.6603        | 8.6648        | 8.6298        |
| BOHECO I                             | 6.0889                | 6.1067        | 5.9144        | 7.9831        | 7.6483        | 8.3714        | NDS           | NDS           | NDS           | NDS           |
| BOHECO II                            | 7.9414                | 7.7200        | 7.8438        | 7.9717        | 7.7414        | 8.4007        | 6.7664        | 6.6901        | 5.6973        | 5.9270        |
| CELCO                                | 9.9497                | 11.3519       | 11.5936       | 11.4209       | 11.3719       | 11.3547       | 11.2765       | 11.3941       | 11.3900       | 11.4211       |
| CEBECO I                             | 7.0464                | 7.1000        | 3.7641        | 3.6052        | 3.5121        | 4.5115        | 4.4245        | 4.1179        | 4.2444        | 3.7862        |
| CEBECO II                            | 4.1073                | 4.0608        | 4.2984        | 4.3990        | 3.7546        | 4.6138        | 4.7024        | 5.3008        | 5.0521        | 5.0067        |
| CEBECO III                           | 5.3056                | 5.4628        | 5.6903        | 5.6851        | 6.3311        | 5.6567        | 7.1872        | 6.1682        | 6.3410        | 6.5724        |
| NORECO I                             | 6.3751                | 6.1848        | 4.1219        | 6.9254        | 7.7348        | 7.4467        | 8.0515        | 8.2717        | 7.8656        | 7.4289        |
| NORECO II                            | 6.7260                | 7.0433        | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           |
| PROSIELCO                            | 9.5215                | 11.0398       | 11.6374       | 11.9504       | 11.0348       | 11.0084       | 11.0190       | 10.9949       | 11.0936       | 11.1206       |
| <b>Region VII Average</b>            | <b>6.5436</b>         | <b>6.5255</b> | <b>6.5345</b> | <b>7.1299</b> | <b>6.9062</b> | <b>7.5646</b> | <b>7.5399</b> | <b>7.6232</b> | <b>7.3615</b> | <b>7.2314</b> |
| <b>Equivalent in US\$</b>            | <b>0.1481</b>         | <b>0.1493</b> | <b>0.1502</b> | <b>0.1649</b> | <b>0.1601</b> | <b>0.1744</b> | <b>0.1761</b> | <b>0.1797</b> | <b>0.1711</b> | <b>0.1664</b> |
| <b>REGION VIII (Eastern Visayas)</b> |                       |               |               |               |               |               |               |               |               |               |
| BILECO                               | 9.5395                | 8.9773        | 9.5693        | 9.1443        | 9.2316        | 10.0773       | 8.9465        | 9.4101        | 8.2625        | 7.7915        |

| ELECTRIC COOPERATIVES                  | Average Systems Rates |               |               |               |               |               |               |               |               |               |
|--|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11        | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| DORELCO                                | 7.2618                | 7.3545        | 7.8196        | 8.3740        | 8.0578        | 8.1113        | 8.0967        | 8.2793        | 7.5348        | 7.3202        |
| LEYECO II                              | 6.2892                | 6.3061        | 4.2514        | 4.3817        | 4.2020        | 4.2701        | 4.2429        | 4.0961        | 3.6950        | 3.5690        |
| LEYECO III                             | 8.3040                | 8.4069        | 8.5634        | 8.8217        | 8.3099        | 7.0994        | 6.9733        | 7.0939        | 6.9005        | 6.8206        |
| LEYECO IV                              | 7.5888                | 7.7401        | 8.1614        | 8.0008        | 7.0884        | 6.6992        | 6.7150        | 6.9025        | 6.3940        | 6.4027        |
| LEYECO V                               | 7.3627                | 7.7576        | 7.9353        | 8.0070        | 7.8155        | 7.5458        | 7.7682        | 7.5466        | 7.4817        | 7.2809        |
| SOLECO                                 | 8.2056                | 8.4692        | 7.9204        | 9.5884        | 8.5190        | 8.5534        | 8.4141        | 8.4835        | 8.1838        | 8.0435        |
| ESAMELCO                               | 8.5090                | 9.0349        | 8.6888        | 8.8039        | 8.6652        | 8.4708        | 8.4240        | 8.5354        | 8.2212        | 8.1347        |
| NORSAMELCO                             | 9.2520                | 8.8370        | 8.8185        | 8.1162        | 9.5320        | 8.9129        | 7.6287        | 7.9942        | 7.9891        | 8.0865        |
| SAMELCO I                              | 6.8703                | 8.3656        | 7.2050        | 10.3603       | 8.1699        | 8.4194        | 8.1033        | 8.1938        | 7.9405        | 7.8209        |
| SAMELCO II                             | 7.3671                | 7.3717        | 7.7715        | 7.9151        | 7.8523        | 8.2205        | 8.2539        | 8.4056        | 7.0011        | 7.1282        |
| <b>Region VIII Average</b>             | <b>7.4153</b>         | <b>7.6348</b> | <b>7.6971</b> | <b>8.1755</b> | <b>7.8064</b> | <b>7.8008</b> | <b>7.6529</b> | <b>7.6429</b> | <b>7.1943</b> | <b>7.0600</b> |
| <b>Visayas Average</b>                 | <b>6.9524</b>         | <b>7.2016</b> | <b>7.3121</b> | <b>7.9593</b> | <b>7.8552</b> | <b>8.1718</b> | <b>8.3004</b> | <b>8.4958</b> | <b>8.1594</b> | <b>8.0900</b> |
| <b>REGION IX (Zamboanga Peninsula)</b> |                       |               |               |               |               |               |               |               |               |               |
| ZANECO                                 | 5.4954                | 6.0231        | 5.5773        | 6.0225        | 6.1295        | 6.0926        | 6.1957        | 5.3594        | 5.6330        | 5.7536        |
| ZAMSURECO I                            | 5.7936                | 5.9231        | 6.0547        | 6.2609        | 6.3724        | 6.3653        | 6.3555        | 5.9822        | 5.4030        | 6.0131        |
| ZAMSURECO II                           | 6.1039                | 6.0108        | 6.4853        | 6.7180        | 6.6353        | 6.5664        | 6.2587        | 5.6204        | 6.2155        | 6.3236        |
| ZAMCELCO                               | 4.8340                | 5.3101        | 5.2303        | 5.3590        | 5.3979        | 5.4248        | 5.3362        | 5.1650        | 4.9695        | 5.2334        |
| <b>Region IX Average</b>               | <b>5.2773</b>         | <b>5.6196</b> | <b>5.5978</b> | <b>5.7900</b> | <b>5.8327</b> | <b>5.8187</b> | <b>5.7631</b> | <b>5.3943</b> | <b>5.2964</b> | <b>5.5892</b> |
| <b>REGION X (Northern Mindanao)</b>    |                       |               |               |               |               |               |               |               |               |               |
| FIBECO                                 | 5.9211                | 6.2643        | 6.2826        | 6.3853        | 6.6433        | 6.6636        | 6.3230        | 5.8615        | 5.8598        | 6.3403        |
| BUSECO                                 | 5.4368                | 6.3893        | 6.0090        | 5.8424        | 5.9938        | 5.9495        | 5.8520        | 5.6628        | 5.5149        | 5.7788        |
| CAMELCO                                | 8.3699                | 8.6739        | 9.1521        | 8.9478        | 9.3689        | 8.6630        | 8.8568        | 8.6517        | 8.5034        | 8.5905        |
| LANECO                                 | 6.4748                | 7.1379        | 7.3573        | 6.6381        | 6.9766        | 8.1994        | 7.3212        | 6.9083        | 7.3089        | 6.7276        |
| MOELCI I                               | 6.4660                | 6.8431        | 6.4509        | 6.6145        | 6.6705        | 6.6698        | 6.7606        | 6.3790        | 6.3081        | 6.4677        |

| ELECTRIC COOPERATIVES                              | Average Systems Rates |               |               |               |               |               |               |               |               |               |
|--|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  | Jan-11                | Feb-11        | Mar-11        | Apr-11        | May-11        | Jun-11        | Jul-11        | Aug-11        | Sep-11        | Oct-11        |
| MOELCI II  | 6.1423                | 6.7183        | 6.4826        | 6.6724        | 7.0635        | 6.7575        | 7.0189        | 6.6767        | 6.4117        | 6.8472        |
| MORESCO I  | 5.8137                | 6.0936        | 6.9414        | 8.8839        | 8.7771        | 8.6484        | 8.8086        | 8.3719        | 8.3716        | 8.8729        |
| MORESCO II   | 5.6084                | 5.9976        | 6.2368        | 6.4438        | 6.0273        | 6.0688        | 6.1258        | 5.8549        | 5.6220        | 5.8633        |
| <b>Region X Average</b>                            | <b>5.9560</b>         | <b>6.4515</b> | <b>6.5407</b> | <b>6.8781</b> | <b>7.0050</b> | <b>7.0242</b> | <b>6.9297</b> | <b>6.5823</b> | <b>6.5156</b> | <b>6.7983</b> |
| <b>REGION XI (Davao Region)</b>                    |                       |               |               |               |               |               |               |               |               |               |
| DORECO   | 6.0166                | 6.3392        | 6.3335        | 6.1557        | 6.3439        | 6.5695        | 6.5543        | 6.1323        | 6.1895        | 6.2912        |
| DANECO   | 5.9812                | 6.0543        | 5.8484        | 6.1176        | 6.2722        | 6.2368        | 5.9812        | 6.0078        | 5.7880        | 5.8573        |
| DASURECO   | 5.7723                | 5.9096        | 6.3499        | 5.6146        | 6.1999        | 5.8407        | 5.7112        | 5.5881        | 6.1410        | 6.3045        |
| <b>Region XI Average</b>                           | <b>5.9226</b>         | <b>6.0441</b> | <b>6.0750</b> | <b>5.9660</b> | <b>6.2586</b> | <b>6.1572</b> | <b>5.9794</b> | <b>5.9000</b> | <b>5.9484</b> | <b>6.0520</b> |
| <b>REGION XII</b>                                  |                       |               |               |               |               |               |               |               |               |               |
| COTELCO  | 5.3731                | 5.5944        | 5.6154        | 5.8028        | 5.9521        | 6.0114        | 5.8964        | 5.7664        | 5.4359        | 5.7421        |
| SOCOTECO I   | 5.4732                | 5.3777        | 5.5861        | 5.8317        | 5.7732        | 5.7623        | 5.5198        | 4.9359        | 5.5648        | 5.6246        |
| SOCOTECO II  | 5.0563                | 5.2239        | 5.3075        | 5.2863        | 5.4083        | 5.5367        | 5.4734        | 4.8020        | 5.1673        | 5.4123        |
| SUKELCO  | 5.3515                | 5.5648        | 5.5216        | 5.6644        | 6.0121        | 5.9750        | 5.9867        | 5.6853        | 5.5625        | 5.3474        |
| <b>Region XII Average</b>                          | <b>5.2006</b>         | <b>5.3416</b> | <b>5.4233</b> | <b>5.4911</b> | <b>5.6098</b> | <b>5.6915</b> | <b>5.5990</b> | <b>5.0709</b> | <b>5.3183</b> | <b>5.4854</b> |
| <b>ARMM (Autonomous Region in Muslim Mindanao)</b> |                       |               |               |               |               |               |               |               |               |               |
| CASELCO  | 9.7870                | 9.7308        | 9.6554        | 9.7779        | 9.7238        | 9.6097        | 9.4989        | 9.6340        | NDS           | NDS           |
| LASURECO   | 5.2626                | 5.6481        | 5.6828        | 5.6534        | 5.6659        | 5.7050        | 5.6912        | 5.5889        | 5.6531        | 5.1773        |
| MAGELCO  | 5.7302                | 6.0211        | 7.2048        | 5.9881        | 5.8973        | 6.2227        | 5.9337        | 5.8109        | NDS           | NDS           |
| SIASELCO   | 8.3614                | 9.0026        | 9.8952        | 4.9984        | 10.0236       | 10.0712       | 10.0255       | 10.0062       | 10.0901       | 10.0547       |
| SULECO   | 8.1602                | 9.3935        | 10.6185       | 10.1667       | 10.9116       | 10.0420       | 10.0570       | NDS           | NDS           | NDS           |
| 'BASELCO   | 8.1066                | 8.7689        | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           | NDS           |
| TAWELCO  | 8.5321                | 10.4272       | 10.3964       | 10.8280       | 10.8234       | 10.9112       | 10.8321       | 10.1719       | 10.4179       | 10.4121       |
| <b>ARMM Average</b>                                | <b>6.3988</b>         | <b>6.9886</b> | <b>7.4861</b> | <b>7.0522</b> | <b>7.0954</b> | <b>7.1813</b> | <b>7.3377</b> | <b>6.5072</b> | <b>7.6819</b> | <b>6.4529</b> |



| ELECTRIC COOPERATIVES   | Average Systems Rates |        |        |        |         |        |        |        |        |        |
|-------------------------|-----------------------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
|                         | Jan-11                | Feb-11 | Mar-11 | Apr-11 | May-11  | Jun-11 | Jul-11 | Aug-11 | Sep-11 | Oct-11 |
| <b>CARAGA</b>           |                       |        |        |        |         |        |        |        |        |        |
| ANECO                   | 5.6223                | 5.9683 | 5.7680 | 5.9294 | 6.0383  | 5.9568 | 5.8371 | 5.8109 | 5.4620 | 5.7145 |
| ASELCO                  | 5.4853                | 6.2014 | 6.1120 | 5.7928 | 6.1018  | 6.1022 | 6.3025 | 5.5740 | 5.9958 | 6.6277 |
| DIELCO                  | 7.7917                | 8.3278 | 9.7315 | 9.7199 | 10.6732 | 9.5521 | 9.6137 | 9.5759 | 9.5180 | 9.5796 |
| SIARELCO                | 7.9711                | 8.5628 | 8.6446 | 8.6773 | 9.0993  | 9.0308 | 9.0624 | 8.6267 | 8.5933 | 8.5507 |
| SURNECO                 | 4.9533                | 5.6865 | 5.3435 | 5.3916 | 5.6987  | 5.7318 | 5.5923 | 5.3058 | 5.3785 | 5.7269 |
| SURSECO I               | 6.3397                | 6.3997 | 6.5797 | 6.7522 | 6.7968  | 6.8409 | 6.7693 | 6.4718 | 6.0630 | 6.3098 |
| SURSECO II              | 6.1078                | 6.6944 | 6.8778 | 6.7690 | 6.6160  | 6.7704 | 6.6604 | 6.1052 | 6.3071 | 6.5048 |
| <b>CARAGA Average</b>   | 5.6245                | 6.1290 | 5.9855 | 6.0197 | 6.2013  | 6.1685 | 6.1054 | 5.8279 | 5.7530 | 6.0989 |
| <b>Mindanao Average</b> | 5.5861                | 5.8986 | 5.9391 | 6.0265 | 6.1677  | 6.1715 | 6.0824 | 5.7163 | 5.8051 | 5.9519 |
| <b>National Average</b> | 7.1298                | 7.4247 | 7.6280 | 7.8721 | 7.8046  | 8.1408 | 7.7316 | 7.5731 | 7.5047 | 7.4561 |

Source: NEA-MFSRs

NDS-No Data Submitted