# 22nd Electric Power Industry Reform Act Implementation Status Report

(Period Covering November 2012 to April 2013)

*Prepared by the*
Department of Energy

*With Contributions from*

Energy Regulatory Commission
Philippine Electricity Market Corporation
National Power Corporation
National Electrification Administration
Power Sector Assets and Liabilities Management Corporation
National Transmission Corporation

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## I. INTRODUCTION

The 22nd Status Report on the Implementation of Electric Power Industry Reform Act of 2001 (EPIRA) covers the period November 2012 up to April 2013 and highlights the electric power sector's continuing efforts to put in place and meet the objectives of the power industry reforms as embodied in EPIRA, which are summarized as follows:

- For privatization, in-progress transfer by the Power Sector Assets and Liabilities Management Corporation (PSALM) of the Angat Hydro Electric Power Plant (HEPP) to the winning bidder and continuous preparations for the bid of remaining power plants and energy contracts with Independent Power Producers (IPP);
- Monitoring by the National Transmission Corporation (TransCo) of the Concession Agreement with National Grid Corporation of the Philippines (NGCP), and the continuing sale of its sub-transmission assets;
- Highlighting the operations of the Wholesale Electricity Spot Market (WESM) and the continuous monitoring and improvement undertaken to achieve better competition in the generation and supply and transparency in the utilization of electricity and prices;
- Continuing preparations to implement Retail Competition and Open Access (RCOA);
- Monitoring of supply-demand situation including the actions taken by the Department of Energy and other relevant entities to mitigate power interruptions;
- Initiatives to Address the Mindanao Power Situation;
- Monitoring of generators' compliance to capacity limitation under *Section 45 of the EPIRA*; and
- Developments on the continuous implementation of total electrification program

The Department of Energy (DOE) continuous to supervise the restructuring of the electricity industry and formulate policies towards ensuring the sufficiency and applicability of existing rules, guidelines, infrastructures and other institutional requirements necessary to achieve the goals of EPIRA in coorination with key implementing agencies and electric power industry participants.

Discussed in the succeeding Sections are the details of the progress of the sector reforms' implementation.

## II. PRIVATIZATION

As of the report period, the privatization level of the generating facilities previously owned by the National Power Corporation (NPC) is expected to reach 86.5 percent from the 79.56 percent, the level where the RCOA was declared to commence by the Energy Regulatory Commission (ERC). The increase is brought about by the in-progress turn-over of Angat HEPP to Korean Water Resources, Inc. (K-Water). Meanwhile, for the IPP contracts, the level remains at 76.85 percent. Currently, the PSALM is working on the bid of the remaining unprivatized power plants subject to the policy direction of the government. Following are the status:

### A. Privatization of Generating Assets

In line with *Section 47 of EPIRA*, the PSALM still has to privatize a total of 1,913 MW of owned-generating assets of which 1,014 MW are located in Mindanao comprised mainly by the Agus-Pulangui hydro complexes. In Luzon and Visayas are all oil-fired power plants. Summarized in Table 1 are the list of the power plants and the indicative schedule of bids as identified by PSALM.

*Table 1. Schedule of Privatization for Generating Assets as of 30 April 2013*

| Asset Type | Plant Name | Rated Capacity (MW) | Bid Date | Turn Over Date |
|---|---|---|---|---|
| Owned Generating Plants | **Luzon Grid** | | | |
| | Angat Hydro | 218.00 | April 2010 | 2013 |
| | Malaya Thermal | 650.00 | 2014 | 2014 |
| | ***Sub-total Luzon*** | **868.00** | | |
| | **Visayas Grid** | | | |
| | PB 101 (Diesel/Bunker) | 32.00 | 2013 | 2013 |
| | PB 102 (Diesel/Bunker) | 32.00 | | |
| | PB 103 (Diesel/Bunker) | 32.00 | | |
| | Cebu Thermal 1 & 2 (Naga Complex)[1] | 109.30 | 2013 | 2013 |
| | Cebu Diesel (1-6) (Naga Complex)[1] | 43.80 | | |
| | ***Sub-total Visayas*** | **249.10** | | |
| | **Mindanao Grid** | | | |
| | PB 104 (Diesel/Bunker) | 32.00 | 2013 | 2013 |
| | Agus 1 & 2 Hydro | 260.00 | 2017 | 2017 |
| | Agus 4 & 5 Hydro | 213.10 | | |
| | Agus 6 & 7 Hydro | 254.00 | | |
| | Pulangui Hydro | 255.00 | | |
| | ***Sub-total Mindanao*** | **1,014.10** | | |
| | ***GRAND TOTAL*** | **2,131.20** | | |
| **Decommissioned Plants** | Bataan Thermal | - | 2013 | 2013 |
| | Sucat Thermal | - | 2013 | 2013 |

[1]*Under an extended Operation and Maintenance Service Contract(OMSC) with SPC Power Corporation until 25 September 2013*
*Source: PSALM*

**Angat Hydro Electric Power Plant (HEPP)**

PSALM targets the issuance of the Certificate of Effectivity (COE) to the winning bidder by May 2013. The certificate will commence the effective date of the Transaction Documents on the sale of the Angat HEPP .

The National Water Resources Board (NWRB) and NPC have signed the revised Memorandum of Agreement (MOA) on the Angat Water Protocol. The MOA is now with the National Irrigation Authority (NIA) which will be routed to the Metropolitan Waterworks and Sewerage System (MWSS), PSALM and lastly, to K-Water.

**Power Barges (PB) 101, 102, 103 and 104**

On 29 April 2013, the PSALM Board, approved the commencement of the sale of the PBs with the proposed terms as follows:

1. Revised sale structure/packaging of assets;
2. No requirement to transfer PBs 101-103 to Mindanao;
3. No attached Purchase Orders/Purchase Requests; and
4. No requirement to operate PBs 101 to 104 while PB 104 is required to be operated in Mindanao for five (5) years

**Naga Power Plant Complex (NPPC)**

Also being resumed is the sale of the 145.9-megawatt (MW) Naga Power Plant Complex (NPPC) since its deferment in 2011 upon the request of the Joint Congressional Power Commission (JCPC). Said request from JCPC was due to an allegedly unfair and illegal condition known as a "right to top" the highest bid previously granted to SPC Power Corporation (SPC) in the Land Lease Agreement (LLA) executed among PSALM, National Power Corporation (NPC) and SPC in 2009.

However, the Department of Justice (DOJ) after its in-depth investigation of the said case confirmed in an opinion dated 09 January 2013 that the "right to top" provision included in PSALM's bidding documents was not in violation of the rules on competitive bidding.

With DOJ's official confirmation, the PSALM Board approved in February 2013 the commencement of the sale of the 145.9 MW NPPC.

**Agus-Pulangui HEPP Complexes**

As directed by the DOE, PSALM created a technical working group (Agus TWG), which studied the possible options for the privatization of the Agus-Pulangui HEPP Complexes. The study was completed by the Agus TWG last January 2013, which takes into consideration the technical/operational concerns brought about by the cascading nature of water releases from Lake Lanao to the Agus HEPPs and the construction of the proposed Agus 3 project. The Agus TWG recommended that the only option for privatization is an outright sale by way of public bidding in compliance with EPIRA and its IRR and other relevant government rules and regulations (Commission on Audit Circular No. 89-296, 27 January 1989). It excluded other options such as privatization by way of shares of stocks, corporatization and other special purpose vehicle (private O&M Operator). The study however, did not consider the legal review of conflicting provisions, if any, of other pertinent laws such as that of the Renewable Energy (RE) Law vis-a-vis PSALM's mandate under the EPIRA.

## B. Transfer of NPC Contracted Energy Outputs from its IPPs to Independent Administrators

Table 2 shows the indicative schedule for the appointment of IPP Administrators in the remaining NPC-IPP contracts in Luzon, Visayas and Mindanao Grids as of 30 April 2013.

*Table 2. Indicative Schedule for Appointment of IPP Administrators as of 30 April 2013*

| Grid | Plant Name | Contracted Capacity (MW) | Bid Date | Turn Over Date |
|---|---|---|---|---|
| | Casecnan Multi-Purpose Hydro | 140.00 | 2013 | 2013 |
| | Benguet Mini Hydro | 30.75 | | |

| Grid | Plant Name | Contracted Capacity (MW) | Bid Date | Turn Over Date |
|---|---|---|---|---|
| **Luzon Grid** | Caliraya-Botocan-Kalayaan Hydro | 728.00 | 2016 | 2016 |
| | ***Sub-total Luzon*** | **898.75** | | |
| **Visayas Grid** | Unified Leyte | 559.00 | 2013 | 2013 |
| | ***Sub-total Visayas*** | **559.00** | | |
| **Mindanao Grid** | SPPC Diesel | 50.00 | WMPC and SPPC contracts to expire in 2015 and 2016, respectively; privatization of said plants to be reviewed | |
| | WMPC Diesel | 100.00 | | |
| | Mindanao Coal-Fired | 200.00 | 2015 | 2015 |
| | Mt. Apo 1 Geothermal | 44.52 | 2014 | 2014 |
| | Mt. Apo 2 Geothermal | 48.00 | | |
| | ***Sub-total Mindanao*** | **442.52** | | |
| | ***GRAND TOTAL*** | **1,900.27** | | |

*Source: PSALM*

## C. Privatization Proceeds

As of the report period, the generated privatization proceeds of PSALM was US$21.757 Billion while actual collection amounted to US$6.371 Billion. The proceeds were utilized for debt prepayment, regular payment of debts and IPP obligations, and payment of other privatization-related expenses with details indicated in Table 4.

*Table 3. Generated and Collected Proceeds of Privatization as of 30 April 2013, (In US$Billion)*

| Privatization Assets | Generated | Collected |
|---|---|---|
| Generating Assets[1/] | 3.260 | 3.064 |
| Decommissioned Plants[2/] | 0.004 | 0.004 |
| Transmission Asset (TransCo)[3/] | 7.685 | 2.226 |
| Appointment of IPPAs[4/] | 10.807 | 1.077 |
| **TOTAL** | **21.757** | **6.371** |

*1/ Amounts generated include financial bid based on Schedule C of the Asset Purchase Agreement (APA) and interest on deferred payment. Generating Assets' proceeds have been 100% collected and the variance between amount generated and amount collected is due to foreign exchange (forex) conversion.*
*2/ Amounts generated include financial bid based on Schedule C of the Asset Purchase Agreement (APA).*
*3/ Inclusive of interest, with a rate based on 10-year PDSTF plus 2.30 %*
*4/ Consistent with the amount reflected in the Schedule I of the IPP Administration Agreement (AA).*
*Source: PSALM*

*Table 4. Utilization of Privatization Proceeds as of 30 April 2013*

| Privatization Proceeds Utilized | In US$ Billion |
|---|---|
| Debt Prepayment | 1.298 |
| Regular Debt Service | 3.396 |
| Lease Obligations | 1.682 |
| Others | 0.054 |
| TRANSCO Opex | 0.001 |
| **TOTAL** | **6.431** |

*USD: PhP 41.61 (BSP Guiding Rate dated 30 April 2013)*

** The US$0.06 billion difference in Total Proceeds Collected and Total Proceeds Utilized were due to foreign exchange (forex) conversion.*
*Source: PSALM*

## D. Concession of the National Transmission Network

PSALM and the TransCo resumed the conduct of assessment on NGCP's compliance to the Concession Agreement (CA), with the reconstitution of the Joint PSALM-TransCo Annual Technical, Financial and Legal Assessment Team (TFLAT). In its assessment for the year 2010 and 2011, TFLAT identified ninety-six (96) provisions in the CA that NGCP is obliged to comply with. The results of the final assessment matrix/findings are as shown in Table 5.

*Table 5. Annual Technical, Financial and Legal Assessment Team Assesment Report, January 2010*

| Findings | 2010 | 2011 |
|---|---|---|
| | No. of items | No. of items |
| 1. Complied | 52 | 51 |
| 2. Partially Complied | 15 | 14 |
| 3. Not Complied | 9 | 10 |
| 4. Not Applicable | 4 | 5 |
| 5. No Basis to Assess Compliance | 16 | 16 |
| **Total** | **96** | **96** |

*Source: PSALM*

TFLAT recommended that particular attention be given to NGCP's non-compliance with its obligations on certain provisions of the CA that have substantial impact on NGPC's performance as the System Operator and Concessionaire of the transmission assets. The TFLAT will convene to discuss the necessary preparations for the forthcoming assessment activities covering the year 2012.

As regard the inspection of the assets condition and Project Under Construction (PUC) accomplishments, for the report period, TransCo inspectedfive (5) PUC Projects, and eighteen (18) transmission facilities as reflected in *Annex 1*. Further, the summary inspection report of PUC is shown in *Annex 2.*

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

The sale of TransCo's STAs involved 131 sale contracts and 107 interested Distribution Utilities (DUs), most of which are Electric Cooperatives (ECs). The STAs include some 6,200 ckt-km of mostly 69 kV transmission lines and 1,600 MVA of substation capacity. In compliance with the mandate of EPIRA and under the guidelines set by the ERC, TransCo in 2011 signed 18 sale contracts with DUs amounting to about PhP1.23 Billion.

As of April 30, 2013, TransCo has signed 106 sale contracts with 76 DUs/ECs/consortia amounting to about PhP5.75 billion. These sales cover an aggregate length of about 3,900 ckt-kms of sub-transmission lines (STLs) and about 35,600 sub-transmission structures and 865 MVA of substation capacity. Of the 106 sale contracts, 45 contracts with total sale price of PhP2.3 billion have been approved and one contract amounting to PhP 10.8 million was disapproved by the ERC as of April 30, 2013 posting in the ERC website. Sixty (60) sale contracts are for ERC filing, evaluation or approval.

Following the EPIRA provision to extend concessional financing to ECs, TransCo implemented lease purchase arrangements with a term of 20 years. Of the 106 sale contracts already signed, 66 are under lease purchase agreements with 58 ECs/consortia, valued at about PhP3.8billion. The remaining 40 involved sales to private DUs/consortia. TransCo is looking forward to the sale of about 710 ckt-km of STLs and about 485 MVA of substation equipment among 19 interested DUs/consortia for the next three years.

Table 6 below shows the summary of the sale as of the report period.

*Table 6. Summary Table of STAs Sale Per Region as of 30 April 2013*

| | DUs | Sale Amount in PhP (Original Contract) | CKM |
|---|---|---|---|
| North Luzon | 32 | 1,625,300,696.83 | 1,213 |
| South Luzon | 17 | 1,120,511,843.37 | 467.04 |
| Visayas | 27 | 1,168,202,902.00 | 683.21 |
| Mindanao | 30 | 1,827,564,957.83 | 1,557.12 |
| **TOTAL** | **106** | **5,741,580,400.03** | **3,920.02** |

*Source: Transco*

On March 4, 2013, the ERC provisionally approved Resolution No. 4, Series of 2013 entitled, "Resolution Amending Resolution No. 26, Series of 2011" by:

- Extending the deadline for the disposition of the Residual STAs or the subtransmission assets which are shared by and between two (2) or more connected DUs until December 31, 2012;
- Authorizing the NGCP and the ECs to enter the MOAs for the amortization of uncollected Connection Charges/Residual Subtransmission Charges (CC/RSTC); and
- Clarifying that:

  i. Residual STAs with two (2) or more connected DUs to be reverted to NGCP's Regulatory Asset Base (RAB) effective January 1, 2013; and
  ii. Subtransmission assets (CA and RSTA) with only one (1) connected load end-users shall continue to be sold/divested until further notice.

## III. ELECTRICITY RATES

This section includes information pertaining to electricity prices as monitored and gathered by the DOE from various sources.

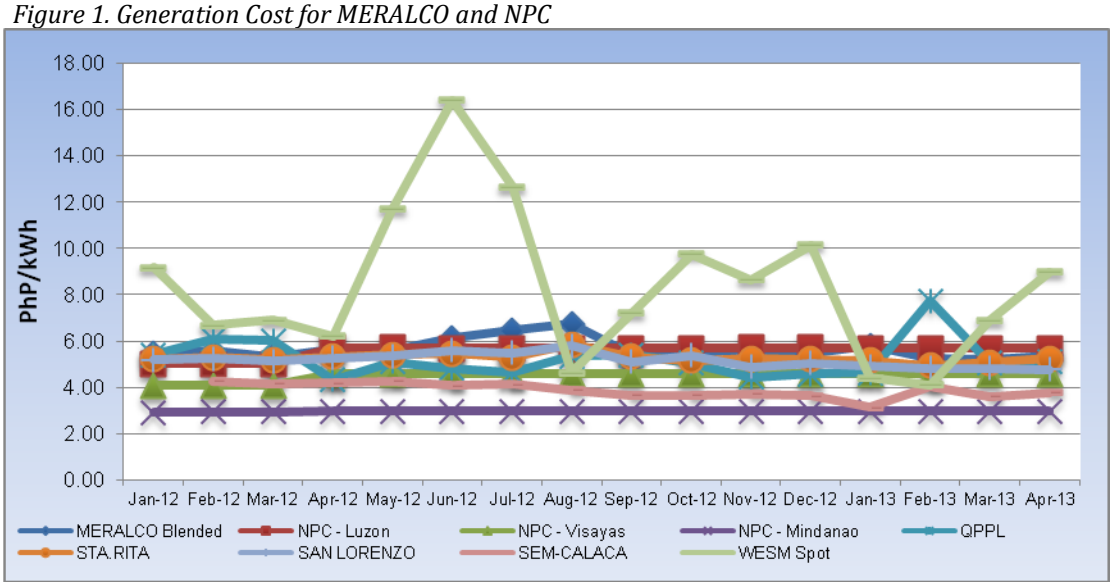
### A. Generation Cost

The generation cost reported in this section were gathered from the Manila Electric Company (MERALCO), NPC, and Philippine Electricity Market Corporation (PEMC) websites.

For the report period, the blended generation cost for the MERALCO franchise area were relatively stable despite occassional spikes in WESM spot prices.

PSALM/NPC generation charges are likewise stable. PSALM/NPC has continuously implementing the March 2009 provisionally approved Basic Generation Charges (BGC) pending ERC decision on the proposed Asset Valuation Guidelines.

*Figure 1. Generation Cost for MERALCO and NPC*




### B. Transmission Wheeling Rates

The transmission rates of the NGCP are set in accordance with the Rules for Setting Transmission' Wheeling Rates (RTWR) promulgated by the ERC which provides for the approval of a Maximum Allowable Revenue (MAR) including the incentives set under the Performance Incentive Scheme (PIS). Said MAR and PIS are approved by the ERC for each regulatory period and year. Following are significant updates during the report period.

- On December 17, 2012, the ERC issued an Order on Case No. 2012-109 RC, provisionally approving NGCP's application for the approval of the MAR for Calendar year (CY) 2013 the amount of PhP44,567.18 Million and the Performance Incentive Scheme (PIS) reward claim in the amount of PhP609.05 Million effective its January 2013 billing. The approved amount in accordance with the responsibility of NGCP under the RTWR and Open Access Transmission Service (OATS).

For the NGCP rates, the ERC estimated the indicative Power Delivery Service (PDS) Charges under the following table where they assumed to apply on the average for the entire duration of CY 2013, as follows:

*Table 7. Indicative Power Delivery Service Charges*

| Particulars | Average Transmission Rate | | |
|---|---|---|---|
| | March 2012 | March 2013 | Difference |
| PhP, Million | 42,903.05 | 44,567.18 | 1,664.13 |
| Indicative Average, PhP/kW/mo. | 333.87 | 330.77 | (3.1019) |
| Indicative Average, PhP/kWh | 0.68450 | 0.67475 | (0.00975) |

*Source: ERC*

The rate impact to the customers decreased by approximately PhP0.00975/kWh due to the higher percentage of increase in the billing determinant than the percentage of increase in the MAR.

- On 25 February 2013, the ERC provisionally approved the application filed by NGCP and Trans-Asia Oil/Power and Energy Development Corporation (TA-Oil/Power) for approval of their Ancillary Services Procurement Agreement (ASPA) under ERC Case No. 2012-135/136 RC, subject to the following conditions:

  i. Applicable Rates – TA-Oil shall nominate a corresponding price (in per kW capacity per hour) for each Ancillary Service capacity to NGCP under the following price:

     - Scheduled capacity without energy dispatched
       - ❖ Dispatchable Reserve - PhP 1.25/kW
     - Scheduled capacity with energy dispatched – The ASPA rate shall be recovered through settlement on the Market.

  ii. NGCP is enjoined to optimize the economic and technical dispatch of the available Ancillary Services (AS) as capacity wherein it shall schedule a mix of hourly AS capacity at least cost for a reserve needed to maintain power quality, security, reliability and integrity of the grid;

  iii. The rate to be paid by NGCP as AS cost should be passed on to its customers in accordance with the approved Ancillary Services-Cost Recovery Mechanism (AS-CRM); and

  iv. The provisionally approved rates shall be effective on the next billing cycle of NGCP.

- On 04 March 2013 the ERC provisionally approved the application filed by NGCP and San Roque Power Corporation (SRPC) for approval of their ASPA under ERC Case No. 2013-009 RC, subject to the following conditions:

  i. Applicable Rates – TA-Oil shall nominate a corresponding price (in per kW capacity per hour) for each AS capacity to NGCP under the following price:

     - Scheduled capacity without energy dispatched -
       - ❖ Regulating Reserve - PhP 2.25/kW (Firm)<br>PhP3.00/kW (Non-Firm)
       - ❖ Contingency Reserve - PhP1.50/kW (Firm)<br>PhP2.25/kW (Non-Firm)
       - ❖ Dispatchable Reserve - PhP1.50/kW

- Scheduled capacity with energy dispatched – The ASPA rate shall be recovered through settlement on the Market.

ii. NGCP is enjoined to optimize the economic and technical dispatch of the available Ancillary Services capacity wherein it shall schedule a mix of hourly Ancillary Services capacity at least cost for a reserve needed to maintain power quality, security, reliability and integrity of the grid;

iii. The rate to be paid by NGCP as AS cost should be passed on to its customers in accordance with the approved AS-CRM; and

iv. The provisionally-approved rates shall be effective on the next billing cycle of NGCP.

- On February 15, 2013, NGCP filed with ERC, Case No. 2013-024 RC, the Application for Approval of the Cebu-Negros-Panay 230 kV Backbone Project (Stage1). The ERC issued an order dated March 11, 2013 and the jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing was heard on 24 April 2013.
- On the same date above, NGCP again filed with ERC, Case No. 2013-023 RC, the Application for Approval of the Calaca-Dasmariñas 230 kW Transmission Line Project, with prayer for provisional authority.

## B. Distribution Utilities (DUs) Rates

The following discussions provide updates on the electricity rates for the month of November 2012 to April 2013 as well as related developments on regulatory actions, with rate cases being under the exclusive jurisdiction of the ERC.

The country's average electricity rates as of April 2013 is PhP8.6073/kWh, PhP0.4527/kWh higher compared with the September 2012 average systems rate. Among the three major grids, Luzon has the highest rate at PhP8.9300/kWh while Mindanao remains the lowest at PhP6.6900/kWh for April 2013.

The ECs' average systems rate for April 2013 is PhP8.6082/kWh, an increase of PhP0.8402/kWh from the September 2012 level. The largest increase in ECs' rates was noted in the Luzon grid fromPhP8.1521/kWh in September 2012 to PhP9.1419/kWh in April 2013. Mindanao ECs posted the lowest rate at PhP7.0855/kWh.

The national average systems rates of private distribution utilities (PDUs) also increased by PhP0.0652/kWh from PhP8.5412/kWh in September 2012 to PhP8.6064/kWh in April 2013.

*Table 8. Average Systems Rates, September 2012 vs. April 2013 (PhP/kWh)*

| Grid | Electric Cooperatives | | | Private Distribution Utilities | | | National Average | | |
|---|---|---|---|---|---|---|---|---|---|
| | 12-Sep | 13-Apr | Change | 12-Sep | 13-Apr | Change | 12-Sep | 13-Apr | Change |
| Luzon | 8.1521 | 9.1419 | 0.9898 | 8.7987 | 8.7180 | (0.0807) | 8.4754 | 8.9300 | 0.4546 |
| Visayas | 8.462 | 9.0978 | 0.6358 | 7.9601 | 8.0985 | 0.1384 | 8.21105 | 8.5981 | 0.3871 |
| Mindanao | 6.3474 | 7.0855 | 0.7381 | 6.0052 | 6.2944 | 0.2892 | 6.1763 | 6.6900 | 0.5137 |
| Philippines | 7.7680 | 8.6082 | 0.8402 | 8.5412 | 8.6064 | 0.0652 | 8.1546 | 8.6073 | 0.4527 |

*Sources: ECs – Monthly Financial & Statistical Report*
*PDUs –Monthly Operations Report*
*Weighted averages*

The ECs' national unbundled residential electricity rate for April 2013 is PhP9.1455/kWh. Generation costs comprised 49 percent of ECs' national average effective electricity rates followed by distribution costs share of 19 percent of the total. Among the three grids, Mindanao remained to enjoy the lowest generation costs at PhP3.3576/kWh.

*Table 9. EC's Unbundled Average Effective Residential Electricity Rates, March 2013(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 | 4.6714 | 49% | 5.3032 | 52% | 3.3576 | 44% | 4.4441 | 49% |
| Transmission | 1.1127 | 12% | 0.9584 | 9% | 0.9875 | 13% | 1.0195 | 11% |
| System Loss | 0.8473 | 9% | 0.8965 | 9% | 0.6447 | 8% | 0.7962 | 9% |
| Distribution * | 1.6910 | 18% | 1.8165 | 18% | 1.6687 | 22% | 1.7254 | 19% |
| Subsidies** | 0.0813 | 1% | 0.0432 | 0% | -0.0316 | 0% | 0.0310 | 0% |
| Government Taxes*** | 0.8832 | 9% | 0.8835 | 9% | 0.7516 | 10% | 0.8394 | 9% |
| Other Charges **** | 0.2993 | 3% | 0.3559 | 3% | 0.2141 | 3% | 0.2899 | 3% |
| **Total** | **9.5863** | **100%** | **10.2572** | **100%** | **7.5926** | **100%** | **9.1455** | **100%** |

*Source: NEA*
** Includes Distribution, Supply and Metering Charges*
*** Includes Lifeline and Sr. Citizen Discounts*
****Includes Universal Charges and V.A.T*
***** Includes Loan Condonation, RFSC & PEMC-SPA Charges*

Among the PDUs, MERALCO has the highest average effective rate for the residential customers at PhP11.1741/kWh for the billing period April 2013. On the other hand, Iligan Light & Power (ILPI) has the lowest average effective residential rates at PhP6.4163/kWh for the same billing period.

*Table 10. PDU's Average Effective Rates (AER), September 2012 vs April 2013 (PhP/kWh)*

| PDU | Residential | | Commercial | | Industrial | | Average Systems Rate | |
|---|---|---|---|---|---|---|---|---|
| | September 2012 | April 2013 | September 2012 | April 2013 | September 2012 | April 2013 | September 2012 | April 2013 |
| **Luzon Grid Average** | **10.6315** | **11.0184** | **9.3349** | **9.5096** | **7.508** | **7.8602** | **8.7987** | **8.71797** |
| MERALCO | 10.7965 | 11.1741 | 9.3865 | 9.5449 | 7.5189 | 7.8628 | 8.8454 | 8.7252 |
| DECORP | 7.1443 | 8.4495 | 6.9057 | 8.2308 | 6.456 | 7.6412 | 6.9388 | 8.2390 |
| LUECO | 9.1286 | 10.1283 | 9.5727 | 10.4784 | 9.5467 | 10.6588 | 9.3187 | 10.2899 |
| AEC | 8.0848 | 8.2053 | 8.5369 | 8.6865 | 10.0344 | 8.8954 | 8.284 | 8.4002 |
| CELCOR | 9.4753 | 10.1337 | 9.019 | 9.6183 | 8.8068 | 9.3763 | 9.2117 | 9.8550 |
| SFELAPCO | 8.5027 | 9.1511 | 8.8452 | 9.3670 | 6.7687 | 7.3535 | 7.5 | 8.2439 |
| TEI | 8.4024 | 8.7622 | 7.6211 | 7.8036 | 6.7685 | 6.9326 | 7.7287 | 8.0196 |
| **Visayas Grid Average** | **8.9593** | **9.0279** | **8.8785** | **9.0430** | **7.4326** | **7.2989** | **7.9601** | **8.0985** |
| MECO | 8.8020 | 7.9504 | 8.6045 | 7.7809 | 8.7915 | 7.6791 | 8.7668 | 7.7870 |
| VECO | 8.9658 | 9.3251 | 9.142 | 9.2578 | 7.0769 | 7.2444 | 7.9156 | 8.1530 |
| BLCI | 6.8586 | 7.9351 | 6.9950 | 7.9869 | - | 0.0000 | 6.9375 | 7.9418 |
| **Mindanao Grid Average** | **6.5625** | **7.2038** | **6.6397** | **6.9748** | **5.6814** | **5.9455** | **6.0052** | **6.2944** |
| CEPALCO | 7.1619 | 7.6846 | 6.6141 | 7.1158 | 5.5834 | 6.0422 | 5.8679 | 6.2991 |
| COLIGHT | 6.4675 | 6.7544 | 6.9073 | 7.1358 | 6.0961 | 6.3034 | 6.4088 | 6.6617 |
| ILPI | 5.8520 | 6.4163 | 5.8640 | 6.4143 | 4.4390 | 4.9638 | 5.4659 | 6.0511 |
| **National Average** | **10.2306** | **10.7783** | **9.2361** | **9.4452** | **7.3236** | **7.7178** | **8.5412** | **8.6064** |

*Source: Monthly Operations Report submitted by Private DUs (AER = Revenue over Sale), weighted averages*

For April 2013 billing, MERALCO's effective residential rates for the different residential customer classes ranged from PhP10.6192/kWh to PhP12.0528/kWh of which the

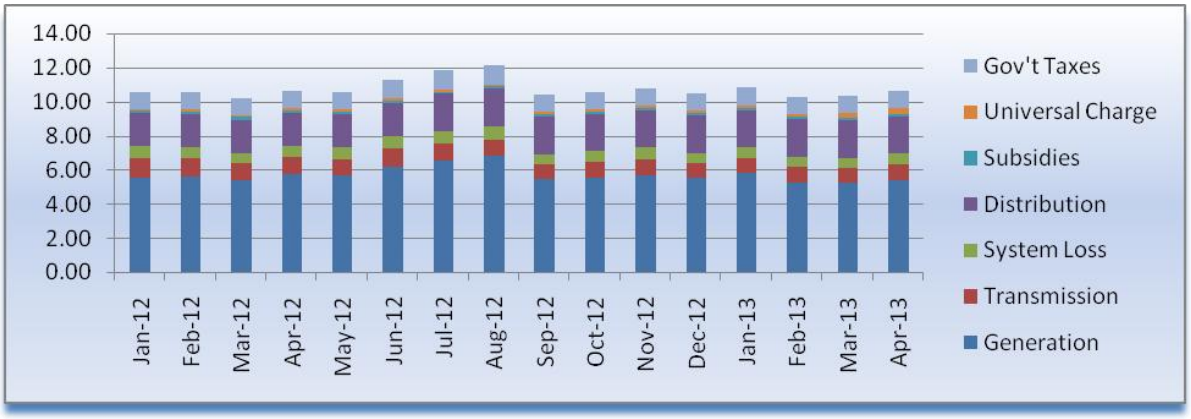
highest component was generation costs at PhP5.4177/kWh. Meanwhile, MERALCO distribution charges for its different residential customer classes comprised 21 percent to 29 percent of the total effective residential rates equivalent to PhP2.1898/kWh and PhP3.4716/kWh, respectively.

*Table 11. Summary of MERALCO Residential Unbundled Power Rates, April 2013*

| BILL SUBGROUP | 0 to 200 kWh (P/kWh) | % | 201 to 300 kWh (P/kWh) | % | 301 to 400 kWh (P/kWh) | % | Over 400kWh (P/kWh) | % |
|---|---|---|---|---|---|---|---|---|
| Generation | 5.4177 | 51 | 5.4177 | 49 | 5.4177 | 48 | 5.4177 | 45 |
| Transmission | 0.8964 | 8 | 0.8964 | 8 | 0.8964 | 8 | 0.8964 | 7 |
| System Loss | 0.6205 | 6 | 0.6205 | 6 | 0.6205 | 5 | 0.6205 | 5 |
| Distribution | 2.1898 | 21 | 2.5471 | 23 | 2.8843 | 25 | 3.4716 | 29 |
| Subsidies | 0.1573 | 1 | 0.1573 | 1 | 0.1573 | 1 | 0.1573 | 1 |
| Universal Charge | 0.3126 | 3 | 0.3126 | 3 | 0.3126 | 3 | 0.3126 | 3 |
| Government Taxes | 1.0249 | 10 | 1.0646 | 10 | 1.1044 | 10 | 1.1767 | 10 |
| **TOTAL**** | **10.6192** | **100** | **11.0162** | **100** | **11.3932** | **100** | **12.0528** | **100** |

*Source: MERALCO Website*

*Figure 2. MERALCO Effective Unbundled Residential Rates, April 2013*




Meanwhile, the ERC continued to adopt phase-in implementation of Performance-Base Rate Methodology for PDUs to Rules for Setting Distribution Wheeling Rates (RDWR).

Complete details of PDUs' applications are shown in *Annex 3*.

## D. 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.

Total UC remittances to PSALM as of 30 April 2013 amounted to PhP29.848 billion. Of this amount, PhP28.958 billion was disbursed by PSALM to the NPC-SPUG for missionary electrification and watershed rehabilitation and management in accordance with the provisions of the EPIRA. As of the same period, total interest earnings from placements of UC funds amounted to PhP0.122 billion. This leaves the UC fund with a balance of PhP1.012 billion.

*Table 12. Universal Charge Remittances, Interests and Disbursements as of April 2013 (In Billion PhP)*

| Particulars | Remittances | Interests | Disbursements | Balances |
|---|---|---|---|---|
| Missionary Electrification | 28.439 | 0.043 | 28.460 | 0.022 |
| Environmental Charge | 1.224 | 0.079 | 0.498 | 0.805 |
| Stranded Contract Cost | 0.185 | - | - | 0.185 |
| **Total:** | **29.848** | **0.122** | **28.958** | **1.012** |

*Source: PSALM*

For the period November 2012 to April 2013, PSALM received a total of Php3.749billion in UC remittances from collecting entities, and disbursed to NPC-SPUG the total amount of Php3.595 billion for missionary electrification. The monthly breakdown of the collections and disbursements are provided in Table 13.

*Table 13. UC Collections and Disbursements for November 2012 – April 2013 (In Billion PhP)*

| | UC – ME | UC – EWR | UC-SCC | Total Month | UC-ME Disbursements |
|---|---|---|---|---|---|
| November 2012 | 0.607 | 0.013 | - | 0.620 | 0.606 |
| December 2012 | 0.568 | 0.012 | - | 0.580 | 0.583 |
| January 2013 | 0.617 | 0.013 | - | 0.630 | 0.697 |
| February 2013 | 0.651 | 0.015 | - | 0.666 | 0.667 |
| March 2013 | 0.493 | 0.011 | - | 0.504 | 0.495 |
| April 2013 | 0.552 | 0.012 | 0.185 | 0.749 | 0.547 |
| **Total** | **3.488** | **0.076** | **0.185** | **3.749** | **3.595** |

*Source: PSALM*

## E. Assumption of Loans of Electric Cooperatives

As of 30 April 2013, PSALM has paid a total of PhP15.833 billion worth of financial obligations of ECs to National Electrification Administration (NEA) and other government agencies (OGAs) as well as local government units (LGUs) pursuant to Executive Order (EO) No. 119, s. 2002 and the Memorandum of Agreement between PSALM and NEA dated 03 October 2003. Table 14 shows a summary of PSALM's outstanding financial obligations to NEA and LGUs/OGAs.

*Table 14. Status of Loan as of 30 April 2013(In PhP Billion)*

| | Total Consumption | Actual Payments | | Balance | |
|---|---|---|---|---|---|
| | | Amount | % | Amount | % |
| NEA | 17.978 | 15.756 1/ | 86.64 | 2.221 | 12.36 |
| LGU/OGA | 0.096 | 0.077 2/ | 79.85 | 0.019 | 20.15 |
| **TOTAL** | **18.074** | **15.833** | **87.60** | **2.240** 3/ | **12.40** |

*1/ Inclusive of PhP0.369 billion pertaining to NEA's double collection from ECs amounting to PhP2.215 billion for the period 2001-2003*

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

*3/ Balance covers the remaining amount to be paid to NEA and LGU/OGA, subject to submission of complete documents/requirements and compliance with the terms and conditions provided under Section 5 of EO 119*

*Source: PSALM*

Of the PhP15.756 billion total payments to NEA as of 30 April 2013, about 75.12% or PhP11.836 billion was used to pay the rural electrification loans incurred by the ECs, 15.57% or PhP2.454 billion for Mini-hydro loans, and 9.23% or PhP1.454 billion for Dendro Thermal loans. Payments intended for house wiring services only amounted to PhP0.012 billion or 0.08%. Table 15 shows the summary of payments made by PSALM.

*Table 15. PSALM Payments per Type of Loan as of 30 April 2013 (In PhP Billion)*

| Type of Payment | Amount Paid | Percentage to Total |
|---|---|---|
| Rural Electrification Loan | 11.836 | 75.12 |
| Mini-hydro | 2.454 | 15.57 |
| Dendro Thermal | 1.454 | 9.23 |
| House wiring | 0.012 | 0.08 |
| **TOTAL** | **15.756** | **100.00%** |

*Source: PSALM*

## F. 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 November 2012 to April 2013, total discounts granted by NPC amounted to PhP467.478 million of which 75 percent were availed by residential customers in Mindanao, 24 percent in the Visayas and one percent by the MERALCO customers in Luzon. Total discounts granted since 2001 were reflected in *Annex 14*.

## G. Lifeline Rate Subsidy Program

The provision of lifeline rate subsidy is allowed by *Section 73 of the EPIRA* which defines the lifeline rate as a subsidized rate given to low-income captive market end-users who cannot afford to pay at full cost.

For the report period, the average total amount of subsidy provided to lifeline consumers was PhP511 million which translated to an average of PhP2.73/kWh subsidy to lifeline customers in the whole country. On the average, each lifeline customers has enjoyed an average monthly subsidy of PhP105.47. Large discrepancy though was noted between the subsidy availed by a PDU lifeline customer and an EC lifeline customer which averages monthly at PhP122.40/kWh and PhP 31.75/kWh, respectively. Higher amount of subsidy were paid for by the non-lifeline customers of PDUs at 13-centavos/kWh for the MERALCO franchise area and 11-centavos/kWhfor other PDUs while for the ECs, non-lifeline customers subsidized an average of 8-centavos per kWh.

Meanwhile, Table 16 shows the April 2013 status of lifeline rate subsidy implementation, as provided by the ERC.

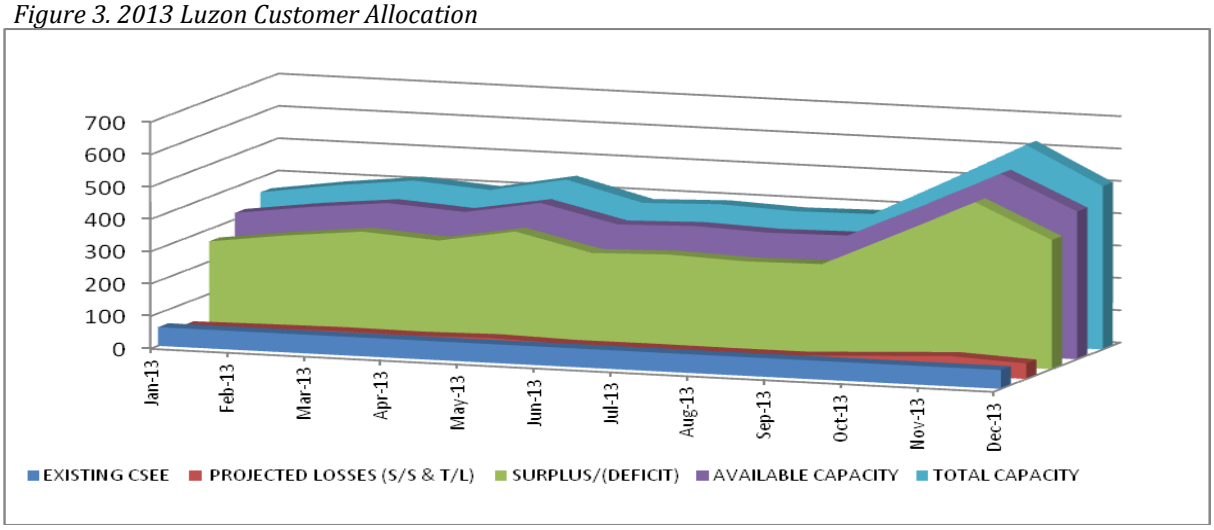
*Table 16. Summary of Lifeline Subsidy Implementation, November 2012 - April 2013*

| Particulars | MERALCO | Other PDUs* | ECs | Total |
|---|---|---|---|---|
| Monthly Average Total Amount of Subsidy Provided by Non-Lifeline Customers (in Php) | 345,946,536 | 107,126,141 | 58,164,499 | 511,237,177 |
| Average Monthly Total Consumption of Lifeline Customers (kWh) | 110,020,810 | 42,672,278 | 34,649,593 | 187,342,681 |
| Monthly Average Number of Lifeline Customers | 2,140,089 | 875,191 | 1,831,961.22 | 4,847,242 |
| Monthly Average Number of Non-Lifeline Customers | 3,072,981 | 1,336,911 | 4,938,678 | 9,348,570 |
| **Average Amount of Subsidy Provided to Lifeline Customers (In PhP/kWh)** | 3.14 | 2.51 | 1.68 | 2.73 |
| **Average Amount of Subsidy Provided to Lifeline Customers (In PhP/Customer)** | 161.65 | 122.40 | 31.75 | 105.47 |
| **Average Amount of Subsidy Paid by Non-lifeline customers (in PhP/kWh)** | 0.13 | 0.11 | 0.08 | 0.12 |

*Source: ERC Investigation & Enforcement Division*

## H. Transition Supply Contracts

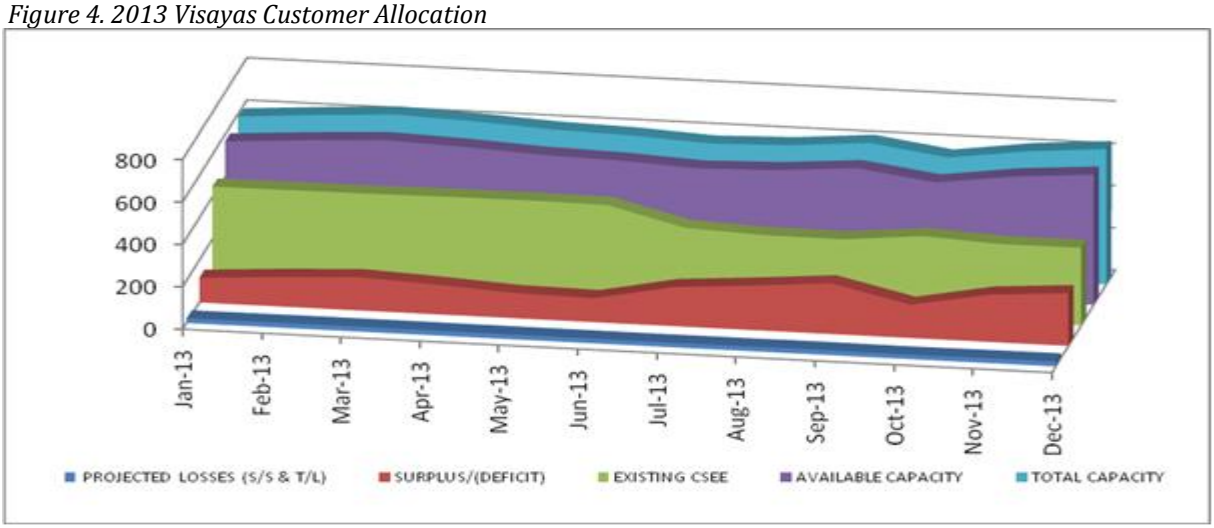
*Figure 3. 2013 Luzon Customer Allocation*




With the privatization and transfer to IPPAs of most of its assets, PSALM's capacity in Luzon stood at 354 MW capacity as shown in Figure 3. As of April 2013, PSALM has only three (3) customers left which is equivalent to 58 MW as follows:

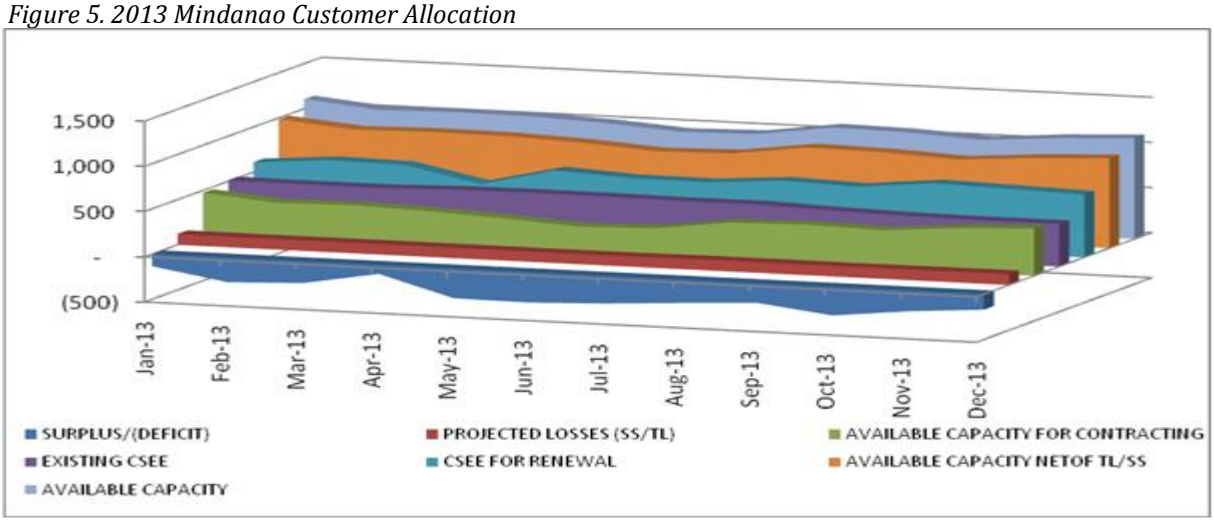
- SKK Steel Corporation with a contract demand of 20 MW to expire in July 2015; and
- Two (2)Texas Instruments located in Clark, Pampanga and Baguio City with contract demands of 10 MW and 28 MW which will be due to expire in June 2017.

*Figure 4. 2013 Visayas Customer Allocation*




In the Visayas, PSALM has an average existing capacity of 603 MW while average existing contracts are equivalent to 410 MW. Transmission Loss is estimated to be about 22 MW while Available Capacity for contracting is about 581 MW. As of April 2013, PSALM has a total of twenty six (26) contracts of which twenty three (23) are expected to expire by December 2013, five (5) in December 2015, and eight (8) in December 2016.

*Figure 5. 2013 Mindanao Customer Allocation*




The PSALM projection for Mindanao, the average available capacity is 1,093 MW, of which 117 MW is allocated for AS, station use and transmission losses resulting to net capacity of about 922 MW. Out of 922 MW, 507 MW is still contracted with customers leaving on about 415 MW available capacity for contracting. There are about thirty nine (39) supply contracts that expired on 25 December 2012 that were requested for renewal with a total demand of 657 MW leaving an average deficit of about 242 MW. In order for NPC to renew such contracts, PSALM resolved that all available capacities will be allocated to all NPC/PSALM customers resulting to reduction by an average of 37% in the contracted demand for each customer from the 2012 contract levels. The said renewal will be effective until 25 December 2016.

## IV. COMPETITION

This section provides an update on key areas of competition to include the operation of the WESM, preparation for RCOA and monitoring of compliance to *Section 45 of the EPIRA.* Significant developments include declaration of the commencement date of RCOA including promulgation of the Retail Market Rules and issuance of General Policies and Guidelines and the corresponding implementing rules and regulations to ensure smooth implementation of the RCOA.

### A. Wholesale Electricity Spot Market Operations

As of April 2013, the integrated WESM has a total of 252 participants comprised of 56 generating companies and 196 customer trading participants comprised of 16 PDUs, 72 ECs, 101 Bulk end-users and 7 wholesale aggregators. There are 30 applications being evaluated in Luzon and Visayas, comprised of 23 bulk users, 2 generation companies, 3 PDUs and 2 ECs.

*Table 17. Registration Update as of April 2013 (Luzon and Visayas)*

| CATEGORY | | EXPECTED (Luz& Vis) | REGISTERED | | | | APPLICANT | | NOT REGISTERED | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | DIRECT | | INDIRECT | | | | | |
| | | | LUZ | VIS | LUZ | VIS | LUZ | VIS | LUZ | VIS |
| Generation Companies | | 56 | **31** | **19** | **0** | **0** | **2** | **3** | **0** | **1** |
| Customer Trading Participants | Private DUs & LGUs | 16 | 3 | 3 | 5 | 0 | 3 | 0 | 1 | 1 |
| | ECs | 72 | 26 | 25 | 16 | 3 | 2 | 0 | 0 | 0 |
| | Bulk users | 101 | 6 | 6 | 48 | 16 | 23 | 1 | 1 | 0 |
| | Wholesale aggregators | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Trading Participant | | **196** | **42** | 34 | 69 | 19 | 28 | 1 | 2 | 1 |
| **TOTAL PARTICIPANTS/ APPLICANTS** | | **252** | **73** | **53** | **69** | **19** | **30** | **4** | **2** | **2** |

*Source: PEMC*

*Update on the list of Applicants and Not Registered Customers*

1. *The following customers were removed from the list of WESM applicants due to the expiration of their Transmission Service Agreements (TSA) with NGCP resulting to a decrease in the number of applicants:*
   *Luzon (Bulk Users)*
   - *Forest Products Research & Development Institute*
   - *RGS Ice Plant and Cold Storage*
   - *University of the Philippines Los Baños*
2. *Bataan Technology Park, Inc. and Boy Scout of the Philippines, both bulk users were removed from the list of companies that are not registered in the WESM due to the expiration of their Transmission Service Agreements (TSA) with NGCP resulting to a decrease in the number non-registered companies:*
3. *The Philippine Foremost Milling Corporation has submitted its application as Direct WESM Member Contestable Customer for Luzon;*
4. *The following has submitted their application as Indirect WESM Member Contestable Customer:*
   *Luzon*
   - *Liberty Paper, Inc.*
   - *Philippine Integrated Energy Solutions, Inc.*
   - *Station Square East Commercial Corporation*
   - *North Triangle Depot Commercial Corporation*
   - *NorthBeacon Commercial Corporation*

- Highlights of WESM trading for the period November 2012 - April 2013:

  a. Average system demand for Luzon and Visayas registered during the report period was at 8,874 MW.
  b. System peak demand was recorded at 9,688 MW which occurred in the month of April 2013.
  c. Spot market transactions amounted to 2,836 GWH, translating to 10.1 percent of the total energy consumed in the Luzon and Visayas regions during the six months period while the remaining 89.9 percent of the total volume or equivalent to 25,248 GWH were transacted and settled outside the market.

d. Average Effective Spot Settlement Price (ESSP) for customers amounted to Php5,825.75 per MWH during the six months period.
e. Generation in Luzon and Visayas for the billing period November 2012 to April 2013 was dominated by Coal Power Plants at 43.5 percent followed by Natural Gas Plants at 31.8 percent. Geothermal contributed a share of 15.3 percent, hydro with 7.5 percent. Diesel powered power plants contributed about 1.6 percent, a minimum contribution of generation came from Wind-Based Plants at 0.2 percent, and bio-fuel at 0.1 percent.

- Status of Pending ERC Regulatory Filings

a. Approval of the level of the market fees for the WESM for Calendar Year 2010-2011

In an Order dated 11 February 2013, the ERC granted with modification PEMC's Motion for Extension to submit its proposed mechanism for the recovery of the cost of the B2B System in the amounts of PhP132.9M and PhP53.723M (as approved in PEMC's CY 2012 MF Application). PEMC is ordered to submit its proposal on or before 19 June 2013.

b. Approval of the level of the market fees for the WESM for CY 2012

During the hearing conducted on 26 March 2013, the ERC directed PEMC to submit the following: (a) chronology of the budget proposals in various MF Applications concerning the Market Research and Development Platform (MRDP) and Forwards Market projects, (b) possible source of the remaining 80% of the initial budget for the MRDP and the Forwards Market, (c) change in position titles of PEMC employees from 2006 to the present, and (d) specific position titles of the 24 additional personnel. In response, PEMC filed its Compliance and Supplemental Motion on 2 April 2013. PEMC's Motion for Reconsideration is pending resolution by the ERC.

c. Approval of the level of the market fees for the WESM for CY 2013

On 18 March 2013, PEMC received an Order from the ERC setting the case for hearing on PEMC's Motion for Reconsideration on 26 March 2013. During the hearing, PEMC was directed to submit the following: a) chronology of the budget proposals in various MF Applications concerning the Market Research and Development Platform (MRDP) and Forwards Market; b) possible source of the remaining 80% of the initial budget for the MRDP and the Forwards Market; c) change in the position titles of PEMC employees from 2006 to the present; and d) specific position titles of the twenty-four (24) additional personnel.

d. Market Management System (MMS) Loan Repayment

As of April 2013, PEMC's Petition for review of the 7 March 2011 Order of the ERC is pending with the Court of Appeals. In the said ERC Order, the ERC ordered PEMC to refund the total amount of PhP268,200.702.80 inclusive of carrying costs for the collection of funds for the migration of the Market Management System (MMS) to a new hardware platform (hereafter MMS Migration). This was supposed to address the obsolescence issue of the MMS.. These carrying costs were based on the Manila Reference Rate plus 3%.PEMC filed a motion for partial reconsideration, however the same was denied in the Order dated 6 June 2011. PEMC thereafter filed a Petition for Review under Rule 43 of the Rules of Court with the Court of Appeals.

e. Approval of the Pricing and Cost Recovery Mechanism for Reserves in the Philippine Wholesale Electricity Spot Market

On 26 February 2013, PEMC filed its Compliance and Omnibus Motion where it proposed a two-stage approach for the implementation of its Ex-Ante Reserve Effectiveness Factor (REF) proposal and work plan. On 1 March 2013, PEMC filed a Motion to correct and incorporate averments inadvertently omitted in the pleading as filed.

- Update on WESM Governance Activities

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

a. Market Surveillance Committee (MSC)

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- The MSC reviewed and discussed cases submitted by the ECO on Real Time Dispatch (RTD) and Must-Offer Rule (MOR) cases involving 5 Trading Participants covering breaches committed between 2011 and 2012.
- On 21 March 2013, the MSC presented before the PEM Board the results of its review of the twenty-two (22) ECO Investigation Cases involving possible non-compliance of PSALM to the WESM Rules on RTD Schedules and Instructions and the Submission of Offers, in which it has established the following:

    1. that the ECO substantially complied with the procedural requirements provided in the MSCEM Manual without materially affecting the rights of the parties and that the credibility of the data and documents upon which the ECO based its factual findings are valid and complete; and
    2. that PSALM committed breach in all the instances cited, as documented in the 22 ECO Investigation Reports.

- The MSC submitted to the PEM Board on 05 November 2012 the Market Intervention (MI) Report No. 2012-001 covering the Visayas Systems Operator-initiated MI event dated 18 October 2011 pursuant to the PEM Board Resolution No. 2011-62 dated 11 October 2011 directing and authorizing the Market Surveillance Committee (MSC) to conduct investigations over all interventions initiated by the System Operator (SO) and Market Operator (MO), and to render regular reports to the PEM Board. The same was presented to the PEM Board during its meeting on 12 November 2012.

b. Dispute Resolution Administration (DRA)

For the covered period, the DRA submitted its proposed revisions of the Dispute Resolution Market Manual (DRMM) following the directive of the PEM Board to amend specific provisions of the Manual. The proposed revisions were submitted to the Rules Change Committee (RCC) which deliberated upon the proposal during its 70th Meeting on 16 January 2013.

c. Rules Change Committee (RCC)

During the covered period, the RCC spearheaded deliberations of the following proposed rules and/or manuals change:

- The RCC approved the proposed amendment on Appendix A1 of the WESM Rules ("Information to be Supplied with Offers to Supply and to Buy Electricity") which will require all generators to submit minimum ramp up and ramp down rates together with the ramp rate capability curve of each generation unit or aggregated generation units. Said amendment was to endorsed to PEM Board, however, the Board Review Committee's (BRC) deemed that said proposal is a policy matter and not within the authority of the PEM Board and thus, decided to refer the same to the Tripartite Body composed of the ERC, DOE and PEMC for appropriate action.

- The RCC continued discussion/deliberation of several WESM matters requiring amendments of the WESM Rules and WESM manuals to include the following:

    1. Amendments to the WESM Rules and the WESM Manual on Market Operator Information Disclosure and Confidentiality Issue 2.0;
    2. Proposed Amendments Additional Clause 4.4.4 in the WESM Rules;
    3. Proposed Amendments in the WESM Manual on Metering Standards and Procedures Subsection 9.7;
    4. Proposed Amendments to Clause 3.13.6 of the WESM Rules;
    5. Proposed Further Amendments to the WESM Dispatch Protocol Manual regarding Re-Dispatch Procedures based on the WESM Merit Order Table;
    6. Proposed Amendments to the Registration and Settlement Provisions of the WESM Rules, and
    7. Proposed Changes to Appendix A of the WESM Rules on Minimum Offer Block Size.
    8. Segregation of Line Rental
    9. Retail Competition and Open Access where several issues on retail market rules were raised by the generators to include issues related to registration, switching, Retail Electricity Supplier (RES) trading limits and declaration of Bilateral Contract Quantities (BCQs). The Generator sector recommended: (1) to consider registering all contestable customers as indirect WESM members at the onset of the retail market, while firming-up the retail market design and (2) to provide for a mechanism/structure which will enable the RES to declare its own BCQs or to allow the putting-up of pseudo-nodes for the RES.
    10. Proposed Grant of Provisional Approval in the Increase in Capacity of Existing Generating units through an amendment of Section 3.1 on Registered Capacities of the WESM Registration Manual, to expressly provide for the provisional approval of a generator's request for the increase in the registered maximum available capacity (PMax) of its existing generating unit/s during the pendency of securing the final approval of the generator's Certificate of Compliance (COC) from the Energy Regulatory Commission (ERC).

- On 22 March 2013, the DOE issued two (2) Department Circulars (DCs) relative to WESM Rules as follows:

    1. DC No. 2013-03-0005 entitled "Adopting Further Amendments to the WESM Rules (Registration and Settlement Provisions of the WESM Rules)"; and
    2. DC No. 2013-03-0004 entitled "Adopting Further Amendments to the WESM Rules (WESM Rules Appendix A1. Information To Be Supplied with Offers to Supply and Buy Electricity)"

d. Technical Committee (TC)

For the report period, the TC conducted the following activities:

- Review of CVC Pricing including the SO Actions in CVC Table particularly on a) the basis of the one (1) hour duration limit of the allowable Marginal Loading specified in the CVC Table; and b) link of the CVC Action with the MRU actions. The TC noted that corresponding SO Actions are associated with the CVC pricing as indicated in the said CVC Table.
- Study on Water Elevation of Hydroelectric Plants. The TC agreed to review the list of existing plants that are non-compliant to the MOR and reasons submitted by each plant for a specific day as reference in its study of the hydroelectric plants. The TC still awaits the availability of the requested data on water elevation, load curve, requirements for irrigation, domestic and hydro plants from PAG-ASA.
- Commented on the proposal to issue Provisional Authority for the Change of Maximum Available Capacity (Pmax)and the proposed Cancellation of Offers
- Reviewed and submitted its recommendation to PEMC on the Load Forecasting Methodology
- Review of SO Actions included in the CVC Table in the CVC Manual. The TC initiated the review of SO Actions listed in the CVC table of the CVC Manual and discussed matters regarding the same.

e. PEM Audit Committee (PAC)

For the report period, the following are PAC's accomplishments:

- Monitored the PEMC's action plans to address findings and recommendations of PA. With the conclusion of the 3rd market operations audit, the PAC, through the Market Assessment Group (MAG), continued its monitoring of the PEMC's action plans to address findings and recommendations of PA Consulting.
- Submitted the following reports to the Board: for information, on 18 February 2013 the following reports:

    1. PAC 2012 Annual Report which provides the summary of accomplished activities of PAC in 2012.
    2. PAC 3rd Market Operations Audit Report providing of the 3rdIndependent Operational Audit of the Systems and Procedures on Market Operations (3rd MO Audit) covering the period 26 June 2011 to 25 June 2012 (AP2012-02) conducted by PA Consulting Services Ltd. (PA) of New Zealand.
       PAC Post-Audit Evaluation Report which determines whether or not the PA Consulting Group conducted the audit in an efficient, organized and professional manner.
    3. Submitted the Audit Assessment Report for the period 26 September 2012 to 25 December 2012 which provides updates on PEMC's implementation of its action plan to address the Audit recommendations and findings on the market operations.
    4. Conducted preparatory activities for 4th Market Operations Audit initially on the identifying the scope to ensure that the Terms of Reference for the next MO Audit will not be a duplication of work by the MO External Auditor with those done by the other External Auditors (e.g. Financial Audit).

## B. Retail Competitionand Open Access (RCOA)

For the report period, following are the developments on the implementation of RCOA:

1. DOE Promulgation of Department Circular No. 2012-11-0010

On 28 November 2012, the DOE promulagated DOE Circular No. 2012-11-0010 entitled, *"Providing For Additional Guidelines And Implementing Policies For Retail Competition And Open Access And Amending Department Circular No. 2012-05-0005 Entitled "Prescribing The General Policies For The Implementation Of The Retail Competition And Open Access"*.

The said issuance provided for clear policy direction on the following:

- functions of each of the RCOA participants and stakeholders to include the ERC, PEMC which will serve as the Central Registry Body (CRB), the NGCP, NEA, and the DUs.
- six (6) months transition period before the full implementation of the RCOA wherein the following will take place:

    i. The DUs shall continue to serve Contestable Customers (CCs) in their franchise area;
    ii. CCs to pursue their negotiation of retail supply contracts with potential suppliers;
    iii. Continuing issuance by ERC of Certificates of Contestability to all qualified end-users;
    iv. Identification by ERC of DUs who may serve CCs during the Last Resort Event;
    v. Registration of Suppliers and CCs and training retail market participants by the CRB;
    vi. Conduct of trial operations of CRB systems including mock settlement, and
    vii. Conduct by the DOE of comprehensive Information and Education Campaigns (IECs) to all stakeholders on the RCOA implementation.

During the RCOA implementation, all CCs are allowed to choose where to source its electricity. A one (1) year transition period is provided where the first six (6) months all CCs shall have a supply contract with a minimum of one (1) year and will be allowed to switch its supplier once during the period and after six (6) months after the full RCOA implementation.

The guidelines also underscored the interim policy for Government Agencies issued with Certificate of Contestability by the ERC vis-a-vis their compliance with the Procurement Law and its Implementing Rules and Regulations. As a temporary measure, it was promulgated that the Government Contestable Customers shall remain status quo until such time that the Government Procurement Policy Board has issued a Supplementary Guidelines for the Government Contestable Customers.

2. Transitory Rules

To ensure the smooth transition from the existing structure to a competitive environment and promote the interest of all stakeholders, the ERC on 17 December 2012, issued Resolution No. 16, Series of 2012 adopting the Transitory Rules for the implementation of RCOA. Further, the said rules provides additional regulatory framework in the commercial operation of the RCOA including initial transactions to ensure effective implementation of the retail market. The Transitory Rules also provided window for those CCs who may not able to enter into a contract with a Retail Electricity Supplier (RES) from June 26, 2013 to December 25, 2013 by allowing them to be served by their incumbent DU, however, the CC shall show proof that it has exhausted efforts to find its RES but was unsuccessful.

In order to avoid confusion among industry participants, the said Resolution provided that protocols and processes contained in various rules earlier issued by the ERC governing the RCOA shall apply even during transitory period insofar as they are not inconsistent with the Transitory Rules. The Transitory Rules is in accordancewith the DOE Circular No. 2012-11-0010 that defined the transitory period which will be from 26 December 2012 to 25 June 2013.

3. Retail Market Rules

The DOE spearheaded the formulation of the Retail Rules which provide the rules for the integration of the retail market in the operations and governance processes of the WESM, the management of transactions of Suppliers and CCs and the operation of the CRB.

The draft Retail Rules was subjected to public consultations to gather comments and suggestions from various sectors. Table 18 summarizes the areas and participants of the public consultations:

*Table 18. Focused Group Discussion on the General Policies Implementing the RCOA*

| Date | Area/Venue | Participants |
|---|---|---|
| 09 October 2012 | Sarabia Manor Hotel, Iloilo City | Contestable Customers, Generators, DUs, Retail Electricity Suppliers |
| 16-17 October 2012 | Dusit Hotel, Makati City | Contestable Customers, DUs, Retail Electricity Suppliers, Govt. CCs |
| 19 October 2012 | Regent Hotel, Naga City | Generating Companies, DUs and Contestable Customers |
| 30 October 2012 | Mt. Malarayat Golf and Country Club, Lipa City | Contestable Customers |
| 15 November 2012 | Marco Polo Hotel, Cebu City | Contestable Customers, DUs and Generating Companies |
| 21 November 2012 | Holiday Inn Hotel, Clark, Pampanga | Contestable Customers, DUs, Generating Companies |
| 23 November 2012 | Summer Place Hotel, Baguio City | Contestable Customers, DUs, Generating Companies |
| 27 November 2012 (AM) | Legend Villas Hotel, Manadaluyong City | Government Contestable Customers |
| 28 November 2012 | Legend Villas Hotel, Mandaluyong City | DOE, PEMC, ERC, NPC, NGCP, TransCo, PSALM, NEA |

*Source: DOE*

The series of consultations provided significant inputs in the finalization of the Retail Rules. Corollary to this, on 9 January 2013, the Retail Market Rules as promulgated through Department Circular No. 2013-01-0002 and on 16 January 2013, the said Retail Rules were published at the Philippine Daily Inquirer and The Philippine Star.

One compelling issue raised by the CCs was the non-offer by RES and Local RES. In an effort to resolve this issue, the DOE initiated the Suppliers' and Contestable Customers' Get-Together for RCOA held last 20 March 2013 at the Asian Institute of Management (AIM), in the presence of the ERC and PEMC, and other stakeholders in the industry. Said event was attended by CCs, which was given the chance to present their concerns, and RES which were given the chance to showcase their product offerings. The dialogue between the CCs and RES validated the former's claims of non-offer which necessitated issuance of complementing policies and regulation.

4. Disclosure of Energy Allocation by DUs and RES

Consistent with its mandate to monitor and penalize abuse of market power, cartelization and anti-competitive or discriminatory behavior by any electric power industry participant, the ERC issued Resolution No. 5, Series of 2013 entitled, "A Resolution on Disclosures of Capacity

by DUs in the Luzon and the Visayas Grids and RES on 22 March 2013. This was undertaken after several CCs complained that RES are not making any offers because the RES have already allocated their capacities and energy volumes to either affiliate companies or other target customers who may have a more attractive load factor.

As required under the said Resolution, all DUs in Luzon and Visayas shall submit to the ERC data pertaining to the amount of capacity and energy that they have contracted with generators as well as the capacity and energy they have allocated for their captive customers, to their supply business segment which is their Local RES and Suppliers of Last Resort (SOLR). The same requirements were imposed upon the RES while they have to disclose the number of their CCs and the capacity and energy they intend to allocate to them.

## C. Interim Mindanao Electricity Market (IMEM)

1. Establishment of the IMEM

Mindanao has been continually under "red alert" status, which often resulted to rotating brownouts in some areas due to generation capacity deficiencies to meet the energy and ancillary services requirements. Brownouts have tremendously affected local business and ordinary household consumers. It has affected the growth and development in the region. Many investors have expressed concerns over the brownouts clamoring for a steady source of power for their operations.

For the current year alone, as of March 2013 the main causes of supply deficit can be traced due to: (1) limited hydro capability of Agus and Pulangi hydro electric power plant especially during dry summer months; (2) planned outages of large power plant unit such as Pulangi IV Unit 1 (85 MW) on 26 March 2013; (3) non-operation of power plant IDPP (100 MW) on rehabilitation status; and (4) in some cases there were recorded events of un-expected/forced outages of some plants such as Agus 6 Unit 1 (25 MW) due to guide bearing problem; and TMI 1 Unit 2 (50.16 MW) on forced outage since 18 March 2013.

Compared to Luzon and Visayas, the Mindanao grid suffers from intermittent outages lasting from two to six hours. This region-wide power supply deficiency results to frequent brownouts and power interruptions. Based on historical growth, the demand in the region would increase by an average of 4.6 percent annually over the next ten (10) years. In order to meet this demand, new capacities must be installed over the next decade.

Currently, Mindanao ECs have three options to cope with the perennial power supply situation in the region. These are: (1) to consider leasing or procuring modular generating sets having capacities of one (1) or two (2) MW; (2) to continue with the Interruptible Load Program (ILP) wherein entities with excess capacities can use their power generating facilities instead of sourcing power from the main grid, and in return be compensated for such gestures, based on ERC-approved compensation mechanism; and (3) to introduce the IMEM, which will serve as a trading platform where entities with excess capacities shall sell in the IMEM, subject to compensation based on the Price Determination Mechanism (PDM), duly approved by the ERC.

For the IMEM, a total of 348.9 MW was identified from potential additional supply sources to the grid. This is comprised of 165.9 MW of embedded generation and 183 MW of loads with self-generating capacity. Through a deregulated market based pricing scheme, excess power from embedded generating plants can be sold in the market during peak periods.

Recognizing the urgent need to address the current supply shortage in Mindanao, the DOE directed the PEMC to develop and implement the IMEM. The IMEM is an immediate solution developed by the DOE meant to address the deficiency of the supply in Mindanao.

2. What Is the IMEM?

The IMEM is a venue for the transparent and efficient utilization of all available capacities in the Mindanao grid to meet the supply deficiency. Unlike the WESM operating in Luzon and Visayas, the IMEM will be a day-ahead market and will address only the supply deficiency in the grid. It intends to draw out available generation capacities including embedded generators in the grid to alleviate the supply shortfall in Mindanao.

Likewise, the IMEM faciliate a reasonable and transparent pricing mechanism that will encourage participation of existing generating capacities and demand side management in Mindanao as well as transparency and public accountability.

The key features of IMEM are the following: (a) a day-ahead market wherein market participants submit their nominations a day before the actual delivery or curtailment of energy; (b) all generation capacities, directly-connected customers and distribution customers shall be part of a mandatory program that aims to address only the deficiency of supply in the grid; (c) provides for energy efficiency incentives meant to contribute to the supply in the grid; (d) provides real time imbalance correction through the use of merit order table provided by the IMEM Operator; (e) provides a Merit Order Table having the same principles of the merit order table used in the Luzon and Visayas grids; (f) a settlement based on a uniform pricing framework settled at the market clearing price with which the total cost shall be allocated among the IMEM participants; and (g) provides for a governance framework to ensure free and fair.

3. Electricity Pricing in the IMEM

The IMEM will schedule the participating generation facilities through a merit order table from the lowest to the highest bid offer that will meet the day-ahead forecasted demand of the Mindanao grid net of contract nominations. This will set the dispatch schedules such that the day-ahead price will be fixed at the last offer price that will meet the forecasted demand.

IMEM's effect on the electricity prices in Mindanao will depend on two factors: (1) the level of exposure of the consumer to the IMEM and (2) the offer prices of IMEM Resources. If a consumer is not fully contracted and opts to buy the rest of its requirements from the IMEM, then the IMEM will have an impact on its electricity prices. The direction (whether increasing or decreasing) and extent of the impact of the IMEM on the electricity prices of a consumer would depend on the offer prices of IMEM Resources.

*Table 19. IMEM Implementation Milestones*

| DATE | MILESTONE / EVENT |
|---|---|
| 22 October 2012 | 1st Leg Public Consultation – N Hotel, Kauswagan Highway, Cagayan de Oro City |
| 14 November 2012 | 2nd Leg Public Consultation – The Apo View, J. Camus Street, Davao City |
| 09 January 2013 | DOE DC2013-01-0001 directing PEMC to develop and implement the IMEM was issued |
| 25 March 2013 | Draft IMEM Rules was published. |
| 1 April 2013 | ERC Approval of the Level of Market Transaction Fees for the Establishment of IMEM |
| 03, 10, 12 April 2013 | Public Consultations on the Draft IMEM Rules were held in Zamboanga, CDO and Davao |
| 15 May 2013 | Registration Requirements for the IMEM was posted in the WESM Website |
| 24 May 2013 | DOE DC2013-05-0008 promulgating the IMEM Implementing Rules was issued |
| 31 May 2013 | PEMC filed the application for the approval of the IMEM Price Determination Methodology (PDM) to the ERC. |
| 03 June 2013 | Registration in the IMEM started. |
| 23 July 2013 | ERC Public Hearing ERC No. 2013-116 RC Notice of Public Hearing - IMEM Price Determination Methodology (PDM) |

*Source: DOE*

4. 2012 Public Consultations

Public consultations on the proposed establishment of the IMEM as a measure to immediately address the power supply situation in Mindanao were conducted in late months of 2012. The 1st leg of public consultations was held in Cagayan de Oro City last 22 October 2012 and the 2nd leg was held in Davao City on 14 November 2012.

During these initial public consultations, the DOE presented the current Mindanao power situation and the draft Department Circular directing PEMC to implement the IMEM. Stakeholders concerns and issues were solicited through an open forum where relevant issues raised. To summarize, the following issues were raised: (a) NPC capacity tradability; (b) impact of the IMEM on the existing Interruptible Load Programs; (c) duration of the operation of the IMEM; (d) possible mechanisms to ease the registration of DUs such as lowering the prudential requirements; (e) rate impact of the administration costs of the IMEM; (f) mandatory or Voluntary participation; (g) evaluation of transmission constraints; (h) appropriate bid cap level design and application; and (i) real-time imbalance correction due to forecast deviations.

Likewise, several meetings with embedded generators were arranged that determined procedures for monitoring capacity generation; respective loads among self-generating capacity; and current interruptible load programs (ILP) being implemented.

5. Policy Issuances

- DOE Department Circular DC2013-01-0001

  Pursuant to Department Circular No. 2013-01-0001, the DOE directed the PEMC to develop and implement an interim electricity market design for Mindanao or IMEM. The IMEM is envisioned to provide an opportunity for generators and other entities with excess or unutilized generation capacities, to offer or make use of such generation capacities, subject to compensation based on the resulting market prices. PEMC was likewise directed to formulate applicable IMEM Rules/Manuals, and file the necessary application with the ERC the cost Recovery Methodology and the IMEM Price Determination Methodology.

- DOE DC2013-05-0008 Promulgating the IMEM Implementing Rules

  As directed under Department Circular DC 2013-01-0001, the PEMC submitted to the DOE the draft IMEM Implementing Rules last 25 March 2013. This was posted in the DOE website on 25 March 2013 for public review. To solicit comments among the constituents of Mindanao, public consultations were held on 3, 10, and 12 April 2013 in Zamboanga, Cagayan de Oro, and Davao City. With the positive feedbacks received and with no major objections from the public consultations, the DOE formally adopted the IMEM Implementing Rules. The Department Circular enjoined all electric power industry participants in Mindanao to participate in the IMEM together with the government energy family to extend full cooperation for the smooth implementation of IMEM.

6. ERC Approval of Transaction Fees For The Establishment of IMEM

Last 01 April 2013, the ERC approved the application of PEMC (ERC Case No. 2013-011RC) filed on January 21, 2013 for the level of Market Transaction Fees for the establishment of the IMEM. The ERC on February 25, 2013 allowed PEMC to use the excess collections of the market fees in the WESM for 2012, in the amount of up to PhP24.26 Million for the establishment of the IMEM. PEMC's proposed budget for the establishment of IMEM stood at PhP34.26 Million, with PhP5.98 Million going to pre-operating expenses, PhP8.28 Million for capital expenditures (CAPEX), and PhP20 Million for consultancy services. The approved amount will be refunded

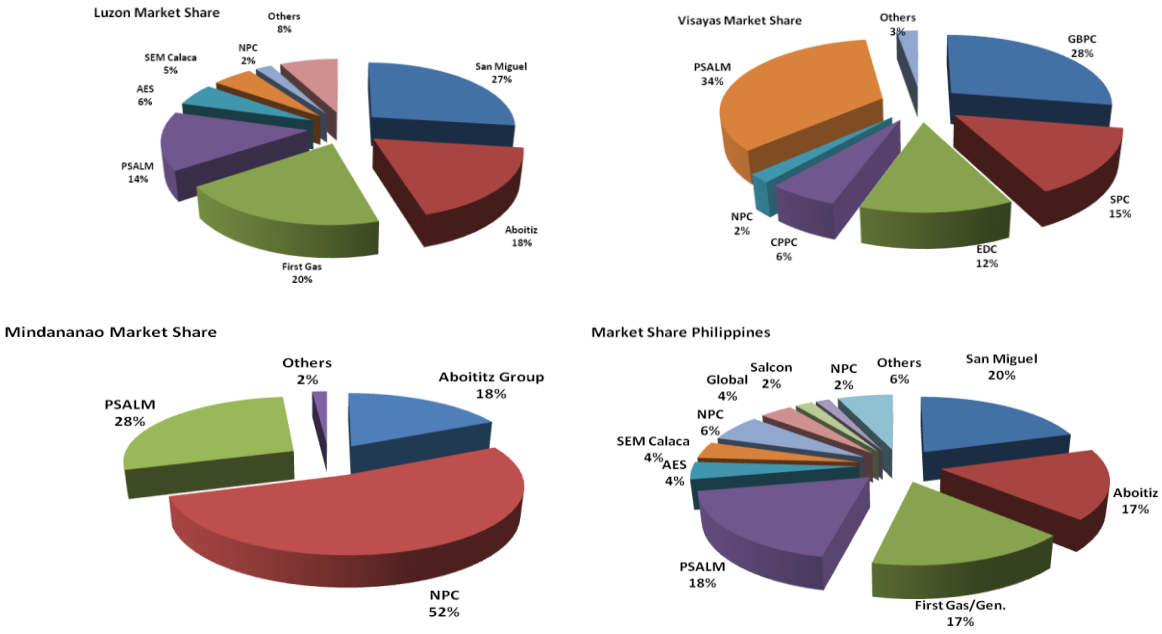
to the Luzon and Visayas WESM participants from whom the 2012 market fees were collected once the IMEM starts commercial operations, based on a refund mechanism to be finalized later. Since the amount will be taken from the excess collections of the previously-approved 2012 market fees, no additional imposition will be levied on the Luzon and Visayas WESM participants.

## D. Market Share Monitoring

On 11 March 2013, the ERC issued Resolution No. 3, series of 2013, setting the installed generating capacity per grid and national grid and the market share limitation per grid and national grid for 2013.

In accordance with its guidelines, the ERC determined a total installed capacity of 15,717 MW for 2013, higher by 498 MW as compared to 15,219 MW installed capacity in 2012. The increase was due to commercial operation of several plants such as the 604 MW GN Power, the 19.8 MW Biomass of Green Futures Innovation in Luzon; 1.02 MW DESCO Natural Gas Power Plant and the 15 MW Central Azucarera de San Antonio Biomass Power Plant in Visayas; and, 9 MW Cabulig Hydro Power Plant and 3.2 MW King Energy Generation Diesel Power Plant in Mindanao. Likewise augmented the installed capacity base were there-commissioning of 52.2 MW BacMan Geothermal Power Plant in Sorsogon and the expansion of Minergy Bunker Plant from 18 MW to 46 MW in Cagayan de Oro City.

*Figure 6. Installed Capacity Share 2013*




The increase however was offset by the reduction in installed capacity of MakBan and Tiwi Geothermal Power Plants which are known to have steam supply issue.

Compliance to the 25 percent national grid installed capacity limitation was still observed with the largest share at 19 percent by San Miguel Energy Company (SMEC), followed by PSALM at 18 percent.

San Miguel group still dominates the generation sector in Luzon with a total installed capacity of 3,085 MW or 27 percent while its share to the national grid is 19 percent. In the Visayas, PSALM remains to have the biggest share of installedcapacity at 35 percent or 716 MW while Global

Business Power Corporation (GBPC) follows with 552 MW 27 percent share respectively. In Mindanao, the Government thru PSALM and NPC still dominate the generation business with 78 percent of the total capacity of the grid or equivalent to 1,416 MW. Aboitiz Group is the next biggest generation company in Mindanao with a total capacity of 314 MW or 17 percent of the grid.

Adjustments to the capacity limitations may be made by the ERC on or before 15th day of March 2014 if there are material changes necessary to be done.

# V. POWER SUPPLY SECURITY AND RELIABILITY

This section highlights the updates on the power situation and project developments in Luzon, Visayas and Mindanao for year 2012 and the first four months of 2013. It should also be noted that during the period under review, there are government initiatives introduced to address the Mindanao power situation.

## A. Power Generation

For 2012, gross electricity generation for the country was recorded at 72,922 GWh, 5.42 percent higher compared to last year's generation of 69,176 GWh. The three main grids displayed growth in their respective generations, Luzon grid registered an increase of 2,295 GWh or 4.59 % from 50,017 GWh in 2011 while Visayas posted an increase of 1,027 GWh or 9.82 % from 2011 generation of 10,458 GWh. Mindanao, despite having continuous curtailments and limited demand, was able to register an increase of 424 GWh or 4.87 % from 8,703 GWh in 2011.

Coal-fired power plant still surpassed all power sources in terms of generation with 28,265 GWh or a share of 38.76 percent of the total gross generation of the country, followed by Natural Gas – fired power plants with 19,642 GWh or 26.93 percent. Hydroelectric and Geothermal power plants with 10,252 GWh and 10,250 GWh, respectively.

Generation from oil-based power plants, was at 4,254 GWh or 5.83 percent of the generation mix. While renewable energy sources such as wind, solar and biomass contributed 259 GWh.

*Table 20: Philippines, 2012 and 2011 Comparative Generation, GWh*

| PHILIPPINES | | | | | | |
|---|---|---|---|---|---|---|
| PLANT TYPE | 2012 | | 2011 | | Difference | |
| | GWh | % Share | GWh | % Share | GWh | % |
| Coal | 28,265 | 38.76 | 25,342 | 36.63 | 2,923 | 11.53 |
| Oil-based | 4,254 | 5.83 | 3,398 | 4.91 | 856 | 25.21 |
| Natural Gas | 19,642 | 26.93 | 20,591 | 29.77 | (950) | (4.61) |
| Geothermal | 10,250 | 14.06 | 9,942 | 14.37 | 308 | 3.09 |
| Hydro | 10,252 | 14.06 | 9,698 | 14.02 | 555 | 5.72 |
| Wind | 75 | 0.10 | 88 | 0.13 | (13) | (14.59) |
| Biomass | 183 | 0.25 | 115 | 0.17 | 68 | 58.60 |
| Solar | 1 | 0.00 | 1 | 0.00 | 0 | 8.97 |
| **Total Generation** | **72,922** | | **69,176** | | **3,746** | **5.42** |

*Source: Power Statistics 2012, released June 2013*

Coal-fired power plant is still the major contributor of power supply in the Luzon grid having a share of 41.82 percent of the generation mix. Despite of several outages of coal-fired power plants in 2012, such as 300 MW Calaca Unit 1 (05 September 2011 – 25 July 2012), 382 MW Pagbilao Unit 2 (16 June – 09 July 2012) and 456 MW QPPL (20 January – 04 February and 27 February – 11 March 2012), generation from coal increased by 11.53 percent from 2011.

Generation from natural gas-fired power plants, such as Sta. Rita, San Lorenzo and Ilijan went down by 4.61 percent due to several outages attributed to the Malampaya Shutdown on 13 – 21 July 2012 wherein 1200 MW Ilijan Block A and B alternately went on planned outage from 12 July to 10 August 2012. Consequently, generation from oil-based power plants increased by 39.49 percent from 1,291 GWh in 2011 to 1,800 GWh in 2012 due to

the contribution of the 650 MW Malaya Oil Thermal Plant, 620 MW Limay Combined Cycle plant and 116 MW Subic Diesel Power Plant which were dispatched to replace the loss generation from natural gas.

Hydroelectric plants dominated all Renewable Energy-based plants in Luzon as it posted 5,292 GWh generation in 2012, 9.43 percent higher than the 2011 generation of 4,836 GWh. Utilization of geothermal power plants, mainly composed of APRI's Makban geothermal plant in Laguna and Tiwi Geothermal Plant in Tiwi, Albay, slightly increased by 2.94 percent to 3,588 GWh in 2012. Other RE plants such as wind and biomass decreased their generation in 2012 by 14.59 and 15.58 percent , respectively.

*Table 21. Luzon, 2012 and 2011 Comparative Generation, GWh*

| LUZON GRID | | | | | | |
|---|---|---|---|---|---|---|
| PLANT TYPE | 2012 | | 2011 | | Difference | |
| | GWh | % Share | GWh | % Share | GWh | % |
| Coal | 21,878 | 42 | 19,681 | 39 | 2,196 | 11.16 |
| Oil-based | 1,800 | 3 | 1,291 | 3 | 510 | 39.49 |
| Natural Gas | 19,642 | 38 | 20,591 | 41 | (950) | (4.61) |
| Geothermal | 3,588 | 7 | 3,486 | 7 | 103 | 2.94 |
| Hydro | 5,292 | 10 | 4,836 | 10 | 456 | 9.43 |
| Wind | 75 | 0.14 | 88 | 0.18 | (13) | (14.59) |
| Biomass | 37 | 0.07 | 44 | 0.09 | (7) | (15.58) |
| ***Total Generation*** | ***52,312*** | ***100%*** | ***50,017*** | ***100%*** | ***2,295*** | ***4.59*** |

*Source: Power Statistics 2012, released June 2013*

In Visayas, geothermal power plants contributed 51.65 percent of the total generation in 2012 at 5,930 GWh, higher by 5.61 percent compared to 5,616 GWh in 2011. Utilization of Coal-fired power plants registered an increase of 16.59 percent attributed to the commissioning of the 2 x 103 MW KEPCO-Salcon Power Corporation (KSPC), 2 x 82 Panay Energy Development Corporation (PEDC) and 3 x 82 MW Cebu Energy Development Corporation (CEDC) in 2011.

*Table 22. Visayas, 2012 and 2011 Comparative Generation, GWh*

| VISAYAS GRID | | | | | | |
|---|---|---|---|---|---|---|
| PLANT TYPE | 2012 | | 2011 | | Difference | |
| | GWh | % Share | GWh | % Share | GWh | % |
| Coal | 4,701 | 41 | 4,032 | 39 | 669 | 16.6 |
| Oil-based | 734 | 6 | 683 | 6 | 51 | 7.5 |
| Geothermal | 5,930 | 52 | 5,616 | 54 | 315 | 5.6 |
| Hydro | 46 | 0.40 | 53 | 0.51 | (7) | (13.1) |
| Biomass | 71 | 0.62 | 72 | 0.69 | (1) | (1.1) |
| **Sub-Total Visayas** | **11,483** | **100%** | **10,456** | **100%** | **1,027** | **9.8** |

*Source: Power Statistics 2012, released June 2013*

Despite the improved utilization of geothermal and coal power plants, oil-based power plants still played an important role during peak hours, contributing about 734 GWh in 2012 or 6.39 percent of the mix.

On the other hand, hydroelectric and biomass power plants, recorded a decline of 13.10 and 1.11 percent, respectively during the period due to shortage in water supply and bagasse.

Power situation in Mindanao remains a challenge due to tight power supply condition. In spite of this, generation for 2012 managed to increase by 4.87 percent. Hydroelectric

power plants comprising of NPC-owned Agus-Pulangi complex and other private-owned hydroelectric power plants contributed 53.84 percent of the total generation of the grid. Despite of the outages that occurred in 2012 especially during summer such as the planned outage of 255 MW Pulangi hydroelectric power plant in Bukidnon, which lasted from 17 April to 08 May 2012, hydroelectric power plants still registered an increase of 2.20 percent from 2011.

Oil-based power plants had the highest increase in generation by 20.78 percent from 1,424 GWh in 2011 to 1,720 GWh in 2012. This was due to continuous operation of the 200 MW TMI Power barges in Compostela Valley and Agusan del Norte. Despite its peaking characteristics, the power plants was operated as baseload due to shortage in supply. Meanwhile, slight increase was recorded by the STEAG-operated Mindanao coal – fired power plant since the plant was on preventive maintenance on 06 October – 10 November 2012. From 1,629 GWh in 2011, generation rose by 3.53 percent to 1,686 GWh in 2012.

EDC-operated Mt. Apo Geothermal power plants in North Cotabato posted a decline of 13.06 percent in 2012 attributed to the forced outage of the 54.2 MW MAGPP Unit 2 that occurred from 28 June to 11 August 2012 due to Electro-Hydraulic Control alarm trouble.

CEPALCO's Solar PV plant in Cagayan de Oro contributed about 1.32 GWh of solar power in 2012, higher by 8.97 percent compared to 2011. The 34.9 MW Crystal Sugar Company Inc. (CSCI) biomass plant in Bukidnon which is embedded to First Bukidnon Electric Cooperative, Inc. (FIBECO) generated 75 GWh in 2012. During the second quarter of 2012, CSCI started to deliver the uncontracted energy of FIBECO to the grid to be used by other electric cooperatives in Mindanao to lessen their load curtailment.

*Table 23. Mindanao, 2012 and 2011 Comparative Generation*

| PLANT TYPE | MINDANAO GRID | | | | | |
|---|---|---|---|---|---|---|
| | 2012 | | 2011 | | Difference | |
| | GWh | % Share | GWh | % Share | GWh | % |
| Coal | 1,686 | 18 | 1,629 | 19 | 57 | 3.5 |
| Oil-based | 1,720 | 19 | 1,424 | 16 | 296 | 20.8 |
| Geothermal | 731 | 8 | 841 | 10 | (110) | (13.1) |
| Hydro | 4,913 | 54 | 4,808 | 55 | 106 | 2.2 |
| Solar | 1 | 0.01 | 1 | 0.01 | 0 | 8.9 |
| Biomass | 75 | 0.82 | | | | |
| **Total Generation** | **9,127** | **100%** | **8,703** | **100%** | **424** | **4.9** |

*Source: Power Statistics 2012, released June 2013*

## B. Installed and Dependable Capacity

Total installed capacity in the country increased by 5.34 percent from 16,162 MW in 2011 to 17,025 MW as of May 2012. While dependable capacity grew by 4.07 percent to 15.066 MW from 14,477 MW in 2011.Luzon grid still holds the majority of the total installed capacity at 73.58 percent or 12,528 MW. Visayas at 14.38percent or 2,448MW and Mindanao at 12.04 percent or 2,049 MW.

*Table 24. 2012 Installed and Dependable Capacity of Luzon Grid*

| FUEL TYPE | LUZON | | | |
|---|---|---|---|---|
| | Capacity (MW) | | Percent Share (%) | |
| | Installed | Dependable | Installed | Dependable |
| Coal | 4,531 | 4,219 | 36 | 37 |
| Oil Based | 1,778 | 1,586 | 14 | 14 |
| Natural Gas | 2,861 | 2,759 | 23 | 24 |
| Geothermal | 824 | 587 | 7 | 5.2 |

| FUEL TYPE | LUZON | | | |
|---|---|---|---|---|
| | Capacity (MW) | | Percent Share (%) | |
| | Installed | Dependable | Installed | Dependable |
| Hydro | 2,462 | 2,147 | 20 | 19 |
| Wind | 33 | 17 | 0.26 | 0.15 |
| Biomass | 38 | 34 | 0.31 | 0.30 |
| **TOTAL** | **12,528** | **11,349** | 100% | 100% |

*Note: Excluding Off-grid generators;released on May 2013*

*Table 25. 2012 Installed and Dependable Capacity of Visayas Grid*

| FUEL TYPE | VISAYAS | | | |
|---|---|---|---|---|
| | Capacity (MW) | | Percent Share (%) | |
| | Installed | Dependable | Installed | Dependable |
| Coal | 806 | 777 | 33 | 37 |
| Oil Based | 670 | 505 | 27 | 24 |
| Geothermal | 915 | 777 | 37 | 37 |
| Hydro | 11 | 11 | 0.47 | 0.51 |
| Biomass | 44 | 32 | 1.8 | 1.5 |
| Natural Gas | 1 | 1 | 0.04 | 0.05 |
| **TOTAL** | **2,448** | **2,103** | **100%** | **100%** |

*Note: Excluding Off-grid generators; released on May 2013*

*Table 26. 2012 Installed and Dependable Capacity of Mindanao Grid*

| FUEL TYPE | MINDANAO | | | |
|---|---|---|---|---|
| | Capacity (MW) | | Percent Share (%) | |
| | Installed | Dependable | Installed | Dependable |
| Coal | 232 | 210 | 11 | 13 |
| Oil Based | 625 | 470 | 30 | 29 |
| Geothermal | 108 | 98 | 5. | 6 |
| Hydro | 1,047 | 826 | 51 | 51 |
| Solar | 1 | 0 | 0.05 | 0.02 |
| Biomass | 36 | 10 | 1.8 | 0.62 |
| **TOTAL** | **2,049** | **1,614** | **100%** | **100%** |

*Note: Excluding Off-grid generators; released on May 2013*

*Table 27. 2012 Installed and Dependable Capacity of the Philippines*

| FUEL TYPE | PHILIPPINES | | | |
|---|---|---|---|---|
| | Capacity (MW) | | Percent Share (%) | |
| | Installed | Dependable | Installed | Dependable |
| Coal | 5,568 | 5,206 | 33 | 34 |
| Oil Based | 3,074 | 2,561 | 18 | 17 |
| Natural Gas | 2,862 | 2,760 | 17 | 18 |
| Geothermal | 1,848 | 1,462 | 11 | 10 |
| Hydro | 3,521 | 2,983 | 21 | 20 |
| Wind | 33 | 17 | 0.19 | 0.12 |
| Solar | 1 | 0 | 0.01 | 0.00 |
| Biomass | 119 | 76 | 0.70 | 0.51 |
| **TOTAL** | **17,025** | **15,066** | **100%** | **100%** |

*Note: Excluding Off-grid generators; released on May 2013*

The increase in installed capacity in the country can be credited to the power plants that went on commercial operation in 2012 such as 3.2 MW Bukidnon Diesel Power Plant,

owned by King Energy Generation, Inc. (KEGI), 8 MW Cabulig Hydroelectric Power Plant, owned by Minergy, 1.02 MW Libertad Gas in Cebu and additional 14.9 MW Biomass power plant by Crystal Sugar Co. Inc. Also, there were power plants that started commercial operation in 2013 such as 21 MW CIP II oil-based power plant in La Union, 1.2 MW Waste-to-Energy Plant in Payatas, Quezon City, 19.8 MW Biomass power plant by Green Future and the 2 x 325 MW coal-fired power plant by GN Power.

*Table 28. Philippines, 2012 and 2011 Comparative Installed and Dependable Capacity*

| FUEL TYPE | Installed Capacity (MW) | | Difference | Dependable Capacity (MW) | | Difference |
|---|---|---|---|---|---|---|
| | 2012 | 2011 | MW | 2012 | 2011 | MW |
| Coal | 5,568 | 4,917 | 652 | 5,206 | 4,651 | 555 |
| Oil Based | 3,074 | 2,994 | 79 | 2,561 | 2,579 | (18) |
| Natural Gas | 2,862 | 2,861 | 1 | 2,760 | 2,770 | (10) |
| Geothermal | 1,848 | 1,783 | 64 | 1,462 | 1,434 | 28 |
| Hydro | 3,521 | 3,491 | 30 | 2,983 | 2,963 | 20 |
| Wind | 33 | 33 | 0 | 17 | 33 | (16) |
| Biomass | 119 | 83 | 36 | 76 | 46 | 30 |
| Solar | 1 | 1 | 0 | 0 | 1 | (1) |
| **TOTAL** | **17,025** | **16,162** | **863** | **15,066** | **14,477** | **589** |

*Note: Excluding Off-grid generators; released on May 2013*

## C. System Peak Demand

The system peak demand for Luzon grid for 2012 was recorded at 7,863 MW which occurred on 25 April. This was 4.12 percent higher than the recorded demand of 7,552MW which happened on June 2011. This was due to the high electricity demand for the air conditioning and other cooling equipment of the residential and commercial sector during the summer season.

The highest recorded coincident peak demand in Visayas for 2012 occurred on 12 December 2012 at 1,543MW. This was 4.19 percent higher than the previous year's demand of 1,481 MW which also occurred on December 2011. In sub-grid level, Cebu reflected the hightest demand with 743.48 MW or 48.18 percent share to the total Visayas demand.

On the other hand, Mindanao is still suffering low demand due to continuous load curtailment and rotating brownouts in their area in2012. The recorded demand was 1,257 MW which occurred on 19 December 2012. This was 3.08 percent lower than the demand in 2011 with 1,297 MW.

## D. Electricity Sales of Distribution Utilities

*Table 29. 2012 and 2011 Comparative Electricity Sales of Distribution Utilities, Philippines*

| Sector | PHILIPPINES | | | | | |
|---|---|---|---|---|---|---|
| | 2012 | | 2011 | | Difference | |
| | GWh | % Share | GWh | % Share | GWh | % Growth Rate |
| Residential | 19,695 | 36.3% | 18,694 | 36.3% | 1,001.4 | 5.4% |
| Commercial | 17,777 | 32.7% | 16,624 | 32.7% | 1,153.4 | 6.9% |
| Industrial | 15,532 | 28.6% | 14,217 | 28.6% | 1,314.5 | 9.2% |
| Others | 1,317 | 2.4% | 1,299 | 2.4% | 17.8 | 1.4% |
| **Total Sales** | **54,321** | | **50,834** | **85.4%** | **3,487.1** | **6.9%** |

*Source: DOE*

The healthy growth of the Philippine economy in the year of the water dragon was the key fuel behind the aggressive performance of the Electricity Sales among the distribution utilities despite of the sagging global economy. Fuelled by the[1]country's full-year Gross Domestic Product (GDP) estimate growth of 6.6 percent in 2012, the electricity sales of the distribution utilities grew by 6.9 percent in 2012, a remarkable performance from the 1.8 percent timid growth in 2011. The expansion recorded can be traced to higher consumption from all major sectors, consistent with the outstanding performance of the property sector (real estate activity) and business activities driven mainly by the growing demand from the offshoring and outsourcing (O&O) industry.

The total electricity sales of the DUs all over the country posted a favorable figure of 54,321 GWh in 2012 from a lackluster performance of the previous year of 50,834 GWh. Out of these total sales, 40,325 GWh or 74.2 percent was contributed by Private Investor Owned Utilities (PIOU's), while 13,996 GWh or 25.8 percent was from the Electric Cooperatives.

*Figure 7. 2012 Electricity Sales by Sector, Philippines*

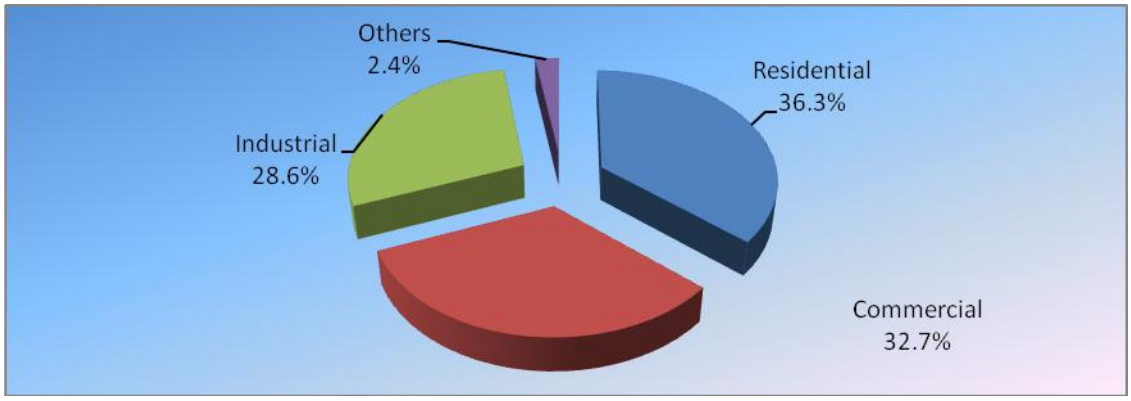



*Table 30. 2012 Electricity Sales ( in GWh) by Distribution Utilities by Grid, Philippines*

| TYPE OF DISTRIBUTION UTILITIES | LUZON | VISAYAS | MINDANAO | PHILIPPINES |
|---|---|---|---|---|
| **Electric Cooperatives (EC's)*** | | | | |
| Residential | 3,699 | 1,734 | 1,881 | 7,314 |
| Commercial | 1,587 | 897 | 957 | 3,442 |
| Industrial | 772 | 517 | 974 | 2,263 |
| Others | 467 | 244 | 266 | 977 |
| **Total Sales of ECs** | **6,525** | **3,393** | **4,078** | **13,996** |
| | | | | |
| **Private Investors Owned Utilities (PIOU's)** | | | | |
| Residential | 10,564 | 934 | 884 | 12,381 |
| Commercial | 13,318 | 528 | 489 | 14,335 |
| Industrial | 10,306 | 1,634 | 1,327 | 13,268 |
| Others | 224 | 68 | 49 | 340 |
| **Total Sales of PIOUs** | **34,412** | **3,164** | **2,748** | **40,325** |
| **Total Sales of DUs** | **40,937** | **6,557** | **6,827** | **54,321** |

*Note: * Includes Off-Grid Sales*
*Source: DOE*

[1] *National Statistical Coordination Board, National Accounts, Q4 and Annual 2012, Philippine Economy Posts GDP Growth of 6.8 percent in Q4 2012, 31 January 2013, http://www.nscb.gov.ph/sna/2012/4th2012/2012qpr4.asp*

On a per grid basis, Visayas grid ranked the highest in terms of growth in electricity sales, representing an increase of 7.3 percent over the previous year. The continued surge can be attributed largely to the stable power supply situation in the Visayas. The sustained growth of manufacturing and the rebound of construction industry boosted the energy sales in the grid. The continued and improved power supply in the Visayas grid coupled with the government's efforts to entice private investments and undertake additional infrastructure projects drew in more new businesses and regional economic expansions in the region.

Favorable performance was also registered in the Luzon grid which grew by 6.9 percent. The increase came from the positive contribution of all the sectors, particularly the resilient commercial and industrial sector which remains as the grid's engine of energy sales growth supported by the sustained growth of residential sector.

Mindanao electricity sales increase by 6.1 percent in 2012 from 5.5 percent a year ago. The commercial sector grew by 9.2 percent, the highest growth among all sectors. All other sectors recorded positive growths, and continued to accelerate due to the availability of hydroelectric power plants of the grid during the rainy seasons. Similarly, the expansion on Mindanao electricity sales can be attributed to the continued reconstruction on damages mainly on the distribution and transmission side caused by the adverse impact of typhoon Pedring in September 2011 and other storms experienced by the grid during the last quarter of the previous year.

### ❖ Industrial Sector

Electricity sales of the industrial customers comprised 15,532 GWh or 28.6 percent of total electricity sales in 2012, implying an increase of 9.2 percent from 14,217 GWh in 2011.

The beyond expectation full-year growth was driven by the impressive performance of the Luzon industrial customers, posting a significant increase of 9.9 percent in 2012. The rebound of the construction industry and the huge boost of manufacturing industry particularly, electrical machinery from a rough pace during the second semester last year pushed the growth of the energy sales in the Luzon grid.

Meanwhile, the sustained growth in energy sales of the industry sector in the Visayas grid also contributed a significant surge of 10.4 percent from 1,950 GWh in 2011 to 2,152 GWh in 2012. The industry sector continued to be one of the dominant sectors in the Visayas grid in 2012. Aggregate industry sustained its growth specifically in manufacturing, driven by the increased production of food manufactures. Likewise, the economic headlock of the manufacturing sub-sector still relied on the metals and chemical and heavy industries as mining and quarrying activities across the grid significantly pushed the growth of the energy sales of the grid.

Similarly, the electricity sales of the industry sector in Mindanao continued to grow, albeit at a slower pace compared to the other grids due to adverse weather condition. The industry sector electricity sales, which expanded by 5.4 percent in 2012 from 2,301 GWh to 2,183 GWh in 2011, was driven primarily by Mindanao's manufacturing sector, cornering two-thirds of the total industry's output.

### ❖ Residential Sector

Electricity sales in residential sector grew by 5.4 percent in 2012, a turnaround from the 0.7 percent contraction from the previous year. The dramatic improvement of the residential sector' sales can be traced mainly to the increased consumption from this sector paralleled to the post-double digit growth of the newly-connected customers

conveyed from the consistent uptrend in the residential property trades. Likewise, higher temperature during the summer months led to increased usage of air cooling appliances.

The 5.2 percent robust increase in Luzon grid's sales for the residential sector affected the whole country and was immensely fuelled by the higher temperature during the summer months which led to increased usage of air cooling appliances. In addition, the expansion was also driven largely by the gained momentum of the household consumption and exports on the expenditure side that significantly pushed the consumption growth on the household utilization of electronic appliances for food preparation and recreation.

In Visayas, electricity sales have also posted a remarkable increase of 5.6 percent or an equivalent of 2, 668 GWh from the year-ago level of 2,527 GWh.

On the other hand, sales of electricity in Mindanao were flabbier than of the other two grids. Mindanao residential customers grew, albeit at a slower pace of 6.0 percent in the second semester of 2012 from 6.7 percent rise in overall residential sales for Mindanao in 2011.

### ❖ Commercial Sector

Commercial consumption increased at markedly higher rate from an insipid growth performance of 4.7 percent in 2011 to a resilient sales growth of 6.9 percent in 2012. Similar to the previous year, sales in the commercial sector was driven mainly by real estate services sub-sector along with trade and private services sub-sectors. Improved commercial energy sales in 2012 were driven by the increase in cooling load due to the striving domestic investment, supported by the growth pace of business process outsourcing, hotels and restaurants, wholesale and small-scale trade and retail establishments, and import and export trading.

The uptick in electricity sales inflation for the commercial sector for the three power grids, on the other hand, was mainly due to the brisk performance of the real estate activities, renting and business activities engaged in transport, storage and communication, and the recovery of the trading activities towards the end of the semester. Further, the resilient continued demand for services sector such as laundry services, medical and health services, educational services, hotels and restaurants, spas and beauty parlors, remained the main driver of growth of electricity sales to the commercial sector.

### ❖ Others

Others refer to public buildings, street lights, irrigation, agriculture and "others not elsewhere classified". This group recorded a very timid increase of 1.4 percent from 1,299 GWh in 2011 to 1,317 GWh in 2012. This was due to the decline in government spending as well as a slowdown on infrastructure in 2012 such as public buildings and the continued decline of the farmers and fisher folks engaged on agriculture sector mainly due to the reduced production of main crops (palay, corn and including other crops) and fishing driven by the unfavorable weather also contributed to the bland performance of "other" sector.

## E. Power Situation Highlights, January to April 2013

LUZON

For the period January to April 2013, the system peak demand was 8,221 MW which occurred on 25 April 2013, , 4.21% higher compared to the system peak demand of 7,889 MW that occurred on the same period in 2012. Maximum and minimum available capacity for the first quarter of 2013 were 8,824MW (01 February 2013) and 7,243 MW (13 January 2013) respectively, with an average available capacity of 8,170MW.

Following are the reports on the major plant outages that occurred during the report period:

*Coal*

- Calaca U2 (300 MW) went on planned outage due to maintenance from 30 December 2012 to 27 January 2013.
- Pagbilao U1 (382 MW) on planned outage from 17 February to 13 March 2013 while U2 (382 MW) on planned outage since 16 June 2012.
- Masinloc U1 (315 MW) on planned outage from 29 December 2012 to 02 February 2013.
- Quezon Power Philippines Ltd. (460 MW) on planned outage from 11 to 28 January 2013.
- GN Power (600 MW) under testing and commissioning stage.

*Natural Gas*

- Sta Rita U4 (265 MW) on planned outage from 02 February to 08 March 2013. Sta Rita U4 (265 MW) also went on PMS from 15 March to 21 April 2013.

*Oil – Based*

- Limay A4 (100 MW) on forced outage since 15 April 2011 due to Generating bearing trouble. B6 (70 MW) also on forced outage since 08 November 2013 due to excessive vibration of bearing.
- Malaya U2 (350 MW) on planned outage since 15 March 2013 due to the repair of Smoke Stack.

*Geothermal*

- Bacman U1 (55 MW) resume its operation on 21 January 2013 but went back to unplanned outage since 28 February 2013.
- Makban U5 and U6 (2 x 63 MW) ended their outage in early March 2013 for their performance testing in compliance with the Asset Purchase Agreement with PSALM.

*Hydro*

- Angat Main U2 (50 MW) still on planned outage since 24 May 2011 due to APMT.
- Ambuklao (3 x 35 MW) on planned outage from 10 February to 10 March 2013.
- Magat U2 (90 MW) on planned outage from 04 to 22 February 2013 while U3 (90 MW) will be half-life refurbishment from 11 March until 04 September 2013.
- Binga U2 (25 MW) for refurbishment since 21 January 2013.

VISAYAS

For the period January to April 2013, coincident system peak demand in the Visayas grid was recorder at 1,545 MW which occurred on 16 April 2013, 7.28 % higher to the coincident system peak demand of 1,440 MW that occurred in the same period in 2012. Maximum and minimum available capacity for 2012 were 1,854MW (25 March 2013)

and 1,601MW (02 February 2013), respectively. The computed average available capacity was 1,775MW.

Following are the reports on the major plant outages that occurred during the report period:

*Coal*

- Panay Energy Development Corporation U1 (82 MW) on forced outage from 19 December 2012 to 09 January 2013 due to high pressure at the furnace. U2 (82 MW) on planned outage from 01 to 17 February 2013.
- Cebu Thermal Power Plant 1 (50 MW) on planned outage from 14 to 23 May 2012 while Cebu Thermal Power Plant 2 (56 MW) went on forced outage from 19 to 28 February 2013 (Boiler tube leak) and on 06 to 14 March 2013 (Burnt power supply cable).

*Hydro*

- Amlan Hydroelectric Power Plant (0.8 MW) unavailable since 17 December 2011 due to the flood and landslide caused by typhoon Sendong.

*Geothermal*

- Northern Negros Geothermal Power Plant (49.4 MW) decommissioned based on 01 July 2011 letter of EDC to EPIMB.
- Unified Leyte - Mahanagdong A U1 (60 MW) on planned outage since 14 January 2013 due to Preventive Maintenance Schedule (PMS).
- Palinpinon Geothermal Power Plant I U3 (37.5 MW) on planned outage from 10 January to 15 March 2013 due to PMS.

*Oil-Based*

- Most Oil- based power plants in Visayas run per Real-Time Dispatch (RTD).
- Nabas U3 (5 MW) on forced outage since 18 May 2012 due to cut off connecting rod.

<u>MINDANAO</u>

System peak demand in Mindanao was recorded at 1,210 MW for the period January to April 2013. System peak demand which occurred on 14 January 2013, was slightly higher by 0.25 percent compared to the same period last year. Maximum and minimum available capacity were 1,334MW (04 January 2013) and 968MW (16 March 2013), respectively, with an average available capacity of 1,178MW.

Following are the reports on the major plant outages that occurred during the report period:

*Coal*

- Mindanao Coal-fired Power Plant U1 (105 MW) on planned outage from 16 to 17 March 2013 while U2 (105 MW) also went on planned outage from 02 to 04 February 2013.

*Oil-Based*

- Therma Marine Inc. 1 U2 (50 MW) went on forced outage from 18 March to 05 May 2013 due to the tripping caused by AC Directional Overcurrent Relay activation.
- Mapalad Power Corporation / former Iligan Diesel Power Plant 1 (69.6 MW) started its operation on 26 April 2013 under Alsons Power.

*Hydro*

- Pulangi IV U1 (85 MW) on planned outage from 01 to 25 March 2013 while U3 (85 MW) also went on planned outage from 01 to 20 April 2013.
- Agus 1 U1 (40 MW) on planned outage from 15 January to 06 February 2013. U2 (40 MW) went on planned outage from 19 to 26 February 2013.
- Agus 2 U1 (60 MW) on forced outage from 02 April until 18 June 2013. U3 (60 MW) on planned outage from 05 to 27 February 2013.

## C. Initiatives to Address the Mindanao Power Situation

In view of power generation deficiency in Mindanao grid, the government has initiated the following programs/immediate solutions to the Mindanao power situation until new capacities come on stream by 2015:

1. Iligan Diesel Power Plant (IDPP)

The IDPP will provide an additional 100 MW to the Mindanao grid. The City of Iligan and Conal Holdings have finally agreed and executed a Deed of Sale for the IDPP at the purchased price set by the Commission on Audit (COA). The rehabilitation program for the IDPP started last 11 March 2013 with the objective of making all engines fully operational in 6 months:

- 15 MW – April 2013
- 30 MW – May 2013
- 50 MW – June 2013
- 98 MW – September 20

2. IMEM

The IMEM developed by the DOE in coordination with PEMC is a mandatory program for all generation capacities, customers with embedded generation, and DUs that aim to provide real-time correction on energy imbalances. It is a venue for transparent and efficient utilization of all available capacities in the Mindanao Grid to meet the supply deficiency. On 09 January 2013, the DOE issued Department Circular DC2013-01-0001, "Directing the Philippine Electricity Market Corporation to Develop and Implement an IMEM as a Measure to Immediately Address the Power Supply Situation in Mindanao". The preparation of the IMEM Rules are underway during the period.

3. Interruptible Load Program (ILP)

The ILP is a mechanism which allows for the compensation of customers of a DU for voluntarily taking itself off the grid during peak demand. When it takes itself off the grid, said customer is compensated. The ERC on 06 May 2013 has approved the petition of Davao Light and Power, Inc. for the revision of cost recovery for the ILP intended to encourage participation from customers.

4. Modular Genset Program

The proposal involves the national government setting up a trust fund for the financing of the acquisition and/or rental of modular gensets for ECs in Mindanao. On 22 March 2013, the DOE conducted meeting with the AMRECO-member ECs in Cagayan de Oro to discuss the option of modular gensets as immediate solutions to Mindanao power situation.

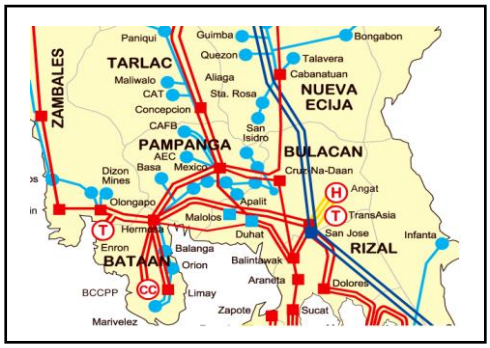
## D. Status of Transmission Projects

LUZON

The Luzon Substation Expansion Project 1 involves installation of additional transformers to accommodate load growth and provide N-1 at various the following substations: Batay, Bauang, Biñan, Cabanatuan, Cruz-na-Daan, Laoag, and Naga. All additional transformers have been energized at various dates with the Naga transformer energized last 16 December 2012.

The Mariveles Coal Transmission Reinforcement Project involves the associated grid reinforcements needed to allow the full dispatch of the both the proposed Mariveles 600 MW Coal-Fired Power Plant (CFPP) and Limay Combined-cycle Power Plant (CCPP). The grid reinforcements involve the reconductoring of the existing Hermosa-Limay B-CCPP 230 kV line to maintain the N-1 provision of the line during the maximum dispatch of both CFPP and B-CCPP units. Likewise this project also includes the replacement of PCBs at San Jose and Hermosa. Overall, the project with the following components: 1) PCB replacement for Hermosa/San Jose completed on 17 April 2013; and 2) BCCPP S/S expansion at 81.55 % complete, with target date of completion on 31 October 2013.

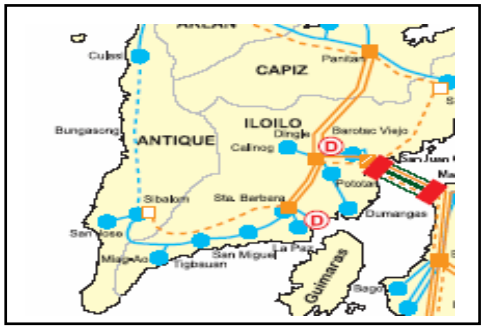
*Figure 8. Mariveles Coal Transmission Reinforcement Project*




VISAYAS

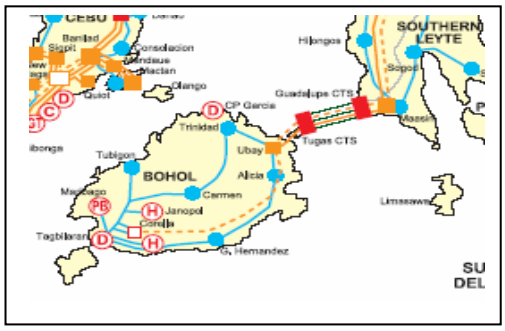
The Southern Panay Backbone 138 kV Transmission Project is part of the Panay Power Transmission backbone which involves the installation/construction of a total of 97 kilometers of 138 kV and 69 kV overhead transmission lines which is aimed to accommodate the load growth and address the low voltage problem in southern Panay. As of 31 March 2013 the transmission and substation components of the project are 98% and 75% complete respectively.

*Figure 9. Southern Panay Backbone 138 kV Transmission Project*



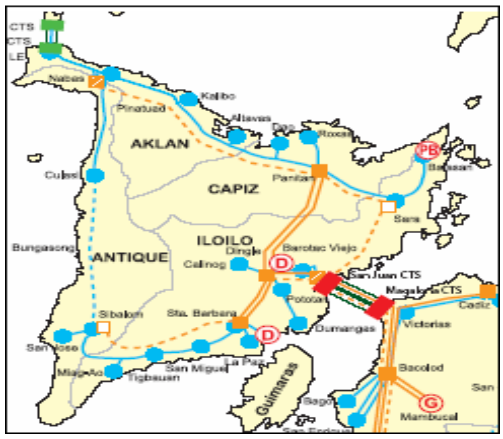

The Bohol Backbone 138 kV Transmission Project involves the installation/construction of a total of 96 kilometers of 138 kV overhead transmission line utilizing steel tower structures and the installation of a 100 MVA power transformer at the new Corella Substation which is intended to provide a new delivery point. As of 31 March 2013 the transmission and substation components of the project are 98% and 70% complete respectively.

*Figure 10. Bohol Backbone 138 Transmission Project*



The Negros-Panay Interconnection Project (Panay Side) ia an ERC approved project located in Negros and Panay Islands. It is made up of two components: Phase 1 on the Panay side of the interconnection and the Pahse on the Negros side of the interconnection. The entire Negros-Panay Interconnection Project was approved but optimized down to only 25% allowing Phase 1 to be implemented and Phase 2 to follow. For Phase 1, Line 2 of the San Juan-Dingle Transmission Line component was energized las 28 December 2011 while the substation components namely, Dingle S/S and San Juan S/S (New) were energized 28 December 2011 and 11 December 2012 respectively.

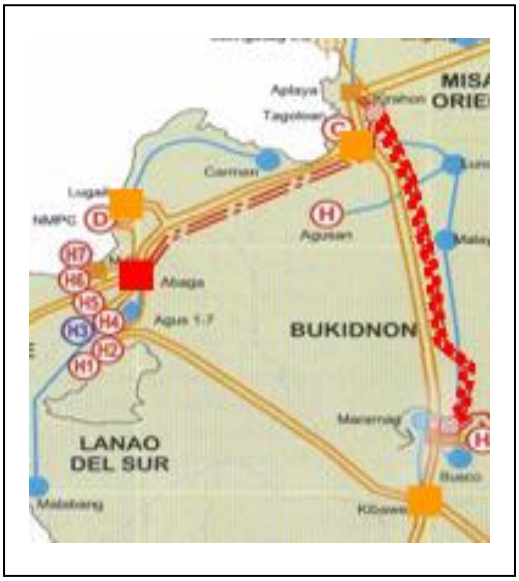
*Figure 11. Negros-Panay Interconnection Project (Panay Side)*




MINDANAO

In the Mindanao Grid, the Balo-I (Abaga)-Villanueva (Kirahon) 230kV Transmission Project will provide additional; transmission corridor the Agus Hydro complex. 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 increasing demand in Davao area. Likewise the Villanueva (Kirahon)-Maramag 230 kV Transmission Project, will complete the 230Kv Transmission Backbone linking northern and southern Mindanao. Both these projects are designed at 230kV but will initially be energized at 138kV. As of 31 October 2012, the transmission and substation component of the Balo-I (Abaga)-Villanueva (Kirahon) 230kV Transmission Project are 95% and 90% complete while the Villanueva (Kirahon)-Maramag 230 kV Transmission Project is approximately 94% complete.

*Figure 12. Balo-I (Abaga_-Villanueva (Kirahon) 230kV Transmission Project*




The Aurora-Polanco 138 kV T/L Project is intended to serve the growing power demand of Dipolog City and surrounding load centers. This will ensure a continuous and reliable power supply in the area. Currently, Dipolog City including neighboring cities and municipalities draw their power requirements from the Aurora Substation a very long 69 kV single circuit transmission line. As of 31 March 2013 the transmission and substation components of the project are 30% and 26 % complete respectively.

*Figure 13. Aurora-Polanco 138 kV T/L*

## E. Distribution Infrastructure Projects

❖ *ERC-Approved Capital Expenditure (CAPEX) Projects*

During the report period, the ERC approved eight (8) Capital Expenditure (CAPEX) Projects applied by Davao Del Norte Electric Cooperative, Inc. (DANECO), Guimaras Electric Cooperative, Inc. (GUIMELCO), Iloilo III Electric Cooperative, Inc. (ILECO III), Sultan Kudarat Electric Cooperative, Inc. (SUKELCO), Zamboanga Del Sur II Electric Cooperative, Inc. (ZAMSURECO II), Cagayan II Electric Cooperative, Inc. (CAGELCO II), and Tarlac I Electric Cooperative, Inc. (TARELCO I). *Annex 13* shows the said approved CAPEX projects as of March 2013.

❖ *Private Sector Financing of CAPEX Projects on System Loss Reduction*

The Electric Cooperative - Partial Credit Guarantee (EC-PCG) Program is one of the potential sources of private sector funds that can be accessed by ECs to finance their CAPEX projects. It aims to provide the ECs with easy access to affordable commercial loans through the provision of partial credit guarantee coverage of up to 80% of the principal and interest of the ECs outstanding loans. There is a US$10.0 million earmarked as the EC-PCG Program Fund that is being managed by the LGU Guarantee Corporation (LGUGC) that can be leveraged up to three times. The EC-PCG Program is one of the project components of the Electric Cooperative System Loss Reduction Project (ECSLRP), a US$12.0 million grant from the World Bank, through the Global Environment Facility, being jointly implemented by the DOE and LGUGC.

On June 16, 2009, the LGUGC and NEA entered into a co-financing agreement to strengthen the EC-PCG Program. Under the co-financing agreement, the loan requirement of an EC shall be co-financed by NEA from its own funds and LGUGC, through the loan facility of its accredited financial institutions (AFIs) with partial guarantee coverage from the EC-PCG Program. In addition, this co-financing agreement also authorizes NEA to exercise its step-in rights in case of loan default by ECs for and in behalf of LGUGC and its AFIs.

From November 2012 to April 2013, five (5) ECs enrolled under the EC-PCG Program, namely LUELCO, BENECO, PALECO, FICELCO, and BUSECO, for total loan amount of PhP653.18 million to finance their capital expenditure projects. With these additional EC accounts, the EC-PCG Program has 18 loan guarantees issued to ECs in Table 31.

*Table 31. ECs Booked in EC-PCG Program*

| | EC | Loan Amount (PhP Million) | Lender | Signing Date or Loan and Guarantee Agreements |
|---|---|---|---|---|
| **A.** | **Booked Accounts with Loan Release** | | | |
| 1 | MORESCO I | 115.00 | Security Bank | 20 July 2010 |
| 2 | PANELCO I | 113.00 | Bank of the Philippine Islands (BPI) | 15 September 2010 |
| 3 | SOCOTECO I | 102.42 | BPI | 04 October 2010 |
| 4 | SURNECO | 85.00 | United Coconut Planters Bank (UCPB) | 03 March 2011 |
| 5 | BUSECO | 135.901 | BPI | 07 February 2011 |
| 6 | FIBECO | 143.00 | Allied Banking Corporation (Allied Bank) | 10 May 2011 |
| 7 | BOHECO I | 109.62 | Development Bank of the Philippines | 03 June 2011 |
| 8 | CANORECO | 133.248 | BPI | 12 July 2011 |
| 9 | DANECO | 172.366 | UCPB | 20 September 2011 |
| 10 | MORESCO II | 135.49 | BPI | 22 November 2011 |
| 11 | MOELCI I | 167.73 | UCPB | 06 July 2012 |
| 12 | LUELCO | 173.125 | Allied Bank | 07 December 2012 |
| 13 | CAMELCO | 140.00 | BPI | 09 November 2011 |
| 14 | NEECO I | 173.538 | Allied Bank | 06 June 2012 |
| 15 | BENECO | 163.498 | BPI | 29 December 2012 |
| **15** | **Sub-Total (A)** | **2,082.84** | | |
| **B.** | **Committed Accounts (Booked Accounts with no releases yet)** | | | |
| 1 | PALECO | 166.966 | Allied Bank | 19 December 2012 |
| 2 | BUSECO (Additional) | 43.494 | Philippine National Bank (PNB) | 12 December 2012 |
| 3 | FICELCO | 106.10 | Security Bank | 07 March 2013 |
| **3** | **Sub-Total (B)** | **316.559** | | |
| **18** | **Total (A+B)** | **2,379.50** | | |

*Source: DOE, LGUGC*

## VI. TOTAL ELECTRIFICATION

In support of the Government's efforts to alleviate poverty, the DOE launched a massive and focused action to increase and accelerate access to electricity services by the country's unenergized communities.

*Table 32. Electrification Targets Per Implementors*

| | |
|---|---|
| **DOE** | **6** |
| BEP | 1 |
| RAES | 5 |
| ER 1-94 | 0 |
| MERALCO | 0 |
| **AMORE** | **0** |
| **Total** | **6** |

*Source: DOE*

To further strengthen and integrate efforts on rural electrification by both the Government and the private sector, and assist the DOE to develop innovative and sustained policies and strategies consistent with the power sector reforms embodied in the EPIRA, the Expanded Rural Electrification Program (ER Program) was established, building around the basic concepts and objectives of its predecessors. The ER Program aims to achieve 100% barangays electrification by 2008 and 90% household electrification by 2017. As of 30 April 2013, the Program has already achieved 99.98 percent of the total potential barangay nationwide. The energization of 41,968 barangays was spearheaded by the DOE with assistance from the NEA, NPC-SPUG, and PNOC and its subsidiaries.

*Table 33. Barangay Electrification Status as of April 2013*

| 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 | 4,010 | 0 | 100.00 |
| IV-B | 1,458 | 1,458 | 0 | 100.00 |
| V | 3,469 | 3,469 | 0 | 100.00 |
| NCR | 1,695 | 1,695 | 0 | 100.00 |
| ***SUB-TOTAL LUZON*** | ***20,486*** | ***20,486*** | **0** | **100.00** |
| VI | 4,050 | 4,050 | 0 | 100.00 |
| VII | 3,003 | 3,003 | 0 | 100.00 |
| VIII | 4,389 | 4,389 | 0 | 100.00 |
| ***SUB-TOTAL VISAYAS*** | ***11,442*** | ***11,442*** | **0** | **100.00** |
| 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 | 2,458 | 2,444 | 9 | 99.43 |
| CARAGA | 1,310 | 1,310 | 0 | 100.00 |
| ***SUB-TOTAL MINDANAO*** | ***10,046*** | ***10,040*** | **6** | **99.94** |
| **TOTAL PHILIPPINES** | **41,974** | **41,968** | **6** | **99.99** |

*Source: DOE*

On 17 July 2013, the DOE launched the Household Electrification Development Plan (HEDP) 2013-2017 aims to meet the Government's target of achieving 90 percent household (HH) electrification by 2017. This is consistent with the declared policy of the State to ensure and accelerate the total electrification of the country as provided in Sec. 2(a) of the EPIRA of 2001. Said law also mandates the DUs to provide universal service in their franchise areas including unviable areas at a reasonable time. The Philippine Development Plan 2011-2016 has likewise carried this target of 90 percent HH electrification by 2017.

As of 2012, the HH electrification level in the country is about 76.46% based on 16.07 million electrified HHs reported by the DUs and a projected 21.01 million total HH population (2010 Census). At most 4.9 million unelectrified HHs are mostly located in remote rural areas and the outskirts of the cities. Said figures do not reflect at least 5 percent of the total households that obtain their electricity through informal/illegal connections. The country's electrification remains lower compared to other ASEAN counterparts such as Thailand, Malaysia and Vietnam whose electrification level have already reached more than 95 percent.

| | TOTAL HHs | Served HHs | Unserved HHs | HH Elec Level |
|---|---|---|---|---|
| As of 31 December 2012 | | | | |
| 119 ECs | 13,137,012 | 8,978,344 | 4,158,668 | 68.34% |
| MERALCO | 5,895,355 | 5,840,879 | 54,476 | 99.08% |
| Other DUs | 1,978,523 | 1,246,436 | 732,087 | 63.00% |
| **PHILIPPINES** | **21,010,890** | **16,065,659** | **4,945,231** | **76.46%** |

*NOTE:*
*HH populations are from NSO 2010 Census. Served HHs are from 2011 DDP (for PIOUs) and NEA's Status of Electrification (for all ECs).*
- 4.2M unelectrified HHs in EC franchise areas
- 0.054M unelectrified HHs in MERALCO areas
- ~ 600 thousand HHs (5% of total) possibly not yet covered by existing reports of DUs (HECS Studies)

*Source: DOE*

- HEDP Major Programs And Activities

Different planned programs, projects and activities to implement the different policy measures and strategies in order to attain the Government's goal of 90% household electrification by end of year 2017. The individual DDP submissions of the DUs shall incorporate necessary changes to include incremental activities in support to HEDP as well as the implications of increased household electrification in their respective demand forecasts, including measures to avoid overloading of facilities and other performance impacts.

In summary, the grid electrification will remain the main strategy of the Government's household electrification program due to its unlimited potential contribution towards greater economic opportunities and improvement of the quality of life of Filipino households. Intensification of household connections in areas with existing electrification shall be pursued by DUs using more pro-active and innovative marketing strategies. Problems of urban electrification shall also be addressed. For off-grid and far-flung areas, the Government shall promote the scaled-up utilization of decentralized, renewable energy systems and technologies such as solar home system (SHS), micro-hydro, biomass and wind systems. SHS and other decentralized systems are viewed as the main strategy of the DUs to fulfill their universal service obligation, control the number of marginal end-users, and ensure the reliability and quality of the distribution system. Corresponding capacity building activities, policy development and other technical assistance shall be undertaken to ensure the attainment of the program goal.

1. *Intensification of the Household Connections Program*

This aims to encourage DUs to fast-track the connections of unelectrified HHs located in the existing electrified areas (rural and urban). DOE, in cooperation with LGUs, DUs and other stakeholders, will develop strategies to promote the intensification activities such as streamlining of connection process, LGU-DU tie-ups for assistance in connection permits, etc. MERALCO and other DUs covering cities and large urban areas shall be encouraged to address the issue of slum electrification and illegal connection.

2. *NEA's Sitio Electrification Program*

This refers to NEAs program of attaining 100 percent sitio electrification in the country. To enhance the efficiency of the program, NEA and ECs must ensure that only deserving poor HHs shall be accorded with grants for connection costs and housewiring. In addition, sitios that are deemed located within the commercial parts of the DU's franchise area must be deemed as least priority and should be considered for DU's own financing. Sitios that are deemed too remote, with highly dispersed households, and no productive use opportunities should be considered for off-grid electrification such as SHS and micro-grids.

| Year | Targets | Project Cost (PhpB) | Accomp. | Cumulative Total Accomp. | House Connection | Remaining Balance (Unenergized Sitios) |
|---|---|---|---|---|---|---|
| Baseline No. of Unenergized Sitio (June 2011) | | | | | | 32,441 |
| 2011 | 1,410 | 0.814 | 1,520 | 1,520 | 30,014 | 30,921 |
| 2012 | 6,007 | 4.053 | 6,163 | 7,683 | 180,210 | 24,758 |
| 2013 | 10,394 | 6.650 | 898 | 18,077 | 311,820 | 14,364 |
| 2014 | 7,107 | 4.548 | | 25,184 | 213,210 | 7,257 |
| 2015 | 7,257 | 4.644 | | 32,441 | 212,710 | 0 |
| ***Total*** | ***32,175*** | ***20.709*** | ***8,581*** | ***84,905*** | ***947,964*** | |

*Source: NEA*

3. *NEA's Barangay Line Enhancement Program*

This aims to rehabilitate those barangays previously energized by off-grid solutions but deemed unsustainable. To enhance the program, it shall only cover those off-grid barangays that are already economically feasible for distribution line extension. NEA shall assist in recovering the existing off-grid electrification facilities still owned by the Government for reconfiguration and transfer to other far-flung areas that can be best served by off-grid solutions.

4. *Solar Home System (SHS) Electrification*

The program aims to scale-up the successful approaches for SHS electrification based on the lessons learned from the past and recent activities in the country. The program has three (3) components:

a) SHS Mainstreaming Program. This program aims to encourage the DUs/ECs in implementing the SHS mainstreaming/fee-for-service approach for dispersed households and highly remote areas in their franchise areas. A World Bank-funded study showed the said approach is the most promising delivery mechanism for large-scale and sustainable SHS electrification of dispersed HHs and remote rural areas not viable for grid extension. Said concept was successfully piloted in six (6) ECs with a 2,500 total households served. The Study has proven that the said approach is the most promising mechanism for scaled-up SHS dissemination. Said concept was successfully piloted in six (6) ECs with a 2,500 total HHs served. The program aims to scale-up the program by replicating the SHS mainstreaming concept to other ECs. The World Bank is also considering the development of a program to establish an Output-based Aid (OBA) Facility for DUs' Public-Private Partnership in accessing commercial financing for SHS mainstreaming projects.

b) Household Electrification Projects by NGOs and other Partners. Team Energy Foundation, Inc. (TEFI) will continue its successful SHS electrification project in

Polilio Group of Islands, Quezon to fully attain 100% HH electrification. To enhance the project, TEFI will coordinate with QUEZELCO II (the local EC) for handoff arrangement and takeover of the EC once TEFI completes its mission in the area. TEFI has also introduced social enterprise approach to supplement electrification with productive uses. TEFI shall also expand its activities in other areas including Zamboanga Peninsula.

c) DOE-REMB Household (Sitio) Electrification Program Project. This covers the SHS electrification of various sitios as DOE-REMB's Locally-Funded Project for 2012.

5. *Qualified Third Party (QTP) Approach*

Under *Sec. 59 of EPIRA*, areas deemed unviable and waived by the DUs may be offered to QTPs as part of the missionary electrification program. To date, there is one QTP operating (PowerSource) in Bgy. Rio-Tuba, Palawan Province. The two (2) current QTP applications under DOE's review are (i) Malapascua, Cebu Province by PowerSource; and, (ii) Semirara Island QTP Project, by Semirara Mining. In addition, the program anticipates the future development of mini-grid and micro-grid electrification projects using biomass, wind and other renewable energy sources by other proponents that may also adopt QTP approach.

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

a) PowerSource Philippines, Incorporated (PSPI) Rio Tuba QTP Project in Bataraza, Palawan

After the ERC's approval of the Full Cost Retail Rate (FCRR) of Php 24.49/kWh and the Subsidized and Approved Retail Rate (SARR) of Php 8.50/kWh for PSPI in the said area, PSPI sales and system load continue to rise, reaching 160,000 net kwhr sales in November 2012, a 100% jump in monthly sales within 1.5 years. Because of the continuous load growth, PSPI installed an additional 2 x 350kW Diesel generator sets and is being commissioned.

As of November 2012, PSPI reported that its current total connections in RioTuba area have increased to 1717 connections with 24-hour electricity services. In December 15, 2012, Powersource has installed and commissioned a biomass gasifier system and is currently operating 8 hours per day, to be steadily ramped up in the next month.

b) PSPI Malapascua QTP Project in Bantayan, Cebu

PSPI has already officially submitted their full technical and financial proposal as of June 2012 and is currently finalizing the negotiation for the signing of the QTP service contract (QSC) with NPC-SPUG. The DOE in coordination with ERC and NPC SPUG has conducted an ocular inspection at the PSPI Malapascua QTP site on August 2-4, 2012. The DOE will formally endorse the PSPI Malapscua QTP to ERC after the QSC signing and PSPI compliance to all the necessary documents required by the DOE.

To date, five hundred twenty (520) households are connected to PSPI's generation and distribution utility at Malapascua.

c) Semirara Mining Corporation (SMC) or its affiliate QTP Project in Semirara Island, Antique

Last September 17, 2012 SMC expressed their intent to serve officially as a QTP for Semirara Island, Antique. SMC has been providing electricity to the island since 1999 thru ANTECO. DOE is awaiting for the submissions of the full technical and financial details of the proposal; and the creation of the company affiliated with SMC that will operate as QTP.

6. *DOE's Area-based Program for Household Electrification*

This specific DOE intervention shall demonstrate the various innovative strategies under the HEDP in assisting the DUs for the two major purposes: (i) Attaining 100% household electrification at franchise level on or before 2017 for ECs that are already nearing 100% household electrification as of 2011; and, (ii) Doubling of the current household electrification level by 2017 or earlier for ECs are with highest number of unelectrified households as of 2011. Table 34 shows the initial list of ECs to be covered by the above program. The experience that will be established from this endeavor will provide vital information to the Government in the setting a more realistic targets of the overall electrification program in the future.

*Table 34. Initial List of ECs to be covered by the DOE's Area-based Program*

| No. | Name of EC | Region | Total HHs as of 2011 | HH Level as of 2011 | Estimated Pot. HH Connections 2012-2017 | Years to Attain 90% Electrification* (BAU Scenario) | Goal under DOE's Household Electrification Plan |
|---|---|---|---|---|---|---|---|
| 1 | BATANELCO | II | 4,348 | 87.7% | 1,017 | 6.8 | Attain 100% household electrification on or before 2017; ; Roll-out expansion of distribution system; SHS Mainstreaming for dispersed households; Employ renewable mini-grid where feasible. |
| 2 | SIARELCO | CARAGA | 23,443 | 94.3% | 3,924 | 4.1 | |
| 3 | SURSECO I | CARAGA | 58,190 | 97.8% | 7,715 | 3.5 | |
| 4 | CAMELCO | X | 18,514 | 76.6% | 6,379 | 10.6 | |
| 5 | PROSIELCO | VII | 21,597 | 75.4% | 7,692 | 8.7 | |
| 6 | SURSECO II | CARAGA | 58,872 | 90.3% | 12,218 | 3.6 | |
| 7 | SOCOTECO II | XII | 284,194 | 41.8% | 196,850 | 53 | Double the household electrification level on or before 2017; Roll-out expansion of distribution system; SHS Mainstreaming for dispersed households; Employ renewable mini-grid where feasible. |
| 8 | DANECO | XI | 283,722 | 48.1% | 178,623 | 32 | |
| 9 | ZAMSURECO I | IX / X | 193,110 | 41.45% | 134,377 | 33.692 | |
| 10 | DASURECO | XI | 204,645 | 46.17% | 132,739 | 37.854 | |

*Source: DOE*

Clearly, the goal of the 90% household electrification by 2017 is not a walk in the park. The challenge of providing electricity to additional 4.9 million Filipino households is a multi-faceted task requiring new strategies and approaches in terms of technology applications, financing, institutional strengthening and program management. Effective planning, sound decision making in terms of project selection and design, ring-fencing of funds, appropriate application of subsidies, and cooperation among stakeholders will surely reduce the burdens and risks of implementing such vast program in the next 6 years.

The issuance of the HEDP Circular shall mark the start of the implementation of the overall household electrification program in the country. It will pave way for the establishment of the Program Team to oversee the program management from policy design and implementation down to the implementation of the household electrification activities at the local levels.

Among others, the political commitment of the Government to pursue necessary policies, programs and activities such as those listed in the action plan for HEDP will be the driving force in ensuring the success of the overall electrification program in the country. The road towards total electrification may be rough and difficult, but the long-term benefit from such endeavor is truly immeasurable, a better future for all Filipino families in years to come.

## VII. Benefits to Host Communities

Pursuant to Energy Regulations No.1-94 (ER 1-94), the Generation Company and/or Energy resource developer shall set aside one centavo per kilowatt-hour (P 0.01/kWh) of the total electricity sales as financial benefit for the host communities. Fifty percent of one centavo per kilowatt-hour (P0.005/kWh) is for electrification projects, twenty five percent (P0.0025/kWh) for development and livelihood projects, and the remaining twenty five percent (P0.0025/kWh) for reforestation, watershed management, health and/or environment enhancement projects.

DOE as fund administrator, has already established a total of 685 Trust Accounts for Electrification Fund (EF) Development and Livelihood Fund (DLF), Reforestation, Watershed Management, Health and/or Environment Enhancement Fund (RWMHEEF). The number of legitimate host communities in the country who can avail of the funds has already reached 1,254 as of 1st quarter of 2013.

The total accrued financial benefit from inception *(Year 1995)* is PhP8.27 Billion from which Php5.29 Billion was obligated for the implementation of projects. This leaves an available fund at around PhP2.98 Billion as shown in Table 35.

*Table 35. Summary of Financial Benefits as of April 2013 (In PhP Billion)*

| Particulars | EF | DLF | RWMHEEF | Total |
|---|---|---|---|---|
| Accrued Financial Benefit | 3.17 | 2.37 | 2.73 | 8.27 |
| Approved | 2.76 | 1.14 | 1.39 | 5.29 |
| Available/ Collectible Balance | 0.41 | 1.23 | 1.34 | 2.98 |

*Source: DOE*

- Project Approval

For electrification programs, the concerned DU endorses the LGU's project proposal to the DOE. While for non-electrification (DL and RWMHEEF), project proposals are being endorsed by the Generation Company or the energy resource developer to DOE. The latter evaluates and approves all project proposals and subsequently issues Notice to proceed to the project implementor.

From November 2012 – April 2013, the DOE has approved a total amount of Php196.55 Million for 153 Electrification Projects in sitios within Metro Manila, Provinces of Rizal, Bulacan, Quezon, Laguna, Batangas, Pangasinan, Cebu, Davao del Sur, Bukidnon, Cagayan de Sulu and Tawi-tawi (Table 36).

Various non-electrification projects have been approved, Php45.99 Million for DL projects such as daycare centers, school buildings, streetlights, and road construction/concreting which will be implemented in Metro Manila, Provinces of Benguet, Quezon, Pangasinan, Leyte, Bukidnon, Cotabato and Lanao del Sur. While, Php83.83 Million RWMHEE projects were approved for the implementation of reforestation, water system, health centers and solid waste management projects in the same Provinces as mentioned in Table 36.

*Table 36. Project Approval (In PhP Million) November 2012- April 2013*

| Fund Source | No. of Approved Projects | Amount (PhP in Million) |
|---|---|---|
| Electrification Fund | 153 | 196.55 |
| Development and Livelihood Fund | 31 | 45.99 |
| Reforestation, Watershed Management, Health and/or Environment Enhancement Fund | 34 | 83.83 |

*Source: DOE*

- Fund Releases

The concerned LGU-DU submits complete bidding documents and a bank certificate for an account/trust fund separately and exclusively opened for ER 1-94 projects, for DOE to commence with the preparation and processing of fund release. The project funds are transferred through a bank to bank transaction.

From November 2012 – April 2013, a series of fund releases was executed for the concerned DU's and Host LGU's for the implementation of their respective projects. The DOE was able to release a total amount of Php196.02 Million from which Php 108.90 Million was sourced out from EF to energize 1,878 sitios in the Provinces of Quezon, Cebu, Lanao del Norte, and Cotabato. The amount of Php64.91 Million was released for the implementation of 28 DL projects in the Provinces of Batangas, Quezon, Albay, Zambales, Benguet, Bukidnon, and Lanao del Sur. A total amount of Php22.22 Million was released for the implementation of 20 RWMHEE projects in the Provinces of Bataan, Zambales, Batangas, Quezon, Albay, and Lanao del Sur as shown in Table 37.

*Table 37. Fund Release (In PhP Million) November 2012- April 2013*

| Fund Source | No. of Projects | Amount (PhP in Million) |
|---|---|---|
| Electrification Fund | 1,878 sitios | 109.90 |
| Development and Livelihood Fund | 28 | 45.99 |
| Reforestation, Watershed Management, Health and/or Environment Enhancement Fund | 20 | 22.22 |

*Source: DOE*

- Financial And Technical Audit

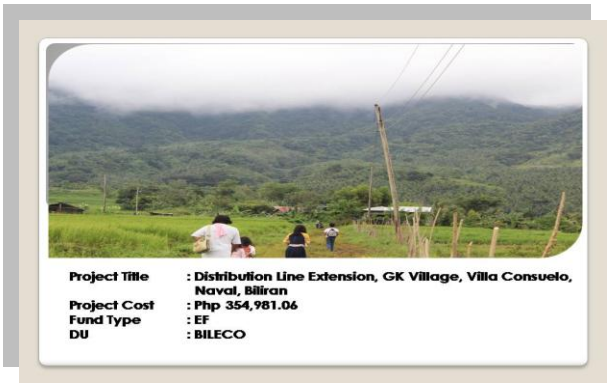
Consistent with the auditing rules and procedures under ER 1-94 program, the DOE-Internal Audit conducts a post-audit for the liquidation of project funds. From November 2012 – April 2013, the DOE has audited and validated an amount of Php72.92 Million under EF, Php41.99 Million under DLF, and 27.85 Million under RWMHEEF.

In the event of unjustified disbursement of funds and non-completion or delay in the implementation of projects, the DOE has to defer the succeeding releases of project funds to the emplementor. This is essential to ensure proper and efficient disbursement of funds.

Moreover, to assess the quality, value, and impact of the projects to the community, the DOE together with its partners, LGU, Generation Company and ECs conduct a joint technical inspection and evaluation of the completed projects.

From last Quarter of 2012 until first Quarter of 2013, a total of 129 completed projects were inspected accordingly. Selected photos of projects are shown below.

1. *Electrification Projects in the Provinces of Biliran, Zamboanga del Sur and Quezon*



Project Title : Distribution Line Extension, GK Village, Villa Consuelo, Naval, Biliran
Project Cost : Php 354,981.06
Fund Type : EF
DU : BILECO

Project Title : Installation of PV-SHS in Brgy. Ticala, San Paablo, Zamboanga Del Sur
Project Cost : Php 2,995,123.81
Fund Type : EF
DU : ZAMSURECO II

Project Title: Distribution Line Extension in Brgy. Antipolo, Pagbilao, Quezon
Project Cost: 3,666,093.19
Fund Type: EF
DU: MERALCO

2. *DL and RWMHEE Projects in Lanao del Sur and Leyte*

Project Title : Farm to Market Road, Brgy. Ditucalan, Iligan City
Project Cost : Php 557,590.55
Fund Type : RWMHEEF
Power Plant : Agus HEPs

Project Title : Dressmaking and Interior Designing Technology, Marawi State University – LNCAT, Brgy. Sadu, Marawi City
Project Cost : Php 335,250.00
Fund Type : DLF
Power Plant : Agus HEPs

Project Title : 2 in 1 Barangay Health/Daycare Center in Brgy.Poblacion, Kananga, Leyte
Project Cost : Php 450,841.94
Fund Type : RWMHEEF
Power Plant : Tongonan I GPP

# ANNEXES

*Annex 1.Transco Inspection Report Based on Concession Agreement as of 30 April 2013*

| No. | Inspection Report No. | Location | Name of Project/ Transmission Facilities | Inspection Date |
|---|---|---|---|---|
| **LUZON** | | | | |
| 1 | NLOMD2-12-31 | North Luzon District 2 | La, Trinidad, Ambuklao,Binga,itogon, Beckel | Nov. 26-30, 2012 |
| 2 | SLRD1-12-32 | South Luzon District 1 | Dasmariñas, Ternate,Rosario, Zapote, Sucat,Binan, Calaca, Batangas | Dec. 4-7, 2012 |
| 3 | NLOMD5-13-02 | North Luzon District 5 | Hermosa, Limay, Hanjin,Olongapo, Subic,Botolan and Morong | Jan. 14-18, 2013 |
| 4 | PUC-13-01 | North Luzon | Mariveles CoalTransmissionReinforcement Project(T/L Portion) | Feb. 11-13, 2013 |
| 5 | PUC-13-02 | North Luzon | Mariveles CoalTransmissionReinforcement Project(Substation Portion) | Feb. 11-13, 2013 |
| 6 | NLOMD1-13-05 | North Luzon District 1 | Bauang, Bacnotan, SanEsteban, Bantay, Currimao, Laoag | Feb. 18-22, 2013 |
| 7 | NLOMD3-13-06 | North Luzon District 3 | San Manuel, Bolo, Labrador, Kadampat, Nagsaag, Mangaldan, Cuyapo | Mar. 4-8, 2013 |
| 8 | NLOMD7-13-07 | North Luzon District 7 | San Jose, Doña Imelda(Araneta), Tay-Tay(Dolores), Malaya,Quezon (Balintawak) | Mar. 11-15, 2013 |
| 9 | NLOMD4-13-08 | North Luzon District 4 | Santiago, Gamu,Tuguegarao,Bayombong, Cauayan,Ilagan, Lagawe | Mar. 18-22, 2013 |
| 10 | SLRD2-13-09 | South Luzon District 2 | Tayabas, Gumaca,Makban, Kalayaan,Caliraya | April 1-5, 2013 |
| 11 | NL-MTDB-13-11 | Central Luzon | Mexico | April 22-23, 2013 |
| 12 | CLACC-13-12 | Central Luzon | Mexico (Area ControlCenter) | April 24-25, 2013 |
| **VISAYAS** | | | | |
| 1 | VISD4-12-29 | Visayas District 4 | Sta. Barbara, Dingle, San Juan, Panit an, Baldoza | Nov. 5-9, 2012 |
| 2 | VISD1-12-30 | Visayas District 1 | Ormoc City,Babatngon,Wright, Isabel, Tabango,Maasin, Bagolibas | Nov. 19-23, 2012 |
| 3 | VISD3-13-01 | Visayas District 3 | Bacolod, Cadiz,Kabankalan, Mabinay, Amlan | Jan. 7-11, 2013 |
| 4 | VISD2-13-04 | Visayas District 2 | Banilad, Mandaue,Mactan, Compostela,Quiot, Naga, BDPP,Ubay, Talisay | Feb. 4-8, 2013 |
| 5 | VISD4-13-13 | Visayas District 4 | Sta. Barbara, Dingle, SanJuan, Panit-an, Baldoza | April 22-26, 2013 |
| **MINDANAO** | | | | |
| 1 | MIND2-13-03 | Mindanao District 2 | Lugait, Iligan(Overton),Balo-i(Abaga), MindanaoRCC, Metering Facilities and Microwave Station | Jan. 21-15, 2013 |
| 2 | PUC-13-03 | Mindanao | Balo-i – Villanueva(Abaga-Kirahon) 230kVT/L Project | Mar. 19-22, 2013 |
| 3 | PUC-13-04 | Mindanao | Balo-i (Abaga) andVillanueva (Kirahon) 230kV S/S Project | Mar. 19-22, 2013 |
| 4 | PUC-13-05 | Mindanao | Villanueva – Maramag(Kirahon - Maramag)230kV TransmissionProject | Mar. 19-22, 2013 |
| 5 | MIND5-13-10 | Mindanao District 5 | Davao City, Bunawan,Matanao, Maco, Nabunturan, Kidapawan | April 15-19, 2013 |
| 6 | MIND3-13-14 | Mindanao District 3 | Carmen, Kibawe,Tagoloan, Aplaya,Kibawe, Maramag | April 22-26, 2013 |

*Source: Transco*

*Annex 2. Summary Inspection Report (PUC) as of 30 April 2013*

| No. | Observation Report No. | Inspection Date/ Area | Description of Observation (TransCo) | Action Plan / Remarks (NGCP) |
|---|---|---|---|---|
| **VISAYAS** | | | | |
| 1 | **(PUC-13-01)** OR-PUC-13-01 | Feb. 11-13, 2013 | The Results of the Joint Final Inspection (Inspection Report No. QSMD-13-12/JLF/OJLD) conducted on January 14-17, 2013 (Punch List, as of 18 January 2013) are yet to be corrected by the contractor (Limay-Mariveles 230 kV T/L). | Rectification of the identified deficiencies is on-going. Closing of the Inspection Report shall be done after the contractor has corrected all the deficiencies. |
| 2 | OR-PUC-13-02 | Feb. 11-13, 2013 | The Results of the Joint Final Inspection (Inspection Report No. QSMD-12-166/JSF/OJLD) conducted on November 26-29, 2012 (Punch List, as of 3 December 2012) are yet to be corrected by the contractor (Reconductoring of Limay-Hermosa). | Rectification of the identified deficiencies is on-going. Closing of the Inspection Report shall be done after the contractor has corrected all the deficiencies. |
| 3 | OR-PUC-13-03 | Feb. 11-13, 2013 | Some of the requested documents are yet to be submitted by NGCP to TransCo (please refer to the check-list). | For submission. |
| 4 | **(PUC-13-02)** OR-PUC-13-04 | Feb. 11-13, 2013 | The Results of the Joint Final Inspection (Inspection Report No. QSMD-12-141/JLF/OJLD) conducted on October 16, 2012 (Punch List, as of 16 October 2012) are yet to be corrected by the contractor (Limay Substation). | Rectification of the identified deficiencies is on-going. Closing of the Inspection Report shall be done after the contractor has corrected all the deficiencies. |
| 5 | OR-PUC-13-05 | Feb. 11-13, 2013 | Two (2) Disconnect Switch are yet to be installed in the San Jose S/S. | Awaiting management directive whether to install the 2 remaining DS or to delete them from the contract. |
| 6 | OR-PUC-13-06 | Feb. 11-13, 2013 | The Guardhouse at Limay Substation is yet to be completed. | On-going construction. |
| 7 | OR-PUC-13-07 | Feb. 11-13, 2013 | The construction of the Entrance Gate at the Limay Substation has not started as of inspection date. | Construction will start after the completion of works being done by the Petron contractor on Bays 7 & 8. |
| 8 | OR-PUC-13-08 | Feb. 11-13, 2013 | Landscaping at the Limay Substation has yet to start. | Construction will start after the completion of works being done by the Petron contractor on Bays 7 & 8. |
| 9 | OR-PUC-13-09 | Feb. 11-13, 2013 | Some of the requested documents are yet to be submitted by NGCP to TransCo (please refer to the check-list). | For submission. |
| **MINDANAO** | | | | |
| 1 | **(PUC-13-03)** OR-PUC-13-10 | March 19-20, 2013 | The transmmission Line Project has expired contract, yet no Contract Time Extension has been approved. | Contract Time Extension No. 3 (due to ROW problems) is under preparation. |
| 2 | OR-PUC-13-11 | March 19-20, 2013 | Some bolts and nuts are not installed and loose at Tower No. AK-258. Also, the anti-pilferage or lock nuts are not yet provided. | To be addressed during the joint tower to tower inspection. |
| 3 | OR-PUC-13-12 | March 19-20, 2013 | Test results for the delivered T/L materials are yet to be provided. | For submission. |
| 4 | **(PUC-13-04)** OR-PUC-13-13 | March 19-20, 2013 | During the inspection, civil works at Kirahon S/S is on-going. No electrical works at the Abaga S/S with minimal activities at Kirahon S/S due to lack of substation materials. | The delivery of the lacking substation materials are already on-going. |
| 5 | OR-PUC-13-14 | March 19-20, 2013 | The contract already expired (CTE 1 & 2). | Contract Time Extension No. 3 is under preparation. |
| 6 | OR-PUC-13-15 | March 19-20, 2013 | Test results of the S/S materials are yet to be provided. | For submission. |
| 7 | **(PUC-13-05)** OR-PUC-13-16 | 21-Mar-13 | Based from the approved Contruction Schedule, the project is delayed and has a variance of (-) 6.44%. | To expedite the resolution of the ROW problem which is the main reason of the delay. |
| 8 | OR-PUC-13-17 | 21-Mar-13 | The approved Contract Time Extensions already axpired and no Contract Time Extension has been approved. | Contract Time Extension No. 2 is already under preparation. |
| 9 | OR-PUC-13-18 | 21-Mar-13 | Some of the requested documents are yet submitted (refer to the Notice of Inspection dated March 6, 2013). | For submission. |

*Source: TransCo*

*Annex 3. Status of Private Distribution Utilities' (PDUs) Rate Applications to Energy Regulatory Commission (ERC) as of April 2013*

| Entry Group | DU | Case Number/ Date of Filing | Regulatory Period | Previous Rates (RY 2013 Rate-PhP/kWh) | ERC Approved (RY 2013 Rate-PhP/kWh) | Increase/ Decrease (RY 2013 Rate-PhP/kWh) | Factors Contributory to Change | Status |
|---|---|---|---|---|---|---|---|---|
| 1st | MERALCO | 2011-088 RC 21-Jun-2011 | 2011-2015 | 1.6464 | 1.6012 | (0.0452) | Plowback of fifty percent (50%) of net income derived from related business undertakings and income from the sale of disposed assets. | Awaiting Final Decision by the ERC; petition filed by oppositor Mr. Lualhati to refund Php8.704 Billion was denied by ERC on its Order dated March 26, 2013. |
| | DECORP | 2012-053 RC March 29, 2012 | 2011-2015 | 1.8167 | 1.7437 | (0.0730) | Mitigation of the impact of the actual changes in the sales mix. | Final Decision issued by ERC on October 29, 2012 |
| | CEPALCO | 2013-061 RC/ | 2011-2015 | 1.5705 | 1.3467 | (0.2238) | Over recoveries in revenue for RY 2011. | Final Decision issued by ERC on Dec. 19, 2011 |
| 2nd | CLPC | 2010-149 RC/ Dec. 15, 2010 | 2009-2013 | 1.5056 | 1.6660 | 0.1604 | Under-recovery of PhP1.86 million in Systems Losses for the period Nov. 2009 to Oct. 2010. | Final Decision issued by ERC on Feb. 28, 2011 |
| | MECO | 2010-154 RC/ Dec. 17, 2010 | 2009-2013 | 1.0149 | 1.0839 | 0.0690 | Timely implementation of its Capital Expenditure Program and its operating and maintenance programs for RY 2012. | Final Decision issued by ERC on Feb. 28, 2011 |
| | ILPI | 2010-153 RC/ Dec. 21, 2010 | 2010-2013 | 1.1256 | 1.3669 | 0.2413 | Timely implementation of its Capital Expenditure Program and its operating and maintenance programs for RY 2012. | Final Decision issued by ERC on June 21, 2011 |
| 3rd | DLPC | 2012-052 RC/ Mar. 29, 2012 | 2010-2014 | 1.2688 | 1.3611 | 0.0923 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on October 29, 2012. |
| | IEEC | 2012-055 RC/ March 30, 2012 | 2010-2014 | 1.6408 | 2.0420 | 0.4012 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on October 29, 2012. |
| | LUECO | 2012-048 RC March 29, 2012 | 2011-2014 | 1.3856 | 1.5438 | 0.1582 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on November 5, 2012. |
| | TEI | 2012-050 RC/ Mar. 29, 2012 | 2011-2014 | 1.4235 | 1.7305 | 0.3070 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on October 29, 2012. |
| | CELCOR | 2012-049 RC/ Mar. 29, 2012 | 2011-2014 | 1.5365 | 1.6488 | 0.1123 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on October 29, 2012. |
| | VECO | 2012-051 RC/ Mar. 29, 2012 | 2011-2014 | 1.2970 | 1.4243 | 0.1273 | Mitigation of the impact of actual changes in the sales mix. | Final Decision issued by ERC on October 29, 2012 |
| 4th | SEZ | 2012-096 RC/ Aug. 3, 2012 | 2011-2015 | 1.4734 | 1.5007 | 0.0273 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on December 3, 2012. |
| | PECO | 2012-100 RC/ September 6, | 2011-2015 | 1.2223 | 1.2695 | 0.0472 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account | Final Decision issued by ERC on December 10, 2012. |

| Entry Group | DU | Case Number/ Date of Filing | Regulatory Period | Previous Rates (RY 2013 Rate- PhP/kWh) | ERC Approved (RY 2013 Rate- PhP/kWh) | Increase/ Decrease (RY 2013 Rate- PhP/kWh) | Factors Contributory to Change | Status |
|---|---|---|---|---|---|---|---|---|
| | | 2012 | | | | | the sales mix. | |
| | CEDC | 2012-099 RC/ Aug. 30, 2012 | 2011-2015 | 0.8527 | 0.8953 | 0.0426 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on December 17, 2012 |
| | SFELAPCO | 2012-092 RC/ July 18, 2012 | 2012-2015 | 1.5595 | 1.7227 | 0.1632 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on Feb. 11, 2013 |
| | AEC | 2012-089 RC/ July 17, 2012 | 2012-2015 | 1.3115 | 1.4991 | 0.1876 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on Dec. 10, 2012. |
| | BLCI | 2012-088 RC/ July 13, 2012 | 2012-2015 | 1.0181 | 1.0321 | 0.0140 | Mitigation of any over or under-recovery in the succeeding regulatory years, taking into account the sales mix. | Final Decision issued by ERC on December 3, 2012 |

*Source: ERC website*

*Annex 4. NGCP Related Petitions to ERC as of 30 April 2013*

| ERC DECISION/ CASE NO. | DATE OF FILING | NATURE OF PETITION | GROUNDS FOR FILING | STATUS |
|---|---|---|---|---|
| ERC Case 2013-024 RC | February 15, 2013 | In the Matter of the Application for Approval of the Cebu Negros-Panay 230 kV Backbone Project(Stage 1), with prayer for the issuance of a Provisional Authority. | • ISSUE, immediately upon filing of the Application, a Provisional Approval for the implementation of the CNP 230 kV backbone Project (Stage 1); and<br>• APPROVE, after notice and hearing, the Application the implementation of the CNP 230 kV Backbone Project (Stage 1) and render judgment making the provisional approval permanent. | • The ERC issued an order dated March 11, 2013 (docketed March 19, 2013), finding the application to be sufficient in form and in substance with the required fees having been paid, The same is set for jurisdictional hearing, expository presentation, pre-trial conference and evidentiary hearing on April 24, 2013 (Wednesday) at ten o'clock in the morning (10:00 A.M.) at the ERC hearing room, 15th Floor, Pacific center Building, San Miguel Avenue, Pasig City.<br>• On April 24, 2013 , as scheduled, the jurisdictional, expository, pre-trial and evidentiary hearing were conducted. Since there was no petition for intervention from any party, the proceedings were terminated and NGCP was given 10 days to submit its Formal Offer of Evidence and other documents requested by the commission. |
| ERC Case 2013-023 RC | February 15, 2013 | In the Matter of theApplication for Approval of the Calaca-Dasmariñas 230 kV Transmission Line Project, with prayer for the issuance of a Provisional Authority | • APPROVE The Application for the implementation of the Calaca-Dasmariñas 230kV Line Project; and<br>• ISSUE, a Provisional Authority for the implementation of the Calaca-Dasmariñas 230kV Line Project pending final approval | • The ERC issued an order dated March 11, 2013 (docketed March 20, 2013), finding the application to be sufficient in form and in substance with the required fees having been paid, The same is set for jurisdictional hearing, expository presentation, pre-trial conferenceand evidentiary hearing on April 24, 2013 (Wednesday) at two o'clockin the afternoon (2:00 P.M.) at the ERC hearing room, 15th Floor,Pacific center Building, San Miguel Avenue, Pasig City.<br>• April 24, 2013, the jurisdictional, expository, pre-trial and evidentiary hearing were conducted. Since there was no petition for intervention from any party, the proceedings were terminated and NGCP was given 10 days to submit its Formal Offer of Evidence and other documents requested by the ERC. |
| ERC Case 2013-019 RC | February 6, 2013 | In the Matter of the Application of the National Grid Corporation of the Philippines for Approval of Force Majeure (FM) Event Regulated FM Pass Through for | • GRANT provisional approval to implement and bill the FME Pass-Through Amount to Visayas customers starting April 2013 billing month to December 2015 billing month or until such time that the amount incurred is fully recovered;<br>• DECLARE the earthquake, flooding and lightning incidents in the Visayas area as Force Majeure Events;<br>• APPROVE the CAPEX incurred/to be incurred for the restoration, rehabilitation and repair of the damaged transmission assets and other related facilities for the FMEs earthquake, flooding and lightning incidents in the Visayas area;<br>• APPROVE the proposed pass-through amount representing return on capital, return of capital and taxes associated with the emergency responses and the | No status |

<table>
<tr><th>ERC DECISION/ CASE NO.</th><th>DATE OF FILING</th><th>NATURE OF PETITION</th><th>GROUNDS FOR FILING</th><th>STATUS</th></tr>
<tr><td></td><td></td><td>Earthquake, Flooding and Lightning incidents in Visayas in accordance with the Rules for setting Transmission Wheeling Rates, with prayer for Provisional Authority</td><td>repair and rehabilitation of facilities damaged due to the said events, as shown in the table below;<br><br><table><tr><td>FME-Peso/kW</td><td>2013</td><td>2014</td><td>2015</td><td>Total</td></tr><tr><td>Visayas</td><td>0.1407</td><td>0.0584</td><td>0.0547</td><td>0.2538</td></tr></table><br>• APPROVE and ALLOW the recovery of the Net Fixed Asset Value of the transmission assets and other related facilities damaged by FMEs earthquake, flooding and lightning incidents in the Visayas are during the Fourth Regulatory Period given that the said amount would have been fully recovered by NGCP if these transmission assets and other related facilities had not been damaged or destroyed by said FMEs; and<br>• EXCLUDE the proposed pass-through amount from the side constraint calculation.</td><td></td></tr>
<tr><td>ERC Case 2013-007 RC</td><td>January 17, 2013</td><td>In the Matter of the Application for Approval of Connection Charges and Residual Subtransmission charges for calendar year 2013 on subtransmission assets of the National Grid Corporation of the Philippines, with prayer for provisional authority.</td><td>• ISSUE a Provisional Authority to implement and commence the billing and collection of the proposed CY 2013 CC/RSTC beginning the billing month of January 2013 as follows:<br><br><table><tr><td></td><td>CC</td><td>RSTC</td><td>Total (Monthly)</td><td>Total (Annual)</td></tr><tr><td>Luzon</td><td>88,361,700.72</td><td>25,942,325.06</td><td>114,304,025.78</td><td>1,371,648,309.40</td></tr><tr><td>Visayas</td><td>41,602,314.64</td><td>12,730,257.54</td><td>54,332,572.19</td><td>651,990,866.22</td></tr><tr><td>Mindanao</td><td>41,848,823.39</td><td>31,092,269.21</td><td>72,941,092.60</td><td>875,293,111.20</td></tr><tr><td>Total</td><td>171,812,838.76</td><td>69,764,851.81</td><td>241,577,690.57</td><td>2,898,932,286.82</td></tr></table><br>• APPROVE the recovery of the computed CY 2013 CC/RSTC provided in this application to all Transmission Customers;<br>• ALLOW NGCP to bill and collect the following thru the CC/RSTC<br><br>1. Deferred CC/RSTC for disposed subtransmission assets;<br>2. Uncollected rehabilitation and improvement costs;<br>3. CC/RSTC for disposed subtransmission assets with approvedcontracts to sell;<br>4. Other uncollected CC/RSTC resulting from adjustment of the CY 2009 charges.<br>• ALLOW NGCP to impose a 3% Franchise Tax on CC/RSTC to be reflected as a separate line item in the Power Bill.</td><td>The ERC issued an order dated February 15, 2013 (docketed February 27, 2013), finding the application to be sufficient in form and in substance with the required fees having been paid, The same is set for jurisdictional hearing, pre-trial conference, expository presentation and evidentiary hearing.<br><br><table><tr><td>Date</td><td>Time</td><td>Venue</td><td>Particulars</td></tr><tr><td>April 10, 2013</td><td>10:00 am</td><td>ERC Central Office</td><td>Jurisdictional Hearing and Expository Presentation</td></tr><tr><td>April 11, 2013</td><td>9:00 am</td><td>ERC Mindanao Field Office</td><td>Expository Presentation</td></tr><tr><td>April 12, 2013</td><td>9:00 am</td><td>ERC Visayas Field Office</td><td>Expository Presentation</td></tr><tr><td>April 17, 2013</td><td>10:00 am</td><td>ERC Central Office</td><td>Pre-trial Conference and Evidentiary hearing</td></tr><tr><td>April 18, 2013</td><td>10:00 am</td><td>ERC Central Office</td><td>Continuation of Evidentiary Hearing, if necessary</td></tr></table></td></tr>
</table>

<table>
<tr><th>ERC DECISION/ CASE NO.</th><th>DATE OF FILING</th><th>NATURE OF PETITION</th><th>GROUNDS FOR FILING</th><th>STATUS</th></tr>
<tr>
<td>ERC Case 2012-109 RC</td>
<td>October 17, 2012</td>
<td>In the Matter of the Application for Approval of the Maximum Allowable Revenue for the Calendar Year 2013 and the Performance Incentive Scheme under the Rules for Setting the Transmission Wheeling Rates, with Prayer for Provisional Authority</td>
<td>
<ul>
<li>APPROVE the authority to collect MAR2013 in the amount of PhP44,977.95Mn, the PIS2012 of PhP642.08Mn and the System Operator and Metering Service Provider Charges;</li>
<li>GRANT provisional authority to implement the collection of the MAR2013 in the amount of PhP44,977.95Mn, the PIS2012 of PhP642.08Mn and the System Operator and Metering Service Provider Charges beginning the billing period of 26 December 2012 – 25 January 2013;</li>
<li>APPROVE the fifty percent (50%) of PhP13.532MN or the equivalent of PhP6.766Mn as RBRt from co-location and rental of equipment; and</li>
<li>DEFERMENT of the setting of the ASAI parameters until the end of the Third Period Regulatory.</li>
</ul>
</td>
<td>
<ul>
<li>The ERC issues an order dated October 23,2012, finding the application to be sufficient in form and in substance. The initial hearing, pre-trial conference, expository presentation and evidentiary hearing on the following dates and venues:</li>
</ul>
<table>
<tr><th>Date</th><th>Time</th><th>Venue</th><th>Particulars</th></tr>
<tr><td>Dec. 3, 2012</td><td>10:30 AM</td><td>15th floor, Pacific Center Bldg., San Miguel Ave., Pasig City</td><td>Jurisdictional Hearing and Expository Presentation</td></tr>
<tr><td>Dec. 6, 2012</td><td>10:30 AM</td><td>ERC Mindanao Field Office</td><td>Expository Presentation</td></tr>
<tr><td>Dec. 7, 2012</td><td>9:00 AM</td><td>ERC Visayas Field Office</td><td>Expository Presentation</td></tr>
<tr><td>Dec. 10, 2012</td><td>2:00 PM</td><td>15th floor, Pacific Center Bldg., San Miguel Ave., Pasig City</td><td>Pre-trial Conference and Evidentiary Hearing</td></tr>
<tr><td>Dec. 11, 2012</td><td>9:00 AM</td><td>15th floor, Pacific Center Bldg., San Miguel Ave., Pasig City</td><td>Continuation of Evidentiary Hearing</td></tr>
</table>
<ul>
<li>Hearing on December 11, 2012 was cancelled pending the Commission's rulingon the petitions of counsels from VECO and DLPC. SNAP Benguet and Magat tointervene in the next meeting.</li>
<li>March 26, 2013 – Presentation of pre-trial brief,</li>
</ul>
</td>
</tr>
</table>

| ERC DECISION/ CASE NO. | DATE OF FILING | NATURE OF PETITION | GROUNDS FOR FILING | STATUS |
|---|---|---|---|---|
| | | | | and the conduct of directcross examination of NGCP's witnesses who testified on MAR computation andPerformance Incentive scheme were held. Afterwards the commission directedthe interveners to file their comments within 10 days upon receipt of NGCP'sFormal Offer of Evidence (FOE). |

*Source: Transco*

*Annex 5. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)*

| Billing Month | | Metered Quantity (Load), MWh | 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 5. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)*

| Billing Month | | Metered Quantity (Load), MWh | 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 5. Metered Quantity, Spot Quantity, Bilateral Quantity (MWh)*

| Billing Month | | Metered Quantity (Load), MWh | 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% |
| 65 | Nov-2011 | 4,597,790.37 | 460,942.12 | 10% | 4,136,848.25 | 90% |
| 66 | Dec-2011 | 4,386,874.52 | 524,084.49 | 12% | 3,862,790.03 | 88% |
| 67 | Jan-2012 | 4,335,207.47 | 261,447.91 | 6% | 4,073,759.57 | 94% |
| 68 | Feb-2012 | 4,519,990.57 | 251,555.63 | 6% | 4,268,434.94 | 94% |
| 69 | Mar-2012 | 4,416,326.59 | 389,036.20 | 9% | 4,027,290.40 | 91% |
| 70 | Apr-2012 | 4,724,661.49 | 303,929.41 | 6% | 4,420,732.08 | 94% |
| 71 | May-2012 | 4,980,881.89 | 373,513.98 | 7% | 4,607,367.91 | 93% |
| 72 | Jun-2012 | 5,080,154.44 | 513,897.32 | 10% | 4,566,257.12 | 90% |
| 73 | Jul-2012 | 4,756,271.85 | 686,471.55 | 14% | 4,069,800.30 | 86% |
| 74 | Aug-2012 | 4,502,480.50 | 288,702.16 | 6% | 4,213,766.33 | 94% |
| 75 | Sep-2012 | 4,745,836.69 | 391,723.48 | 8% | 4,354,113.21 | 92% |
| 76 | Oct-2012 | 4,656,469.61 | 382,553.20 | 8% | 4,273,916.41 | 92% |
| 77 | Nov-2012 | 4,744,798.66 | 405,825.13 | 9% | 4,338,973.53 | 91% |
| 78 | Dec-2012 | 4,607,806.64 | 425,066.37 | 9% | 4,182,740.26 | 91% |
| 79 | Jan-2013 | 4,414,305.72 | 389,527.57 | 9% | 4,024,778.15 | 91% |
| 80 | Feb-2013 | 4,621,906.41 | 436,075.11 | 9% | 4,185,831.30 | 91% |
| 81 | Mar-2013 | 4,440,321.96 | 489,406.63 | 11% | 3,950,915.33 | 89% |
| 82 | Apr-2013 | 5,165,108.01 | 690,301.91 | 13% | 4,474,806.09 | 87% |

*Source: PEMC*

*Annex 6. Demand and Energy Offers (MW) (Luzon)*

| 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 |

| Billing Month | | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers | Average Capacity on Outage |
|---|---|---|---|---|---|---|
| 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 |
| 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 | |
| 64 | Oct-2011 | 7,219 | 7,252 | 5,594 | 6,552 | |

| Billing Month | | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers | Average Capacity on Outage |
|---|---|---|---|---|---|---|
| 65 | Nov-2011 | 7,193 | 7,157 | 5,713 | 7,015 | |
| 66 | Dec-2011 | 7,137 | 7,154 | 5,610 | 6,896 | |
| 67 | Jan-2012 | 7,034 | 6,978 | 5,395 | 6,622 | |
| 68 | Feb-2012 | 7,164 | 7,635 | 5,650 | 7,183 | |
| 69 | Mar-2012 | 7,500 | 7,935 | 5,942 | 7,289 | |
| 70 | Apr-12 | 7,894 | 7,590 | 5,939 | 7,251 | |
| 71 | May-12 | 7,898 | 7,660 | 6,484 | 6,985 | |
| 72 | Jun-12 | 7,685 | 6,987 | 6,220 | 6,710 | |
| 73 | Jul-12 | 7,564 | 7,098 | 5,976 | 6,700 | |
| 74 | Aug-12 | 7,244 | 7,895 | 5,488 | 7,667 | |
| 75 | Sep-12 | 7,298 | 7,244 | 5,849 | 7,345 | |
| 76 | Oct-12 | 7,394 | 7,426 | 5,949 | 7,220 | |
| 77 | Nov-12 | 7,434 | 7,071 | 5,878 | 7,239 | |
| 78 | Dec-12 | 7,362 | 7,002 | 5,958 | 7,044 | |
| 79 | Jan-13 | 7,031 | 7,746 | 5,461 | 7,048 | |
| 80 | Feb-13 | 7,242 | 7,831 | 5,797 | 7,349 | |
| 81 | Mar-13 | 7,684 | 7,440 | 6,147 | 7,387 | |
| 82 | Apr-13 | 8,232 | 7,674 | 6,469 | 7,270 | |

*Source: PEMC*

*Annex 7. Demand and Energy Offers (MW) (Visayas)*

| Billing Month | | Peak Demand | Coincidental Energy Offers | Average Demand | Average Energy Offers | Average Capacity on Outage |
|---|---|---|---|---|---|---|
| 55 | Jan-2011 | 1,264 | 1,305 | 948 | 1,243 | |
| 56 | Feb-2011 | 1,282 | 1,272 | 968 | 1,207 | |
| 57 | Mar-2011 | 1,309 | 1,389 | 999 | 1,277 | |
| 58 | Apr-2011 | 1,346 | 1,511 | 1,004 | 1,363 | |
| 59 | May-2011 | 1,383 | 1,493 | 1,087 | 1,434 | |
| 60 | Jun-2011 | 1,356 | 1,490 | 1,069 | 1,446 | |
| 61 | Jul-2011 | 1,381 | 1,560 | 1,071 | 1,490 | |
| 62 | Aug-2011 | 1,355 | 1,587 | 1,051 | 1,509 | |
| 63 | Sep-2011 | 1,405 | 1,511 | 1,085 | 1,559 | |
| 64 | Oct-2011 | 1,377 | 1,532 | 1,064 | 1,494 | |
| 65 | Nov-2011 | 1,407 | 1,669 | 1,076 | 1,460 | |
| 66 | Dec-2011 | 1,447 | 1,618 | 1,084 | 1,527 | |
| 67 | Jan-2012 | 1,369 | 1,586 | 1.020 | 1,527 | |
| 68 | Feb-2012 | 1,348 | 1,605 | 1,024 | 1,531 | |
| 69 | Mar-2012 | 1,369 | 1,600 | 1,069 | 1,532 | |
| 70 | Apr-12 | 1,460 | 1,710 | 1,085 | 1,603 | |
| 71 | May-12 | 1,444 | 1,647 | 1,153 | 1,600 | |
| 72 | Jun-12 | 1,423 | 1,728 | 1,118 | 1,618 | |
| 73 | Jul-12 | 1,436 | 1,539 | 1,100 | 1,519 | |
| 74 | Aug-12 | 1,462 | 1,623 | 1,130 | 1,547 | |
| 75 | Sep-12 | 1,448 | 1,651 | 1,119 | 1,531 | |
| 76 | Oct-12 | 1,425 | 1,488 | 1,123 | 1,482 | |
| 77 | Nov-12 | 1,467 | 1,503 | 1,125 | 1,496 | |
| 78 | Dec-12 | 1,486 | 1,703 | 1,113 | 1,541 | |
| 79 | Jan-13 | 1,417 | 1,729 | 1,087 | 1,607 | |
| 80 | Feb-13 | 1,408 | 1,706 | 1,075 | 1,584 | |
| 81 | Mar-13 | 1,475 | 1,754 | 1,153 | 1,641 | |
| 82 | Apr-13 | 1,484 | 1,598 | 1,176 | 1,552 | |

*Source: PEMC*

*Annex 8. Generation Mix (%)*

| Billing Month | | Hydro | Geo | Coal | Nat Gas | Diesel/Oil | 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% | |

| Billing Month | | Hydro | Geo | Coal | Nat Gas | Diesel/Oil | Wind | Biofuel |
|---|---|---|---|---|---|---|---|---|
| 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% | |
| 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% |

| Billing Month | | Hydro | Geo | Coal | Nat Gas | Diesel/Oil | Wind | Biofuel |
|---|---|---|---|---|---|---|---|---|
| 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% |
| 65 | Nov-11 | 10.7% | 14.5% | 36.5% | 36.6% | 1.4% | 0.196% | 0.059% |
| 66 | Dec-11 | 10.2% | 15.5% | 37.6% | 34.9% | 1.4% | 0.294% | 0.086% |
| 67 | Jan-12 | 9.0% | 16.2% | 36.0% | 37.0% | 1.4% | 0.285% | 0.089% |
| 68 | Feb-12 | 8.0% | 15.8% | 39.0% | 35.8% | 1.1% | 0.167% | 0.115% |
| 69 | Mar-12 | 6.8% | 16.1% | 40.1% | 35.3% | 1.6% | 0.128% | 0.088% |
| 70 | Apr-12 | 6.0% | 15.7% | 42.5% | 33.4% | 2.1% | 0.118% | 0.065% |
| 71 | May-12 | 5.5% | 14.4% | 42.9% | 33.3% | 4.0% | 0.018% | 0.012% |
| 72 | Jun-12 | 7.00% | 14.86% | 41.28% | 32.86% | 3.87% | 0.10% | 0.01% |
| 73 | Jul-12 | 8.99% | 15.52% | 41.23% | 31.17% | 3.06% | 0.03% | 0.01% |
| 74 | Aug-12 | 16.22% | 15.53% | 35.17% | 32.30% | 0.63% | 0.14% | 0.00% |
| 75 | Sep-12 | 14.78% | 14.56% | 35.95% | 33.03% | 1.61% | 0.07% | 0.00% |
| 76 | Oct-12 | 9.59% | 14.74% | 40.85% | 32.29% | 2.29% | 0.19% | 0.04% |
| 77 | Nov-12 | 8.63% | 14.98% | 44.72% | 29.34% | 2.08% | 0.14% | 0.10% |
| 78 | Dec-12 | 7.6% | 14.7% | 45.2% | 28.4% | 3.9% | 0.2% | 0.1% |
| 79 | Jan-13 | 8.0% | 16.1% | 38.8% | 36.2% | 0.5% | 0.2% | 0.1% |
| 80 | Feb-13 | 7.0% | 16.2% | 43.3% | 32.8% | 0.4% | 0.2% | 0.2% |
| 81 | Mar-13 | 6.3% | 14.4% | 45.6% | 32.2% | 1.3% | 0.1% | 0.2% |

*Source: PEMC*

*Annex 9. WESM 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 |

| EFFECTIVE SETTLEMENT PRICES (PhP/MWh) | | | | |
|---|---|---|---|---|
| Billing Month | | ESP (w/ Surplus) | ESP (w/o Surplus) | Cumulative Average ESP |
| 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 |
| 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 |

| EFFECTIVE SETTLEMENT PRICES (PhP/MWh) | | | | |
|---|---|---|---|---|
| Billing Month | | ESP (w/ Surplus) | ESP (w/o Surplus) | Cumulative Average ESP |
| 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 | | |
| 65 | Nov-2011 | 6,050 | | |
| 66 | Dec-2011 | 5,548 | | |
| 67 | Jan-2012 | 6,321 | | |
| 68 | Feb-2012 | 4,122 | | |
| 69 | Mar-2012 | 5,405 | | |
| 70 | Apr-2012 | 4,300 | | |
| 71 | May-2012 | 8,914 | | |
| 72 | Jun-2012 | 12,667 | | |
| 73 | Jul-2012 | 10,725 | | |
| 74 | Aug-2012 | 3,572 | | |
| 75 | Sep-2012 | 5,806 | | |
| 76 | Oct-2012 | 7,543 | | |
| 77 | Nov-2012 | 7,015 | | |
| 78 | Dec-12 | 8,057 | | |
| 79 | Jan-13 | 3,262 | | |
| 80 | Feb-13 | 3,163 | | |
| 81 | Mar-13 | 5,719 | | |
| 82 | Apr-13 | 7,740 | | |

*Source: PEMC*

*Annex 10. Private Sector Initiated Power Projects (Luzon) as of 29 March 2013*

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| | **COAL** | | | **4,110.00** | | |
| Committed | 135 MW Puting Bato Coal Fired Power Plant Phase I | South Luzon Thermal Energy Corp. (SLTEC) | Brgy. Puting Bato West, Calaca, Batangas | 135 | 50-50 joint venture project of TAOIL and AC Energy Holdings, Inc.; Purchase of land signed on January 2010; EPC contractor was awarded to DMCI on 31 March 2011; DENR-ECC issued to TAOil for project on 30 April 2010, SEC issued on 29 July 2011; PPA between SLTEC and TAOil was signed on 28 Octtober 2011; BOC registration as importer issued on 2 December 2012; transfer of ECC to SLTEC on 14 Dec. 2011; GIS issued on 17 May 2012; financial close on 28 Oct. 2011; Project cost is Php12.9B | September 2014 |
| Committed | 2 X 150 MW SLPGC Coal-Fired Power Plant Phase I | Southwest Luzon Power Generation Corporation | Brgy. San Rafael, Calaca, Batangas | 300 | On-going securing necessary permits; Land Lease Agreement with PSALM secured; SEC registration approved 31 Aug. 2011; on-going negotiations with off-takers; ECC application approved 21 Oct. 2011; GIS with NGCP approved 8 Nov. 2011; EPC signed March 2012; Loan agreement with Banks in place, financial close on 24 February 2012 (60% Loan / 40% Equity); Site Mobilization / Commencement of Construction on May 2012; Project cost for Phase I and II is Php45.36B | Unti I - Q4 2014<br>Unit II - Q1 2015 |
| Indicative | 2 X 20 MW FDC Camarines CFB Coal Power Plant | FDC Utilities, Inc. | Camarines Sur | 40 | On-going feasibility study and plant site evaluation; On-going securing of regulatory requirements; Other required permits and endorsement to be secured upon completion of pre-con activities; Financial close targeted on November 2012 | Q1 2016 |
| Indicative | 2 X 300 MW Coal-Fired Power Plant | Redondo Peninsula Energy, Inc. | Sitio Naglatore, Cawag, Subic Bay Freeport Zone | 600 | ECC of Unit 1 on 2008 and Unit II on 2012, GIS review by NGCP completed 10 May 2012; Public consultations conducted in Subic on 29 June 2012; Amended ECC secured on 12 November 2012; Site preparation construction on-going, construction to commence on Q3 2013; On-going financing arrangements; Started discussions with the Manila Electric Company for sale of power; 52% owned by Meralco PowerGen Corp. (MPGC); Target Commercial Operation for Unit 1 on Q4 2016 and Unit 2 on Q2 2017 Project cost Php50B / $1.2B | Phase I - Q2 2016<br>Phase II - Q4 2016 |
| Indicative | 135 MW Puting Bato Coal Fired Power Plant Phase II | South Luzon Thermal Energy Corp. (SLTEC) | Brgy. Puting Bato West, Calaca, Batangas | 135 | Ongoing feasibility study; SEC Registration Certificate issued July 29, 2011; LGU Endorsement issued Feb. 14, 2012; GIS issued on 17 May 2012; Land already acquired, ongoing Titling and Conversion of Land to industrial; EPC proposal under review, for forward on Q3 2012; ECC target date to secure on Q4 2012; financing close expected by end of 2012; Project cost is Php 9.6B | Q4 2015 |
| Indicative | 2 X 300 MW Mariveles Expansion Project | GNPower Mariveles Coal Plant Ltd. Co. | Mariveles, Bataan | 600 | Ongoing permits; Negotiation with financing resources to commence on Q4 2012; Commercial operation by Q3 2016; Project cost is $1B | Q1 2016 |
| Indicative | 2 X 150 MW SLPGC Coal-Fired Power Plant Phase II | Southwest Luzon Power Generation Corporation | Brgy. San Rafael, Calaca, Batangas | 300 | On-going securing necessary permits; Land Lease Agreement with PSALM secured; SEC registration approved 31 Aug. 2011; on-going negotiations with off-takers; ECC application approved 21 Oct. 2011; On-going negotiation with prospective banks; Project cost for Phase I and II is Php45.36B | Unit I - 2016<br>Unit II - 2016 |
| Indicative | 2 X 300 MW Masinloc Expansion | AES Masinloc Power Partners Co., Inc. | Zambales | 600 | Grid Impact Studies obtained on 7 January 2011; Undergoing consultation with international / local banks; ECC Amendment was released by DENR on 23 April 2012; The amended DOE Certificate of Endorsement for BOI was released on 7 May 2012; Project cost is Php49.45B | Unit 3 (300 MW) - 3rd Quarter 2016<br>Unit 4 (300 MW) - 3rd Quarter 2016 |
| Indicative | 300 MW Limay Power Plant | SMC Consolidated | Brgy. Lamao, | 300 | On-going securing of permits and other regulatory requirements; SEC issued last 19 August 2011; Land acquisition completed; On-going electric power supply contract | 150 MW - Dec. 2015<br>150 MW - May 2016 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| | Project Phase I | Power Corporation | Limay, Bataan | | negotiation with prospective off-takers; On-going negotiations for financing arrangements; Target construction July 2013; Project cost is $622M / Php25.5B | |
| Indicative | Quezon Power Expansion Project | Quezon Power Phils. | Mauban, Quezon | 500 | SIS completed in 2007 and is being revalidated; ECC issued June 4, 2007; Extension of validity granted on May 31, 2012 and valid until 04 June 2015; Municipal LGU endorsement issued April 19, 2005; Award EPC contract estimate July 2013; Design and construction to start January 2014; Project cost is Php37.8B | Q2 2017 |
| Indicative | 300 MW Limay Power Plant Project Phase II | SMC Consolidated Power Corporation | Brgy. Lamao, Limay, Bataan | 300 | On-going negotiation on land acquisition; On-going securing of permits and other regulatory requirements; On-going negotiations for financing arrangements | 2018 |
| Indicative | 300 MW Limay Power Plant Project Phase III | SMC Consolidated Power Corporation | Brgy. Lamao, Limay, Bataan | 300 | On-going negotiation on land acquisition; On-going securing of permits and other regulatory requirements; On-going negotiations for financing arrangements | 2020 |
| | **DIESEL** | | | **150.00** | | |
| 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; Project cost is Php5.67B | June 2013 |
| | **NATURAL GAS** | | | **2,900.00** | | |
| Indicative | Pagbilao 300 MW Combined Cycle Gas Fired Power Plant | Energy World Corporation | Brgy. Ibabang Polo, Grande Island, Pagbilao, Quezon | 300 | Various permits obtained; Granted permits by DOE on the LNG terminal on January 24, 2011; COE obtained from the DOE in December 2011; Land is already secured with a long lease entered into since 2007; Entered into a Sale and Purchase Agreement last October 2012 with Siemens Energy for two 200 MW gas turbines; On-going negotiations for financing arrangements; Intended to supply power into the Wholesale Electricity Spot Market but is also open to discussing potential off take arrangements as well; On-going earth moving activities at the project site; Project cost is $300M | Q2 2014 |
| Indicative | 300 MW Batangas Mid-Merit Plant Project | First Gen Corporation | Batangas | 300 | On-going securing of permits and other regulatory requirements; Acquisition of the parcels of the land in the target plant site is on-going; Discussion with target off-takers on-going; On-going negotiations for financing arrangements; Project cost is Php10B | Q3 2014 |
| Indicative | San Gabriel Power Plant | First Gas Power Corp. | San Gabriel, Batangas | 550 | Various permits obtained; On-going negotiations for financing arrangements with target completion in 4Q 2012; Discussion with OEM and EPC providers ongoing; discussion of target off-takers targeted for the first half of 2012; Project cost is Php18.48B | Q3 2015 |
| Indicative | LNG-Fired Combined Cycle Power Plant | Meralco PowerGen Corporation | Atimonan, Quezon | 1,750 | On-going Feasibility Study; Acquisition of the parcels of the land in the target plant site is on-going; Discussion of PSA with potential off-takers on-going; On-going GIS by NGCP; Project cost Php50B | 2019 |
| | **GEOTHERMAL** | | | **140.00** | | |
| Committed | Maibarara Geothermal Power Project | Maibarara Geothermal, Inc. | Sitio Capuz, Brgy. San Rafael, Sto. Tomas, | 20 | Obtained Geothermal Service Contract with DOE; ECC obtained in August 2010; BOI Registration obtained in January 2011; Entered into an Electricity Suppy Agreement (ESA) with Trans-Asia Oil and Energy Development Corp. for the 100% offtake of generated electricity; Selected IEE Corp & Fuji Electric as main and subcontractors for | July 2013 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| | | | Batangas | | the power plant EPC; Secured 70% project financing with RCBC and BPI Capital; GIS from NGCP completed in March 2011; Certificate of Confirmation of Commerciality from DOE obtained; Ground breaking of construction on 27 April 2012; Commercial Operation by Q4 2013; Project cost Php3.4B / $79.4M | |
| Indicative | Tanawon Geothermal Project | Energy Development Corporation | Guinlajon, Sorsogon | 40 | On-going Feasibility Study; DOE Service Contract within GRESC # 2009-10-003; LGU endorsement, Land Use Permits, DENR-ECC, and Water Rights obtained; Turnkey Contract pending result of feasibility study; project finance preparation on-going; Project cost estimated $200M | 2H 2018 |
| Indicative | Rangas Geothermal Project | Energy Development Corporation | Bacon District, Sorsogon | 40 | On-going Feasibility Study; DOE Service Contract within GRESC # 2009-10-003; LGU endorsement, Land Use Permits, and DENR-ECC obtained; Turnkey Contract pending result of feasibility study; project finance pending result of feasibility study; Project cost is Php8.4B | 2H 2018 |
| Indicative | Kayabon Geothermal Project | Energy Development Corporation | Manito, Albay | 40 | On-going Feasibility Study; DOE Service Contract within GRESC # 2009-10-003; LGU endorsement, DENR-ECC, and Water Rights obtained; On-going application for land-use permits; Project cost is Php8.4B | 2H 2020 |
| | **HYDROPOWER** | | | **150.00** | | |
| Indicative | Kanan Hydro Power Project | Kanan Hydro Electric Power Corp. | Gen. Nakar, Quezon Province | 150 | Fully complied with RE requirements; awaiting RE contract signing; Project cost is Php15.75B | December 2020 |
| | **WIND** | | | **459.50** | | |
| Committed | Pililla Wind Power Project | Alternergy Wind One Corporation | Pililla, Rizal | 67.5 | AWOC to finance the implementation of the project with 100% equity; Interconnection Agreement with MERALCO last 1 March 2012; EPC and O&M Contract with consortium of Nordex SE and McConnell Donnell last 11 July 2012; Project Finance Term Sheet with BDO Unibank, Inc last 27 July 2012; Final review of GIS by NGCP last 31 July 2012; Project cost is Php10B | December 2014 (Subject to FIT) |
| Indicative | Mabitac Wind Farm Project | Alternergy Sembrano Wind Corporation | Mabitac, Rizal | 56 | AWOC to finance the implementation of the project with 100% equity; Interconnection Agreement with MERALCO last 1 March 2012; EPC and O&M Contract with consortium of Nordex SE and McConnell Donnell last 11 July 2012; Project Finance Term Sheet with BDO Unibank, Inc last 27 July 2012; Final review of GIS by NGCP last 31 July 2012; Project cost is Php7.056B | 2015 |
| Indicative | Pasuquin East Wind Energy Project Phase One | Energy Logics Philippines, Inc. | Pasuquin, Ilocos Norte | 48 | ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors committment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets; Project cost is Php6.048B | June 2013 (Subject to FIT) |
| Indicative | Burgos Wind Power Project | EDC Burgos Wind Power Corporation | Nagsurot-Saoit, Burgos, Ilocos Norte | 86 | DOE Service contracts obtained; Civil Aviation Authority clearance obtained; DENR-ECC obtained; LGU endorsement obtained; Project cost is Php85.5M | December 2013 (Subject to FIT) |
| Indicative | Cavinti Wind Farm Project | Alternergy Cavinti Wind Corporation | Cavinti, Laguna | 50 | On-going securing necessary permits, applied for conversion from pre-development stage to development/commercial stage; Project cost is Php7B | 2016 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| Indicative | 80 MW Caparispisan and Balaoi Wind Energy Project | Northern Luzon UPC Asia Corporation | Brgys. Caparispisan and Balaoi, Municipality of Pagudpud, Province of Ilocos Norte | 80 | SEC Registration Certificate obtained May 31, 2006; ECC obtained 23 July 2009; Wind Energy Service Contract (WESC) for Caparispisan secured from DOE last 14 September 2009 and Balaoi last 01 February 2010 ; BOI secured 23 June 2011; NGCP Connection obtained 04 January 2011; A 25-year Forest Land Use Agreements (FLAg) was secured from the DENR last 20 May 2009; Submitted Declaration of Commerciality (DOC) to DOE; On-going negotiation with financial institutions; Construction will commence at financial close and is scheduled to take 18 months; Project cost is $250M | Q1 2014 |
| Indicative | Pasuquin East Wind Energy Project Phase Two | Energy Logics Philippines, Inc. | Pasuquin, Ilocos Norte | 72 | ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors committment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets; Project cost is Php9.072B | February 2014 (Subject to FIT) |
| | **BIOMASS** | | | **43.30** | | |
| Committed | 9.9 MWe (net) SJCiPower Rice Husk-Fired Biomass power Plant Project | San Jose City I Power Corporation | Brgy. Tulat, San Jose, Nueva Ecija | 11 | Various permits obtained; Financially Closed; Signed EPC with Engcon of Singapore; Launching and groundbreaking on 12 October 2012; Project cost is Php1.234B | December 2014 |
| 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; Project cost is Php1.719B | Phase I (2 MW) December 2013<br><br>Phase II (9.2 MW) December 2015 |
| 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; Project cost is Php903M | 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; Project cost is Php1.9B | December 2014 |

**Total Rated Capacity:** **7,952.80**
**Total Committed Rated Capacity:** **533.50**
**Total Indicative Rated Capacity:** **7,419.30**
*Source: DOE*

*Annex 11. Private Sector Initiated Power Projects (Visayas) as of 29 March 2013*

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| | **COAL** | | | **754.00** | | |
| Committed | 2 X 135 MW Concepcion Coal-fired Power Plant | Palm Thermal Consolidated Holdings Corp. | Brgy. Nipa, Concepcion , Iloilo | 270 | Acquired land on Nov. 2010; permits and other requirements obtained; Secured Letter of Intent from from CEBECO, PECO and ILECO 111; EPC Contract signed 2 February 2013; Appointed SNC-Lavalin, Inc. as the Owner's Engineer; Signed Formal Coal Offer of Semirara dated 16 July 2012; Connection Agreement between PCPC and NGCP was already signed on 1 Oct. 2012; negotiations with DUs/ECs are underway for the review of the proposed Power Supply Contract offered by PCPC; System Impact Study (SIS) received from NGCP last 17 July 2012; financial close by April 2013, BDO Capital's due diligence is now underway before the signing of Mandate Letter; BOI amendment for change of ownership/increase capacity from 100-135MW approved 2 Oct. 2012; ECC amendment for increase capacity from 100-135MW approved 12 Oct. 2012; Electric Power Purchase Agreement (EPPA) with VRESCO for 5MW on 14 Nov. 2012, NOCECO for 10MW on 15 Jan. 2013, NORECO 1 for 2MW on 13 Feb. 2013 and CENECO for 22.6 MW on 11 March 2013; Ground breaking on 15 Jan. 2013; Commencement of construction on Q2 2013; Project cost is Php26.356B | 1st Unit - Q3 2015<br>2nd Unit - Q3 2016 |
| Committed | TPC Coal-Fired Power Plant Expansion Project (1 x 82 MW Coal-Fired Power Plant | Toledo Power Company | Toledo City, Cebu | 82 | On-going securing of permits and other regulatory requirements; secured clearance from DOE for the conduct of GIS; ECC issued last 28 August 2012; BOI-Certificate of Registration No. 2012-225 last 23 October 2012; Groundbreaking Ceremony held last 11 November 2012; Loan agreement with Banks in place, financial close on 07 March 2013 (70% Loan / 30% Equity); Project fee is Php10.17B | Q3 2014 |
| Indicative | 1 X 20 MW FDC Danao CFB Coal Power Plant | FDC Utilities, Inc. | Danao City, Cebu | 20 | Grid Impact Studies completed; On-going securing of regulatory requirements; Other required permits and endorsement to be secured upon completion of pre-con activities; Financial close targeted on December 2012; Project cost is Php1.512B | Q4 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; Project cost is Php6.199B | 2015 |
| Indicative | 300 MW Therma Visayas Energy Project | Therma Visayas Inc. | Brgy. Bato, Toledo City, Cebu | 300 | On-going securing of permits and other regulatory requirements; Acquisition of the parcels of the land in the target plant site is on-going; Discussion with target off-takers on-going; Self-funded with on-going negotiations with financing institutions; Site development works to start by Q3 2013; Project cost is Php23B | 2017 |
| | **GEOTHERMAL** | | | **130.00** | | |
| Committed | Nasulo Geothermal Project | Energy Development Corporation | Nasuji, Valencia, Negros Oriental | 50 | Certificate of Commerciality and Certificate of Additional Investment obtained; DOE Service Contract within GRESC # 2009-10-002; LGU endorsement, Land Use Permits, DENR-ECC, and Water Rights obtained; Obtaining necessary permits and requirements; to be financed by EDC; Project cost $91M | Q2 2014 |
| Indicative | Dauin Geothermal Project | Energy Development Corporation | Dauin, Negros Oriental | 40 | On-going feasibility studies; LGU endorsement obtained; water rights obtained; DENR-ECC obtained; Project cost is Php8.4B | 2018 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| Indicative | Southern Leyte Geothermal Project | Energy Development Corporation | Cabalian, Southern Leyte | 40 | On-going feasibility studies; DENR-ECC obtained; LGU Endorsement obtained; Project cost is Php8.4B | 2019 |
| | **HYDROPOWER** | | | **8.00** | | |
| Committed | Villasiga HEP | Sunwest Water & Electric Co., Inc. | Brgy. Igsoro, Bugasong, Antique | 8 | Various permits obtained (LGU Endorsement, Water Permit last 19 Februaru 2010, Reconnaisance Permit, ECC last 8 July 2010, BOI last 24 November 2010 and DOE Hydropower Service Contract last 1 February 2010); Financing from PNB; Project cost Php1.4B | Q3 2013 |
| | **WIND** | | | **104.00** | | |
| Indicative | Nabas Wind Power Project | Petrogreen Energy Corporation | Brgy. Pawa, Nabas, Aklan | 50 | Feasibility study final report submitted August 2012; On-going negotiation with land acquisition; ECC last 04 June 2012; EPC with EEI Corp. secured 31 July 2012; secured Grid Impact Study final report from NGCP on 01 October 2012; Heads of Agreement for T/L construction with AKELCO was signed last 28 November 2012; Project cost US$124.02M | Q3 2013 |
| Indicative | 54 MW San Lorenzo Wind Power Project(8 MW & 46 MW) | Trans-Asia Renewable Energy Corporation | San Lorenzo, Guimaras Island | 54 | Securing various LGU permit; obtained DENR land classification in Feb. 2010; obtained ECC permit for the wind farm in Feb. 2010; secured NCIP Non-overlap Certificate in July 2010; secured Grid Impact Study draft report from NGCP in Dec. 2010; submitted Declaration of Commerciality (DOC) to REMB in March 2011 & additional documents to support the said DOC in January 2012; Power will be sold to the grid thru the FIT Systems; Turnkey EPC Contract conditionally awarded to EPC contractor in Nov. 2012 (conditioned to FIT qualification and financial close); 30% equity and 70% debt (conditionally secured financial commitment from local banks with respective board approvals in Dec. 2012); Target commerical Operation on June 2014 (with the assumption that the project construction starts in March 2013); Project cost US$141M | April 2014 |
| | **BIOMASS** | | | **57.00** | | |
| Committed | Asian Energy System Biomass Project | Asian Energy System Corporation | Cebu | 4 | Obtained necessary permits; Obtained ECC on February 2010; Loan approval from DBP granted on 25 May 2011; on-going construction; Project cost is Php199M | December 2015 |
| 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.); On-going application of Electricity Supply Agreement with Ileco I (3 MW) and Ileco II (7 MW); Acquisition of the parcels of the land in the target plant site is on-going; Biomass supply contract obtained; Certificate of Endorsement from DOE obtained on April 30, 2010; Signed Engineering, Procurement and Construction Contract with Poyry Energy, Inc.; Project cost is Php 2.056B | Phase I - December 2014<br>Phase II - December 2015 |
| Indicative | 18 MW San Carlos Biomass Project | San Carlos BioPower Inc. | San Carlos City, Negros Occidental | 18 | Various permits obtained; SEC secured 29 July 2009; ECC secured 28 June 2011; GIS completed 4 June 2012; EPC signed 10 Aug. 2012; Commencement of construction on Dec. 2012; Currently securing Financing from local and international banks; Project cost is $3.5B | June 2014 |

**Total Rated Capacity: 1,053.00**
**Total Committed Rated Capacity: 414.00**
**Total Indicative Rated Capacity: 639.00**
*Source: DOE*

*Annex 12. Private Sector Initiated Power Projects (Mindanao) as of 29 March 2013*

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| | **COAL** | | | **2,325.00** | | |
| Committed | 2 X 150 MW Coal-Fired Therma South Energy Project | Therma South Inc. | Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur | 300 | Secured right to land; Secured permits for site development works; Self-funded with on-going negotiation with financial institutions; various permits obtained; Power Sales Agreement for 164MW between Therma South, Inc. and Davao Light & Power Company is 100MW (DLPC), Cotabato Light & Power Company is 5MW (CLPC), Agusan del Sur is 10MW (ASELCO), Surigao del Sur II is 5MW (SURSECO II), Davao Oriental EC is 5MW (DORECO), Misamis Occidental I is 3MW (MOELCI I), Cotabato EC is 8MW (COTELCO), Sultan Kudarat EC is 8MW (SUKELCO), Zamboanga del Norte is 5MW (ZANECO), Bukidnon 2 EC is 2MW (BUSECO), Surigao del Sur I is 3MW (SURSECO I), Surigao del Norte is 5MW (SURNECO), and Zamboanga del Sur I is 5MW (ZAMSURECO); EPC contract awarded to Black and Veatch on June 2012; Secured SEC, BIR, BOC, BOI, ECC permits; LGU/Sangguniang Panlalawigan Davao City Reclassification already granted and issued on 12 Dec. 2011; On-going site preparation works; Site development works by 3rd Qtr. of 2012; Target commercial operation is Q1 2015; Project cost is Php24B. | Q3 2014 |
| Committed | 2 X 100 MW Southern Mindanao Coal Fired Power Station | Sarangani Energy Corporation | Brgy, Kamanga, Maasim, Sarangani | 200 | All development permits and some construction permits were already secured, on-going procurement of other construction permits; Power Sales Agreement for 105MW between Sarangani Energy Corporation and South Cotabato II is 70MW (SOCOTECO II), Davao del Norte is 15MW (DANECO), Agusan del Norte is 10MW (ANECO), and Agusan del Sur is 10MW (ASELCO) was executed 2011-2012; EPC Contract between Owner and Daelim Philippines, Inc. executed on 30 March 2011; Financial Close on 12 December 2012; Project cost $450M; Notice to Proceed to EPC Contractor issued on 28 December 2012; Commercial operation on September 2015 | February 2015 |
| Indicative | ZAM 100 MW Circulating Fluidized Bed (CFB) Coal-Fired Power Station | San Ramon Power Inc. | Sitio San Ramon, Bgry. Talisayan, Zamboanga City | 100 | On-going securing permits; On-going negotiations with ZAMCELCO for baseload supply; Power Sales Agreement for ZAMCELCO is 85MW, and ZAMSURECO 1 is 10MW; EPC Contract between Owner and Daelim Philippines, Inc. executed on 27 December 2012; Land Lease Agreement with ZamboEcozone signed on 28 January 2013; DENR had issued ECC in April 2012; On-going sourcing of financing the project; Ground breaking last 27 January 2013; Notice to Proceed targeted on Q4 2013; Commercial operation on June 2016; Project cost is $292M | Q4 2015 |
| Indicative | Davao del Norte 20 MW Circulating Fluidized Bed Biomass-Coal Fired Thermal Power Plant | FDC Utilities, Inc. | Maco, Davao del Norte | 20 | Awaiting approval of sale from ERC on proposed plant connection at DANECO 69/13.2kV Canocotan Substation; On-going of securing of permits; Project cost is Php4.8B | Q1 2015 |
| Indicative | 300 MW SMC Davao Power Plant Project Phase I | San Miguel Consolidated Power Corporation | Brgy. Culaman, Malita, Davao del Sur | 300 | Land acquisition completed; On-going securing of permits and other regulatory requirements; SEC issued last 26 August 2011; On-going electric power supply contract negotiation with prospective off-takers; On-going negotiations for financing arrangements; Target construction May 2013; Project cost is $630M / Php25.8B | 150 MW - Oct. 2015<br>150 MW - March 2016 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| Indicative | Sibuguey Power Plant Project | Philippine National Oil Company (PNOC-EC) | Sibugay, Zamboanga | 100 | Technical and economic feasibility study was completed in July 2011; Eligible bidder for Transaction Advisor on 8 August 2012; On-going bid processing for the EIS consultancy leading to ECC application and other permits | 2016 |
| Indicative | 3 X 135 MW FDC-Misamis Circulating Fluidized Bed (CFB) Coal-Fired Power Plant Project | FDC Utilities, Inc. | Phividec Industrial Estate, Villanueva, Misamis Oriental | 405 | Land acquisition completed; On-going securing of permits and other regulatory requirements; On-going electric power supply contract negotiation with prospective off-takers; On-going negotiations for financing arrangements; Project cost is Php30.019B | Unit 1 - Q3 2015<br>Unit 2 - Q4 2015<br>Unit 3 - 2017 |
| Indicative | 300 MW SMC Davao Power Plant Project Phase II | San Miguel Consolidated Power Corporation | Brgy. Culaman, Malita, Davao del Sur | 300 | Land acquisition completed; On-going securing of permits and other regulatory requirements; On-going negotiations for financing arrangements | 2018 |
| Indicative | 600 MW SMC Davao Power Plant Project Phase III | San Miguel Consolidated Power Corporation | Brgy. Culaman, Malita, Davao del Sur | 600 | Land acquisition completed; On-going securing of permits and other regulatory requirements; On-going negotiations for financing arrangements | 300 MW - 2019<br>300 MW - 2020 |
| | **OIL** | | | **30.00** | | |
| Committed | 15 MW Diesel Power Plant | Mapalad Energy Generating Corporation | Mapalad, Dalipuga, Iligan City | 15 | SEC issued last 24 February 2011, ECC issued last 8 November 2011; PSA with Iligan Light & Power, Inc. (ILPI) for a 15-year supply contract dated 9 May 2011; Project cost Php379M; Financing by Bank of the Philippine Islands (BPI) and Cagayan de Oro Lending Center | June 2013 |
| Committed | 15 MW HFO Peaking Plant | EEI Power Corporation | Brgy. Magdum, Tagum City, Davao Del Norte | 15 | PSA with Davao del Norte Electric Cooperative, Inc. (DANECO) signed on 28, January 2012; ECC issued on 14 May 2012; GIS completed on 11 September 2012; Project cost US$15M / Php600M; financing already secured, 30% Equity and 70% loan granted by RCBC on April 2012 for EEI Power Corp.; Equipment Supply Contract secured; Site development started on May 15, 2012; Accomplishment to date is 75%. Target Commercial Operate Date is June 1, 2013 | May 2013 |
| | **GEOTHERMAL** | | | **50.00** | | |
| Committed | Mindanao 3 Geothermal | Energy Development Corporation | Kidapawan, North Cotabato | 50 | Ongoing resource assessment; DENR ECC obtained; Land use permits obtained; LGU Endorsement obtained; Water right secured; Project cost $250M | 2H 2016 |
| | **HYDROPOWER** | | | **32.00** | | |
| Indicative | Tagoloan Hydropower | First Gen Mindanao Hydropower Corp. | Bukidnon | 20 | Completed feasibility study | December 2016 |

| Committed / Indicative | Name of the Project | Project Proponent | Location | Rated Capacity (MW) | Project Status | Target Commissioning |
|---|---|---|---|---|---|---|
| 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 |
| | **SOLAR** | | | **35.00** | | |
| Indicative | Darong Solar Photovoltaic Power Project | PhilNew Energy Inc. | Sta. Cruz, Davao del Sur | 35 | Awarded with the Solar Energy Service Contract (SESC No. 2011-12-007) on 16 December 2011; Submitted the Declaration of Commerciality (DOC) on September 2011 | September 2015 (Subject to FIT) |
| | **WIND** | | | **5.00** | | |
| 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) |
| | **BIOMASS** | | | **35.00** | | |
| 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 |

**Total Rated Capacity: 2,512.00**
**Total Committed Rated Capacity: 580.00**
**Total Indicative Rated Capacity: 1,932.00**
*Source: DOE*

*Annex 13. ERC Approved Capital Expenditure Projects as of March 2013*

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| **Iloilo III Electric Cooperative,Inc. (ILECO III)** | **NETWORK PROJECTS** | | | | October 26, 2011/ November 12, 2012 |
| | **Projects for 2011** | | | | |
| | Purchase of Maintenance Materials | Purchase of various line hardware and electrical supplies and materials for distribution system operations and maintenance and stocks inventory | • To ensure the availability of stocks to sustain distribution system operation and immediate restoration of electricity | 28,498,559.00 | |
| | Replacement of Damaged Kilowatt-Hour (kWh) Meters | Replacement of aged, inaccurate and static kWh meters | • The project aims to replace existing meters which are damaged, non-sensing and registering inaccurate reading. Such replacement will result in system loss reduction of 2,164,860 kWh for the next four (4) years. A total of 9,500 units of kWh meters will be replaced within the same period. | 3,000,000.00 | |
| | Uprating of Overloaded/Damaged Transformer | Procurement and installation of pole mounted distribution transformers | • The acquisition of thirty-four (34) new pole mounted distribution transformers of various capacities is intended to replace overloaded/damaged units for the next four (4) years | 3,276,668.00 | |
| | Purchase of Kilowatt-hour Meters for New Consumers | Procurement and installation of kilowatt-hour (kWh) meters and accessories | • The new revenue meters are intended for the registration power consumption requirements of residential customers. A total of 11,302 units of kWh meters shall be acquired for the next four (4) years | 3,227,000.00 | |
| | **Projects for 2012** | | | | |
| | Uprating of Distribution Feeders | Uprating of the new conductors to address load growth | • The project is intended for the uprating of existing conductors will have a higher load carrying capacity compared to the existing conductors and aims to address the increasing load of the said feeders. | 27,070,346.00 | |
| | Installation of 69 kV Circuit Breaker to Pani-an Substation | Procurement and installation of power circuit breaker for Pani-an Substation | • To replace disconnect switches currently installed at the Pani-an Substation with a more reliable circuit protection and interrupting/disconnecting equipment in order to avert power transformer failure during the occurrence of electrical fault | 5,072,000.00 | |
| | Purchase of Maintenance Materials | Acquisition of various line hardware and electrical supplies and materials for distribution system operations and maintenance and stocks inventory | • To ensure the availability of stocks to sustain distribution system operation and immediate restoration of electricity | 20,823,392.00 | |
| | Replacement of Damaged Kilowatt-Hour (kWh) Meters | Replacement of aged, inaccurate and static kWh meters | • The project aims to replace existing meters which are damaged, non-sensing and registering inaccurate reading. Such replacement will result in system loss reduction of 2,164,860 kWh for the next four (4) years. A total of 9,500 units of kWh meters will be replaced within the same period. | 2,500,000.00 | |
| | Purchase of Kilowatt-hour Meters for New Consumers | Procurement and installation of kilowatt-hour (kWh) meters and accessories | • The new revenue meters are intended for the registration power consumption requirements of residential customers. A total of 11,302 units of kWh meters shall be acquired for the next four (4) years | 2,754,000.00 | |
| | **Projects for 2013** | | | | |
| | Uprating of | Uprating of Pani-an, Balasan, PFI | • Improvement of the distribution system reliability | 19,015,185.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Distribution Feeders | (10.692 km) and SFI (21.056 km) from #1/0, #2/0 three phase line to #4/0 (preparation to looping) | | | |
| | Purchase of Maintenance Materials | Acquisition of various line hardware and electrical supplies and materials for distribution system operations and maintenance and stocks inventory | • To ensure availability of stocks to sustain distribution system operation and immediate restoration of electricity | 21,672,319.00 | |
| | Replacement of Damaged Kilowatt-Hour (kWh) Meters | Replacement of aged, inaccurate and static kWh meters | • The project aims to replace existing meters which are damaged, non-sensing and registering inaccurate readings. Such replacement will result in system loss reduction of 2,164,860 kWh for the next four (4) years. A total of 9,500 units of kWh meters will be replaced within the same period. | 2,000,000.00 | |
| | Purchase of kWh Meters for New Consumers | Acquisition and installation of kilowatt-hour meters and accessories | • The new revenue meters are intended for the registration of power consumption requirements of residential customers. A total of 11,302 units of kWh meters shall be replaced for the next four (4) years. | 2,769,000.00 | |
| | **Projects for 2014** | | | | |
| | Uprating of Natividad Substation from 5 MVA to 10 MVA | Uprating of Natividad Substation from 5 MVA to 10 MVA | • The uprating of existing power substation capacity to sustain capacity to sustain power demand and load growth | 12,000,000.00 | |
| | Purchase of Maintenance Materials | Acquisition of various line hardware and electrical supplies and materials for distribution system operations and maintenance and stocks inventory | • To ensure the availability of stocks to sustain distribution system operations and maintenance and stocks inventory | 19,630,247.00 | |
| | Replacement of Damage Kilowatt-Hour (kWh) Meters | Replacement of aged, inaccurate and static kWh meters | • The project aims to replace existing meters which are damaged, non-sensing and registering inaccurate reading. Such replacement will result in system loss reduction of 2,164,860 kWh for the next four (4) years. A total of 9,500 units of kWh meters will be replaced within the same period. | 2,000,000.00 | |
| | Purchase of kWh Meters for New Consumers | Purchase and installation of kilowatt-hour meters and accessories | • The new revenue meters are intended for the registration of power consumption requirements of residential customers. ILECO III intends to buy a total of 11,302 units of kWh meters for the next four (4) years | 2,778,500.00 | |
| | **NON-NETWORK PROJECTS** | | | | |
| | **Projects for 2011** | | | | |
| | Purchase of Testing Equipment | Acquisition of various testing equipment for distribution operations | • The proposed expenditure is designed to increase operations efficiency and increase the level of accuracy of monitoring and data gathering of electrical distribution parameters. The equipment to be acquired will be used in substation and feeder monitoring. ILECO III intends to purchase several equipment such as oil dielectric test set, transformer turns ration tester, digital multi meter, infrared scanner, earth tester, phantom load tester, load logger, flicker severity monitoring equipment, voltage recorder, live-line maintenance set, halo ammeter and clamp | 10,501,607.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | | tester within the next four (4) years. | | |
| | Purchase of Accounting and Engineering Software | Purchase of accounting software, GIS, Segregator, and reliability and short circuit program for system automation | • The proposed expenditure aims to increase operations efficiency through system automation and computerized technical data processing and analysis. | 2,300,000.00 | |
| | Purchase of Lineman Tools and Safety Gadgets | Purchase of linemen's tools and safety gadgets devices/equipment for routine and maintenance works | • The proposed expenditure aims to address load growth. | 3,409,854.00 | |
| | Purchase of Meter Reading Devices/Gadgets | Purchase of meter reading/billing hardware | • To facilitate the kilowatt-hour (kWh) meter reading and billing process for the immediate settlement of the consumer's monthly bills | 676,700.00 | |
| | Purchase of Service and Utility Vehicles | Procurement of vehicles for operations and maintenance, particularly, motorcycles, trucks, boom trucks and pump boat as means of transportation to island barangays | • To provide means of transportation to employees and personnel and to replace irreparable service and utility vehicles | 5,972,370.00 | |
| | Purchase of Communication Equipment | Acquisition of various communication devices and equipment | • To upgrade and speed-up the information relaying thru the use of the handheld/mobile radios, base radio sets, telefax machines and mobile phones for swift relaying of instructions and situation of distribution operations | 555,303.00 | |
| | Headquarter Refurbishment and Area Office Construction | Expenditure for the refurbishment and improvement of general headquarters building and facilities and construction of an area office in Sara, Iloilo | • The proposed expenditures aim to refurbish and aesthetically improve the 25-year old ILECO III headquarters and improve consumer service efficiency and optimize available working space. | 6,654,436.00 | |
| | Upgrade and Purchase of Fixtures, Furniture, & Equipment | Acquisition of computers, various softwares and acquisition repair and replacement of damaged office furniture and fixtures, generator sets, motor pool equipment | • To replace and modernize outdated fixtures, furniture, office equipment and motor pool computers and upgrade the level of computer operating system and data processing. | 5,677,000.00 | |
| | **Projects for 2012** | | | | |
| | Purchase of Testing Equipment | Purchase of various testing equipment for distribution operations | • The proposed expenditure is designed to increase operations efficiency and increase the level of accuracy of monitoring and data gathering of electrical distribution parameters. The equipment to be acquired will be used in substation and feeder monitoring. ILECO III intends to purchase several equipment such as oil dielectric test set, transformer turns ration tester, digital multi meter, infrared scanner, earth tester, phantom load tester, load logger, flicker severity monitoring equipment, voltage recorder, live-line maintenance set, halo ammeter and clamp tester within the next four (4) years. | 671,514.00 | |
| | Purchase of Lineman | Purchase of linemen's tools and | • The proposed expenditure aims to address load growth. | 2,653,438.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Tools and Safety Gadgets | safety gadgets/equipment and gadgets for routine and maintenance works. | | | |
| | Purchase of Meter Reading Device/Gadgets | Purchase of meter reading/billing hardware | • To facilitate the kilowatt-hour (kWh) meter reading and billing process for the immediate settlement of consumer's monthly bills | 550,000.00 | |
| | Purchase of Service and Utility Vehicles | Procurement of vehicles for operations and maintenance particularly motorcycles, trucks, boom trucks and pump boat as transportation to island barangays | • To provide means of transportation to employees and personnel and to replace irreparable service and utility vehicles. | 4,186,846.00 | |
| | Purchase of Communication Equipment | Acquisition of various communication devices and equipment | • To upgrade and speed up the information relaying thru the use of handheld/mobile radios, base radio sets, telefax machines and mobile phones for swift relaying of instructions and situation of distribution operations | 481,559.00 | |
| | Headquarter Refurbishment and Area Office Construction | Expenditure for the refurbishment and improvement of general headquarters building and facilities and construction of an area office in Sara, Iloilo | • The proposed expenditures aim to refurbish and aesthetically improve the 25-year old ILECO III headquarters and aesthetically improve consumer service efficiency and optimize available working space | 500,000.00 | |
| | Upgrade and Purchase of Fixtures, Furniture, and Equipment | Purchase of computers, various softwares and acquisition repair and replacement of damaged office furniture and fixtures, generator sets, motor pool equipment | • To replace and modernize outdated fixtures, furniture, office equipment and motor pool computers and upgrade the level of computer operating system and data processing | 2,700,000.00 | |
| | | | **Projects for 2013** | | |
| | Purchase of Testing Equipment | Purchase of various testing equipment for distribution operations | • This project is designed to increase operations efficiency and the level of accuracy of monitoring and data gathering of electrical distribution parameters. The equipment to be acquired will be used in substation and feeder monitoring. ILECO III intends to purchase several equipment such as oil dielectric test set, transformer turns ration tester, digital multi meter, infrared scanner, earth tester, phantom load tester, load logger, flicker severity monitoring equipment, voltage recorder, live-line maintenance set, halo ammeter and clamp tester within the next four (4) years. | 931,500.00 | |
| | Purchase of Lineman Tools and Safety Gadgets | Purchase of linemen's tools and safety gadgets devices/equipment and gadgets for routine and maintenance works | • The proposed expenditure aims to address load growth. | 2,275,416.00 | |
| | Purchase of Service and Utility Vehicles | Procurement of vehicles for operations and maintenance particularly motorcycles, trucks, boom trucks and pump boat as | • To provide means of transportation to employees and personnel and to replace irreparable service and utility vehicles. | 1,845,270.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | transportation to island barangays | | | |
| | Purchase of Communication Equipment | Acquisition of various communication devices and equipment | • To upgrade and speed up the information relaying thru the use of handheld/mobile radios, base radio sets, telefax machines and mobile phones for swift relaying of instructions and situation of distribution operations | 118,868.00 | |
| | Headquarter Refurbishment and Area Office Construction | Expenditure for the refurbishment and improvement of general headquarters building and facilities and construction of an area office in Sara, Iloilo | • The proposed expenditures aim to refurbish and aesthetically improve the 25-year old ILECO III headquarters and aesthetically improve consumer service efficiency and optimize available working space | 2,731,814.00 | |
| | **Projects for 2014** | | | | |
| | Purchase of Testing Equipment | Purchase of various testing equipment for distribution operations | • This project is designed to increase operations efficiency and the level of accuracy of monitoring and data gathering of electrical distribution parameters. The equipment to be acquired will be used in substation and feeder monitoring. ILECO III intends to purchase several equipment such as oil dielectric test set, transformer turns ration tester, digital multi meter, infrared scanner, earth tester, phantom load tester, load logger, flicker severity monitoring equipment, voltage recorder, live-line maintenance set, halo ammeter and clamp tester within the next four (4) years. | 656,500.00 | |
| | Purchase of Lineman Tools and Safety Gadgets | Purchase of linemen's tools and safety gadgets devices/equipment and gadgets for routine and maintenance works | • The proposed expenditure aims to address load growth. | 1,407,750.00 | |
| | Purchase of Service and Utility Vehicles | Procurement of vehicles for operations and maintenance particularly motorcycles, trucks, boom trucks and pump boat as transportation to island barangays | • To provide means of transportation to employees and personnel and to replace irreparable service and utility vehicles. | 2,250,000.00 | |
| | Purchase of Communication Equipment | Acquisition of various communication devices and equipment | • To upgrade and speed up the information relaying thru the use of handheld/mobile radios, base radio sets, telefax machines and mobile phones for swift relaying of instructions and situation of distribution operations | 481,559.00 | |
| | Headquarter Refurbishment and Area Office Construction | Expenditure for the refurbishment and improvement of general headquarters building and facilities and construction of an area office in Sara, Iloilo | • The proposed expenditures aim to refurbish and aesthetically improve the 25-year old ILECO III headquarters and aesthetically improve consumer service efficiency and optimize available working space | 151,500.00 | |
| **Sultan Kudarat Electric Cooperative, Inc. (SUKELCO)** | **NETWORK PROJECTS** | | | | October 28, 2011/ December 3, 2012 |
| | **Projects for 2012** | | | | |
| | Refurbishment of 69 | Refurbishment of acquired National | • To ensure safety and reliability in the transmission of electricity | 932,268.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | kV Lines and Right-of-Way (ROW) Clearing | Transmission Corporation (TRANSCO) subtransmission assets | | | |
| | Relocation and Upgrading of Kalandagan 5 MVA Substation to 10 MVA | Installation of a new power substation to upgrade the existing 5 MVA Kalandagan Substation to 10 MVA capacity | • To serve the existing and potential customers of the Kalandagan area and neighboring municipalities | 45,712,464.00 | |
| | Replacement of Malipayon Power Circuit Breaker | Procurement and Installation of new 69 kV power circuit breaker as replacement for the existing unit in Malipayon substation | • To protect the substation's power transformer and decrease the risk of damage to property and assurance of public safety | 1,801,635.00 | |
| | Replacement of Malipayon and Datu Paglas Substation Breakers and Back-up Feeder Protection | Procurement of new 15 kV circuit breakers for Malipayon and Datu Paglas Substations and installations of feeder protection for Dukay and Isulan feeders | • To ensure the circuit protection and provide means for reliable circuit interrupting and reclosing during the occurrence of electrical fault | 9,517,643.00 | |
| | Kilowatt-Hour (kWh) Meter Replacement and Rehabilitation | Procurement and installation of new kWh meters as replacement for aged, inaccurate and static kWh meters | • To reduce non-technical loss | 18,973,099.00 | |
| | Line Conversion and Extension for Large Customers | Primary line conversion and extension | • To provide adequate line capacity to sustain load growth | 2,702,654.00 | |
| | Power Quality Projects for Dukay Feeder 3 | Line Conversion from single phase to three phase and installation of power capacitors | • To address power quality problems such as under voltage and voltage unbalance | 4,958,049.00 | |
| | Feeder for Provincial Capitol | Construction of a dedicated feeder to serve the Provincial Capitol | • To support the inevitable increase in demand requirement of the entire provincial capitol | 1,336,056 | |
| | Primary Lines Expansion | Procurement of conductors, poles and line hardware/materials for the expansion of primary lines | • To address load growth and rehabilitate existing deteriorated distribution line structures | 4,790,658.00 | |
| | Secondary Line Expansion | Procurement and Installation of #1/0ACSR and Duplex #2AWG conductors having a combined circuit length of 105 km and associated support and line hardware for distribution line expansion | • To address load growth particularly in sub-urban and rural areas | 3,644,727.00 | |
| | Distribution Transformers for New Customers | Procurement and installation of kWh meters wires and accessories | • To provide electrical connection to new customers | 12,007,991.00 | |
| | Massive Poles and Line Cross-Arm Replacement | Replacement of rotten and deteriorating wooden poles and cross-arm | • To ensure reliability of the supporting structures of distribution lines in the entire SUKELCO franchise area | 5,418,203.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Installation of Line Fault Indicator | Procurement and installation of line fault indicator | • To monitor feeder/line fault conditions | 662,068.00 | |
| | Installation of Feeder Metering | Procurement and installation of feeder metering service | • To monitor feeder loading demand and conditions for operational and maintenance purposes | 3,439,442.00 | |
| | Spare Equipment for Substation | Acquisition of several equipment to be used as spare units | • To provide spare units to be used during emergencies in order to minimize power interruption and reduce the number of unserved energy | 1,500,242.00 | |
| | **Projects for 2013** | | | | |
| | Refurbishment of 69 kV Lines and ROW Clearing | Refurbishment of acquired TRANSCO subtransmission assets | • To ensure safety and reliability in the transmission of electricity | 932,266.00 | |
| | kWh Meter Replacement and Rehabilitation | Procurement and installation of new kWh meters as replacement for aged, inaccurate, and static kWh meters | • To reduce non-technical loss | 18,973,098.00 | |
| | Line Conversion and Extension for Large Customers | Primary line conversion and extension | • To provide adequate line capacity to sustain load growth | 2,702,653.00 | |
| | Line Conversion (Single Phase to Three Phase) from Brgy. Ala to Brgy. Salabaca | Conversion of single phase line to three phase configuration from Brgy. Ala to Brgy. Salabaca | • To shorten the over-extended single phase lines in order to reduce the attributed system loss | 1,613,973.00 | |
| | Primary Lines Extension | Procurement of conductors, poles, and line hardware/materials for the expansion of primary lines | • To address load growth and rehabilitate existing deteriorated distribution line structures | 4,790,657.00 | |
| | Secondary Line Expansion | Procurement and installation of #1/0ACSR and Duplex #2AWG conductors having a combined circuit length of 105 km and associated support and line hardware for distribution line expansion | • To address load growth particularly in sub-urban and rural areas | 3,644,727.00 | |
| | Distribution Transformers for New Customers | Procurement and installation of pole mounted transformers | • To address consumer load growth | 5,129,335.00 | |
| | kWh Meters, Accessories for New Customers | Procurement and installation of kWh meters wires and accessories | • To provide electrical connection to new customers | 12,007,991.00 | |
| | Massive Poles and Line Cross-Arm Replacement | Replacement of rotten and deteriorating wooden poles and cross-arm | • To ensure reliability of the supporting structures of distribution lines in the entire SUKELCO franchise area | | |
| | Installation of Line Fault Indicator | Procurement and installation of line fault indicator | • To monitor feeder/line fault conditions | 662,068.00 | |
| | Installation of Feeder | Procurement and installation of | • To monitor feeder loading demand and conditions for operational | 3,439,442.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Metering | feeder metering service | and maintenance purposes | | |
| | Spare Equipment for Substation | Acquisition of several equipment to be used as spare units | • To provide spare units to be used during emergencies in order to minimize power interruption and reduce the number of unserved energy | 1,500,242.00 | |
| | **Projects for 2014** | | | | |
| | Refurbishmen of 69 kV Lines and ROW Clearing | Refurbishment of acquired TRANSCO subtransmission assets | • To ensure safety and reliability in the transmission of electricity | 932,266.00 | |
| | kWh Meter Replacement and Rehabilitation | Procurement and installation of new kWh meters as replacement for aged, inaccurate and static kWh meters | • To reduce non-technical loss | 18,973,098.00 | |
| | Line ROW Access | Relocation of existing primary lines for right-of-way access | • To provide ROW access for existing lines routed in mountainous terrain and lines crossing private properties | 4,452,598.00 | |
| | Primary Lines Expansion | Procurement of conductors, poles and line hardware/materials for the expansion of primary lines | • To address load growth and rehabilitate existing deteriorated distribution line structures | 4,790,657.00 | |
| | Secondary Line Expansion | Procurement and installation of #1/0ACSR and Duplex #2AWG conductors having a combined circuit length of 105 km and associated support and line hardware for distribution line expansion | • To address load growth particularly in sub-urban and rural areas | 3,644,727.00 | |
| | Distribution Transfromers for New Customers | Procurement and installation of pole mounted transformers | • To address consumer load growth | 5,129,335.00 | |
| | kWh Meters, Accessories for New Customers | Procurement and installation of kWh meters wires and accessories | • To provide electrical connection to new customers | 12,007,991.00 | |
| | Massive Poles and Line Cross-Arm Replacement | Replacement of rotten and deteriorating wooden poles and cross-arm | • To ensure reliability of the supporting structures of distribution lines in the entire SUKELCO franchise area | 5,418,203.00 | |
| | Installation of Line Fault Inidcator | Procurement and installation of line fault indicator | • To monitor feeder/line fault conditions | 662,068.00 | |
| | **Projects for 2015** | | | | |
| | Refurbishment of 69 kV Lines and ROW Clearing | Refurbishment of acquired TRANSCO subtransmission assets | • To ensure safety and reliability in the transmission of electricity | 932,266.00 | |
| | Primary Lines Expansion | Procurement of conductors, poles and line hardware/materials for the expansion of primary lines | • To address load growth and rehabilitate existing deteriorated distribution line structures | 4,790,657.00 | |
| | Secondary Line Expansion | Procurement and installation of #1/0ACSR and Duplex #2AWG conductors having a combined circuit | • To address load growth particularly in sub-urban and rural areas | 3,644,727.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | length of 105 km and associated support and line hardware for distribution line expansion | | | |
| | Distribution Transformers for New Customers | Procurement and installation of pole mounted transformers | • To address consumer load growth | 5,129,335.00 | |
| | kWh Meters, Accessories for New Customers | Procurement and installation of kWh meters wires and accessories | • To provide electrical connection to new customers | 12,007,991.00 | |
| | Massive Poles and Line Cross-Arm Replacement | Replacement of rotten and deteriorating wooden poles and cross-arm | • To ensure reliability of the supporting structures of distribution lines in the entire SUKELCO franchise area | 5,418,203.00 | |
| | Installation of Line Fault Indicator | Procurement and installation of line fault indicator | • To monitor feeder/line fault conditions | 662,068.00 | |
| | **Projects for 2016** | | | | |
| | Refurbishment of 69 kV Lines and ROW Clearing | Refurbishment of acquired TRANSCO subtransmission assets | • To ensure safety and reliability in the transmission of electricity | 932,266.00 | |
| | Installation of Bagumbayan 5 MVA Substation | Procurement and installation of a one (1) unit 5 MVA power substation | • To augment the existing 5 MVA Dukay Substation which will be 75% loaded by 2016 | 69,888,033.00 | |
| | Conversion (Single Phase to 3 Phase) Lines from Brgy. Chua to Sen. Ninoy Aquino | Conversion of the single phase distribution lines to three-phase lines traversing Brgy. Chua, Brgy. Masig up to the Municipality of Sen. Ninoy | • To complement the feeders of the proposed substation in Bagumbayan<br>• To interconnect the existing single phase primary distribution lines in the Municipality of Sen,. Ninoy Aquino to the Bagumbayan Feeders upon energization of the proposed 5 MVA substation | 12,841,031.00 | |
| | Primary Lines Expansion | Procurement of conductors, poles and line hardware/materials for the expansion of primary lines | • To address load growth and rehabilitate existing deteriorated distribution line structures | 4,790,657.00 | |
| | Secondary Line Expansion | Procurement and installation of #1/0ACSRand Duplex #2AWG conductors having a combined circuit length of 105 km and associated support and line hardware for distribution line expansion | • To address load growth particularly in sub-urban and rural areas | 3,644,726.00 | |
| | Distribution Transformers for New Customers | Procurement and installation of pole mounted transformers | • To address consumer growth | 5,129,336.00 | |
| | kWh Meters, Accessories for New Customers | Procurement and installation of kWh meters wires and accessories | • To provide electrical connection to new customers | 12,007,990.00 | |
| | Massive Poles and Line Cross-Arm Replacement | Replacement of rotten and deteriorating wooden poles and cross-arm | • To ensure reliability of the supporting structures of distribution lines in the entire SUKELCO franchise area | 5,418,203.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Installation of Line Fault Indicator | Procurement and installation of line fault indicator | • To monitor feeder/line fault conditions | 662,068.00 | |
| | **NON-NETWORK PROJECTS** | | | | |
| | **Projects for 2012** | | | | |
| | Acquisition of Service and Heavy Equipment/Utility Vehicle | Acquisition of vehicles particularly light service trucks, boom trucks and pick-up trucks | • To improve employees' mobility and response time in doing assigned tasks and provide ease and travelling comfort to personnel particularly those attending various maintenance service assignments | 20,351,970.00 | |
| | Acquisition of Accounting Software and Computer Hardware | Procurement of accounting software, computers and associated hardware | • To increase efficiency of operations through system automation of accounting data management and replacement of outdated computer operating system which will handle billing, warehouse, cashier operations, and utility's payroll system | 3,090,000.00 | |
| | Procurement of Instrument Transformer Tester | Procurement of equipment for instrument transformer testing purposes | • To test transformers such as potential and current transformers | 1,532,640.00 | |
| | Information, Communication and Technology (ICT) Projects | Procurement of various ICT equipment and implementation of a multi-year ICT infrastructure and systems upgrade | • To modernize SUKELCO's office operation in terms of computer technology, communication, data analysis and sharing, and surveillance. | 4,035,662.00 | |
| | **Projects for 2013** | | | | |
| | Construction of SUKELCO Headquarters | Construction of general headquarters building, assembly area, and development of garage/parking space and premises landscaping | • To provide a decent and aesthetically-enhanced main office<br>• To improve consumer service efficiency and optimize available working space that will accommodate the seven (7) office departments, consumer service center, conference room, clinic, and storage areas | 31,798,617.00 | |
| | Acquisition of Service and Heavy Equipment/Utility Services | Acquisition of vehicles particularly light service trucks, boom trucks and pick-up trucks | • To improve employees' mobility and response time in doing assigned tasks and provide ease and travelling comfort to personnel particularly those attending various maintenance service assignments | 20,351,969.00 | |
| | ICT Projects | Procurement of various ICT equipment and implementation of a multi-year ICT infrastructure and systems upgrade | • To modernize SUKELCO's office operation in terms of computer technology, communication,, data analysis and sharing, and surveillance | 4,035,662.00 | |
| | **Projects for 2014** | | | | |
| | ICT Projects | Procurement of various ICT equipment and implementation of a multi-year ICT infrastructure and systems upgrade | • To modernize SUKELCO's office operation in terms of computer technology, communication,, data analysis and sharing, and surveillance | 4,035,662.00 | |
| | **Projects for 2015** | | | | |
| | ICT Projects | Procurement of various ICT equipment and implementation of a | • To modernize SUKELCO's office operation in terms of computer technology, communication,, data analysis and sharing, and | 4,035,662.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | multi-year ICT infrastructure and systems upgrade | surveillance | | |
| | **Projects for 2016** | | | | |
| | ICT Projects | Procurement of various ICT equipment and implementation of a multi-year ICT infrastructure and systems upgrade | • To modernize SUKELCO's office operation in terms of computer technology, communication,, data analysis and sharing, and surveillance | 4,035,662.00 | |
| **Zamboanga Del Sur II Electric Cooperative, Inc. (ZAMSURECO II)** | Upgrading and Refurbishment of Sta. Barbara Substation | The project is intended to uprate the existing 5MVA Sta. Barbara Substation by adding a 5 MVA power transformer. The power transformer will be the refurbished 5 MVA substation from Pangi Substation which was decommissioned in 2008. | • The existing 5 MVA power transformer of Sta. Barbara Substation is almost fully loaded with ninety-four percent (94%) of its rated capacity. This is already critical and poses danger to the said transformer. The proposed project will eliminate this dilemma by augmenting another 5 MVA power transformer to Sta. Barbara Substation. The said substation is presently serving various municipalities within the franchise area of ZAMSURECO II. It is already above 70% loaded as shown above.<br>• ZAMSURECO II's two (2) incoming industrial consumers, namely: the A Blackstone Corporation (ABEC) and the Brixton Corporation (BC) intend to connect to the Sta. Barbara Substation. These are both the mining companies with a demand requirement of 0.9 MW and will be located near the areas being served by the substation. The operation of these customers will certainly overload the said substation, and thus, there is urgent need for ZAMSURECO II to address the problem by upgrading the capacity of its Sta. Barbara Substation. The additional 5 MVA power transformer will be coming from the decommissioned Pangi Substation in 2008.<br>• The proposed project includes the transfer of loads from the Bayog Area now being served by the Danda Substation which has an under-voltage problem. Said transfer will relieve Danda Substation from the long vee-phase lines in the area and thus, improve its power quality and reduce its technical system loss.<br>• The implementation of the project will not only provide efficient and reliable power supply in Sta. Barbara but improve the power quality and reduce the existing technical loss in the Danda Substation as shown in ZAMSURECO II's system map. | 35,725,000.00 | April 29, 2011/ December 10, 2012 |
| **Cagayan II Electric Cooperative, Inc. (CAGELCO II)** | Acquisition of 69 kV Sub-transmission Line Under Joint Venture with CAGELCO I | Acquisition of the existing 165 km. 69 kV lines of the National Transmission Corporation (TRANSCO) | • To comply with TRANSCO's sub-transmission assets divestment pursuant to Republic Act 9136 | 82,883,290.00 | August 24, 2011/ December 17, 2012 |
| | Construction of 18.335 km 69 kV line from Casambalangan to Tangatan, Sta. Ana | Procurement of materials and installation of 69 kV lines from Casambalangan to Tangatan, Sta. Ana, Cagayan | • To connect and energize the proposed 10 MVA power substation to be installed in Tangatan, Municipality of Sta. Ana | 90,200,000.00 | |
| | Installation of 10 MVA Substation at | Procurement and installation of a new 10 MVA substation in Tangatan, | • To provide power reliability and additional substation capacity to meet the inevitable increase in power demand | 49,500,000.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Tangatan, Sta. Ana, Cagayan | Sta. Ana, Cagayan | | | |
| | Installation of 7.5 MVA Mobile Substation and 3-167 kVA AVRs at Mission, Sta. Teresita | Installation of a mobile substation in Sta. Teresita, including the connection of the 69 kV lines and one (1) assembly of 3-167 kV AVRs for voltage level correction | • To provide additional substation capacity and augment the existing 5 MVA Bantay Power Substation. The 3-167 kV AVRs will be installed at the far-end section of the distribution/feeder of the Bantay Substation going to Aparri, Cagayan, which is suffering from votalge drop problems | 16,212,400.00 | |
| | Line Rehabilitation and Upgrading Projects | Purchase and replacement of existing distribution lines particularly in coastal areas | • To address load growth and assure power distribution reliability | 52,891,000.00 | |
| | Installation of 15 kV Switchgear at Magapit Substation | Installation of Korean Electric Power Corporation (KEPCO-donated switchgear at Magapit Substation | • To provide automated monitoring and control of Magapit Substation | 3,010,000.00 | |
| **Tarlac I Electric Cooperative, Inc. (TARELCO I)** | **Project for Commissioning Year 2010** | | | | |
| | Acquisition Of Service Vehicle | Procurement of service vehicles, boom truck and drill truck to improve service efficiency. | | 9,818,750.00 | |
| | **Projects for Commissioning Year 2011** | | | | |
| | Installation of 10 MVA substation at Victoria, Tarlac | The proposed capital project is intended to relieve part of the load of the Gerona 10 MVA substation. The new substation will be constructed at Victoria area office with two (2) outgoing feeders. Along with it, a 9.3 km single circuit 69 kV line will be constructed. In addition, the two (2) cooling fans of the Gerona Substation will, likewise, be replaced to accommodate an additional 25% loading capacity for the said transformer. This project will likewise address the safety concerns and power quality problems of TARELCO I. The proposed project is 90% complete. | | 47,127,640.10 | |
| | **Project for Commissioning Year 2010-2012** | | | | |
| | Construction of Satellite Offices | At present, TARELCO I is renting several satellite offices for the collection of power bills at different municipalities in its coverage area having an average floor area of 16 sqm. In order to provide a more spacious and more convenient facility to its personnel and its member-consumers, TARELCO I proposed to construct its own satellite offices at the Municipalities of Anao, Ramos, Pura, San Manuel, San Clemente, Mayantoc, Paniqui, Sta. Ignacia, San Jose, and Nampicuan. | | 14,223,672.88 | |
| | **Projects for Commissioning Year 2010-2013** | | | | |
| | Distribution Transformer Expansion Requirement | Procurement of distribution network transformers for the projected new customers of TARELCO I. | | 58,340,759.98 | |
| | New connection | This project covers the provision of service connections to new applicant of TARELCO I. Standard connection facilities. | | 47,881,765.42 | |
| | Secondary Line Expansion | This project covers the provision of service connections to new applicants and/or existing customers of TARELCO I. | | 20,419,376.17 | January 27, 2011/ December 17, 2012 |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | **Projects for Commissioning Year 2012** | | | | |
| | Advance Installation of 10 MVA at Anao, Tarlac | To correct the power quality problem being experienced by the Cuyapo Feeder which is serving the whole town of Cuyapo and some barangays of Nampicuan and Guimba, Nueva Ecija. TARELCO I simulated thirty (30) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. This project will likewise address the capacity and safety problem of TARELCO I. | | 67,746,692.93 | |
| | Capacitor Installation and Line Section Phase Balancing at Pura Feeder | To correct the power quality problem being experienced by the Pura Feeder. TARELCO I simulated five (5) project alternatives in order to assess the most appropriate project addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. | | 47,979.53 | |
| | Phase Balancing of Three (3) Line Sections and Capacitor Placement at Paniqui 2 Feeder | To correct the power quality problem being experienced by the Paniqui 2 Feeder. TARELCO I simulated eight (8) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. | | 197,271.62 | |
| | Capacitor Placement and Phase Balancing at Mayantoc Feeder | To correct the power quality problem being experienced by the Mayantoc Feeder. TARELCO I simulated eight (8) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. | | 1,010,006.23 | |
| | Line Conversion of 1.94 km Single Phase To Three Phase and Phase Balancing of Two Line Sections of San Jose Feeder | To correct the power quality problem being experienced by the San Jose Feeder. TARELCO I simulated three (3) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. | | 1,927,991.18 | |
| | Backbone Conductor Up-Rating, Line Conversion with Twelve Line Section Phase Balancing and Capacitor Placement of Sta. Ignacia Feeder | To correct the power quality problem being experienced by the Sta. Ignacia Feeder. TARELCO I simulated twelve (12) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project is the most viable solution among the alternatives. | | 37,632,320.05 | |
| | Installation of Recloser at feeder midstream of Paniqui 2 Feeder | To address the safety requirement of Paniqui 2 Feeder during minimum fault conditions by installing one feeder recloser at Pole No. PAN2917 | | 874,157.77 | |
| | Installation of Recloser at feeder midstream of Sta. Ignacia Feeder | To address the safety requirement of Sta. Ignacia Feeder during minimum fault conditions by installing one feeder recloser at Pole No. STI1552 | | 874,157.77 | |
| | Installation of Recloser at Sta. Ignacia Feeder | To improve the reliability performance of Sta. Ignacia Feeder. | | 1,748,315.53 | |
| | Creation of Storeroom for FSD | Construction of store room for the Finance Services Department (FSD) | | 1,974,100.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Substation Graveling (Moncada, Paniqui, Camiling, & Sta. Ignacia) | Laying of gravel at several substations of TARELCO I to prevent grass from sprouting and to ensure the safe operation of the substations. | | 633,047.16 | |
| | Lot Acquisition For Satellite Offices (Sta. Ignacia, San Jose, & Nampicuan) | Acquisition of lot for the construction of TARELCO I's satellite offices. | | 5,714,500.00 | |
| | Renovation of Calayaan Area Office | To renovate the existing facility of TARELCO I's Calayaan area. | | 1,558,500.00 | |
| | Renovation of GM's Residence/Staffhouse | To renovate TARELCO I's residence and staff house located at the main office compound. | | 2,078,000.00 | |
| | Rehabilitation of Headquarters Water System | To replace the main pipe from the overhead tank going to the offices and to rehabilitate other waterlines. | | 519,500.00 | |
| | Engineering Analysis Tools | To facilitate all technical simulations being performed by the electric cooperative with the aid of engineering analysis software. To improve service efficiency. | | 440,000.00 | |
| | Engineering Analysis Tool Software Updates | Upgrading of engineering analysis tool software. | | 623,400.00 | |
| | Procurement of Laptops | To augment and/or replace the existing laptops of the cooperative in order to cope with the technical advancement of most engineering software. To improve service efficiency. | | 137,000.00 | |
| | High Voltage Detector (2 Units) | To be used for measuring the voltage levels at various points or buses in the distribution network of TARELCO I particularly on the primary side of the system. | | 160,006.00 | |
| | Security Cameras for Collection Office and Substation | Installation of security cameras. To ensure public and personnel safety. | | 598,464.00 | |
| | Voice & Video Teleconferencing | To facilitate and enhance the cooperative communication system | | 311,700.00 | |
| | Time Attendance Automation, Payroll & HR System | To automate the HR system of the cooperative in order to eliminate human error and ensure the accuracy of personnel records. | | 623,400.00 | |
| | Boom Truck | Procurement of boom truck to improve service efficiency. | | 24,936,000.00 | |
| | Multimedia Projector (High ANSI Lumens) | To be used in consumer's education, AGMA and other coop activities. To improve service efficiency. | | 311,700.00 | |
| | Short Circuiting and Earthing Equipment | This equipment will prevent/eliminate the possibility of electrocution of personnel's working on de-energize lines. | | 353,260.00 | |
| | Rehabilitation of Administration Building | To rehabilitate the existing condition of TARELCO I's admin building. | | 5,397,605.00 | |
| | **Projects for Commissioning Year 2012** | | | | |
| | Capacitor Installation at Gerona Feeder | To correct the power quality problem being experienced by the Gerona Feeder. TARELCO I simulated eight (8) project alternatives in order to address the most appropriate project in addressing said deficiency and the | | 286,901.21 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | Commission verified that the proposed capital project is the most viable solution among the alternatives. | | | |
| | Capacitor Installation at San Clemente Feeder | To correct the power quality problem being experienced by the San Clemente Feeder. TARELCO I simulated three (3) project alternatives in order to assess the most appropriate project in addressing said deficiency and the Commission verified that the proposed capital project | | 86,912.14 | |
| **Guimaras Electric Cooperative, Inc. (GUIMELCO)** | **NETWORK PROJECTS** | | | | November 29, 2011/ February 4, 2013 |
| | **Projects for 2011** | | | | |
| | Conductor Uprating with Capacitor Placement and Distribution Transformer (DT) Load Management | Uprating of 4/0 ACSR to 336.4 ACSR conductors with a total length of 8.35 kms. And the installation of additional capacitor bank as well as DT load management. | • To reduce system loss | 7,849,679.00 | |
| | Additional Primary and Secondary Lines and Service Drop Wires | Construction of additional primary and secondary lines for three phase and single phase circuits and service drop wires | • To address load growth and accommodate new customers | 4,542,628.00 | |
| | Installation of Recloser | Installation of recloser at the backbone line particularly at Pole No. 1128 | • To improve reliability of the electric system | 1,373,535.00 | |
| | Procurement of New Kilowatt Hour (kWh) Meters | Procurement of brand new kWh meters | • To address load growth | 2,874,123.00 | |
| | Replacement/Rehabilitation of Kilowatt Hour (kWh) Meters | Calibration, Inspection, testing, and resealing and replacement of old, dilapidated, and defective kWh meters | • To reduce system loss and pilferage of electric power | 113,419.00 | |
| | Procurement of Distribution Transformers (DTs) | Procurement of fifty one (51) units conventional, pole type distribution transformers and brand new units to replace old dilapidated and aging distribution transformers. | • To reduce system loss and address load growth | 3,271,022.00 | |
| | **Projects for 2012** | | | | |
| | Additional primary and Secondary Lines and Service Drop Wires | Construction of additional primary and secondary lines for three phase and single phase circuits and service drop wires | • To address load growth and accommodate new customers | 4,212,763.00 | |
| | Procurement of New Kilowatt Hour (kWh) Meters | Procurement of brand new kWh meters | • To address load growth | 2,884,526.00 | |
| | Replacement/Rehabilitation of Kilowatt Hour (kWh) Meters | Calibration, Inspection, testing, and resealing and replacement of old, dilapidated, and defective kWh meters | • To reduce system loss and pilferage of electric power | 118,114.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Procurement of Distribution Transformers (DTs) | Procurement of sixty one (61) units conventional, pole type distribution transformers and brand new units to replace old dilapidated and aging distribution transformers. | • To reduce system loss and address load growth | 3,913,253.00 | |
| | **Projects for 2013** | | | | |
| | Additional primary and Secondary Lines and Service Drop Wires | Construction of additional primary and secondary lines for three phase and single phase circuits and service drop wires | • To address load growth and accommodate new customers | 4,170,732.00 | |
| | Procurement of New Kilowatt Hour (kWh) Meters | Procurement of brand new kWh meters | • To address load growth | 2,805,245.00 | |
| | Replacement/Rehabilitation of Kilowatt Hour (kWh) Meters | Calibration, Inspection, testing, and resealing and replacement of old, dilapidated, and defective kWh meters | • To reduce system loss and pilferage of electric power | 122,739.00 | |
| | Procurement of Distribution Transformers (DTs) | Procurement of seventy (70) units conventional, pole type distribution transformers and brand new units to replace old dilapidated and aging distribution transformers. | • To reduce system loss and address load growth | 4,436,342.00 | |
| | **Projects for 2014** | | | | |
| | Additional primary and Secondary Lines and Service Drop Wires | Construction of additional primary and secondary lines for three phase and single phase circuits and service drop wires | • To address load growth and accommodate new customers | 4,128,411.00 | |
| | Procurement of New Kilowatt Hour (kWh) Meters | Procurement of brand new kWh meters | • To address load growth | 2,724,255.00 | |
| | Replacement/Rehabilitation of Kilowatt Hour (kWh) Meters | Calibration, Inspection, testing, and resealing and replacement of old, dilapidated, and defective kWh meters | • To reduce system loss and pilferage of electric power | 127,202.00 | |
| | Procurement of Distribution Transformers (DTs) | Procurement of seventy six (76) units conventional, pole type distribution transformers and brand new units to replace old dilapidated and aging distribution transformers. | • To reduce system loss and address load growth | 4,878,665.00 | |
| | **Projects for 2015** | | | | |
| | Additional primary and Secondary Lines and Service Drop Wires | Construction of additional primary and secondary lines for three phase and single phase circuits and service drop wires | • To address load growth and accommodate new customers | 4,086,854.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Procurement of New Kilowatt Hour (kWh) Meters | Procurement of brand new kWh meters | • To address load growth | 3,074,503.00 | |
| | Replacement/Rehabilitation of Kilowatt Hour (kWh) Meters | Calibration, Inspection, testing, and resealing and replacement of old, dilapidated, and defective kWh meters | • To reduce system loss and pilferage of electric power | 131,533.00 | |
| | Procurement of Distribution Transformers (DTs) | Procurement of eighty two (82) units conventional, pole type distribution transformers and brand new units to replace old dilapidated and aging distribution transformers. | • To reduce system loss and address load growth | 5,252,216.00 | |
| | **NON-NETWORK PROJECTS** | | | | |
| | **Projects for 2011** | | | | |
| | Procurement of Office Equipment, Furniture and Fixture | Procurement of different types of office equipment, furniture, tools, computers, printers | • To provide reliable power supply and quality service through continuous human resource development and systems improvement | 2,390,373.00 | |
| | Acquisition of Service Vehicles | Procurement of one (1) unit motorcycle | • To increase the mobility of GUIMELCO personnel in order to provide quality service and greater customer satisfaction | 60,000.00 | |
| | Substation Maintenance | Preventive Maintenance Service (PMS) of GUIMELCO's substation located at Ingore, La Paz, Iloilo City including insulation resistance test, transformer oil replacement and performance indicator test | • To prevent damage to the lone substation power transformer located in Ingore, La Paz, Iloilo City | 62,500.00 | |
| | Procurement of Electrical Testing Equipment | Acquisition of electrical equipment and instruments necessary in the operation and maintenance of the distribution network | • To provide efficient operation and maintenance of the continuing expansion of lateral lines, particularly in upland areas | 8,250.00 | |
| | General Plant and Headquarter Facilities | Improvement of GUIMELCO's structures and facilities with acquisition of lots for sub-area office | • To improve GUIMELCO's facilities in order to efficiently serve customers' needs and improve service performance of GUIMELCO | 550,000.00 | |
| | **Projects for 2012** | | | | |
| | Procurement of Office Equipment, Furniture and Fixture | Procurement of different types of office equipment, furniture, tools, computers, printers | • To provide reliable power supply and quality service through continuous human resource development and systems improvement | 4,755,113.00 | |
| | Acquisition of Service Vehicles | Procurement of one (1) unit motorcycle, one (1) unit 4x2 EM/T-Hilux, one (1) unit Urvan Shuttle, 4x4 Hummer Jeep and one (1) unit utility truck with hydraulic digger telescope | • To increase the mobility of GUIMELCO personnel in order to provide quality service and greater customer satisfaction | 4,765,000.00 | |
| | Substation Maintenance | Preventive Maintenance Service (PMS) of GUIMELCO's substation located at Ingore, La Paz, Iloilo City | • To prevent damage to the lone substation power transformer located in Ingore, La Paz, Iloilo City | 250,000.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | including insulation resistance test, transformer oil replacement and performance indicator test | | | |
| | Procurement of Communication Equipment | Procurement and installation of communication equipment and gadgets | • To improve communication system in order to provide immediate and efficient service to customers | 428,000.00 | |
| | Procurement of Electrical Testing Equipment | Acquisition of electrical equipment and instruments necessary in the operation and maintenance of the distribution network | • To provide efficient operation and maintenance of the continuing expansion of lateral lines, particularly in upland areas | 617,258.00 | |
| | General Plant and Headquarter Facilities | Improvement of GUIMELCO's structures and facilities with acquisition of lots for sub-area office | • To improve GUIMELCO's facilities in order to efficiently serve customers' needs and improve service performance of GUIMELCO | 1,510,000.00 | |
| | **Projects for 2013** | | | | |
| | Procurement of Office Equipment, Furniture and Fixture | Procurement of different types of office equipment, furniture, tools, computers, printers | • To provide reliable power supply and quality service through continuous human resource development and systems improvement | 1,206,000.00 | |
| | Acquisition of Service Vehicles | Procurement of three (3) units motorcycles, two (2) units SUV and three (3( units 4x2 Pick-Up | • To increase the mobility of GUIMELCO personnel in order to provide quality service and greater customer satisfaction | 3,910,000.00 | |
| | Procurement of Communication Equipment | Procurement and installation of communication equipment and gadgets | • To improve communication system in order to provide immediate and efficient service to customers | 1,000,000.00 | |
| | General Plant and Headquarter Facilities | Improvement of GUIMELCO's structures and facilities with acquisition of lots for sub-area office | • To improve GUIMELCO's facilities in order to efficiently serve customers' needs and improve service performance of GUIMELCO | 5,960,000.00 | |
| | **Projects for 2014** | | | | |
| | Procurement of Office Equipment, Furniture and Fixture | Procurement of different types of office equipment, furniture, tools, computers, printers | • To provide reliable power supply and quality service through continuous human resource development and systems improvement | 125,000.00 | |
| | Acquisition of Service Vehicles | Procurement of one (1) unit motorcycle | • To increase the mobility of GUIMELCO personnel in order to provide quality service and greater customer satisfaction | 75,000.00 | |
| | Procurement of Electrical Testing Equipment | Acquisition of electrical equipment and instruments necessary in the operation and maintenance of the distribution network | • To provide efficient operation and maintenance of the continuing expansion of lateral lines, particularly in upland areas | 50,000.00 | |
| | Substation Maintenance | Preventive Maintenance Service (PMS) of GUIMELCO's substation located at Ingore, La Paz, Iloilo City including insulation resistance test, transformer oil replacement and performance indicator test | • To prevent damage to the lone substation power transformer located in Ingore, La Paz, Iloilo City | 250,000.00 | |
| | General Plant and Headquarter Facilities | Improvement of GUIMELCO's structures and facilities with | • To improve GUIMELCO's facilities in order to efficiently serve | 1,850,000.00 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | acquisition of lots for sub-area office | customers' needs and improve service performance of GUIMELCO | | |
| | **Projects for 2015** | | | | |
| | Procurement of Office Equipment, Furniture and Fixture | Procurement of different types of office equipment, furniture, tools, computers, printers | • To provide reliable power supply and quality service through continuous human resource development and systems improvement | 431,600.00 | |
| | Acquisition of Service Vehicles | Procurement of two (2) units motorcycle | • To increase the mobility of GUIMELCO personnel in order to provide quality service and greater customer satisfaction | 150,000.00 | |
| | Procurement of Electrical Testing Equipment | Acquisition of electrical equipment and instruments necessary in the operation and maintenance of the distribution network | • To provide efficient operation and maintenance of the continuing expansion of lateral lines, particularly in upland areas | 245,000.00 | |
| | General Plant and Headquarter Facilities | Improvement of GUIMELCO's structures and facilities with acquisition of lots for sub-area office | • To improve GUIMELCO's facilities in order to efficiently serve customers' needs and improve service performance of GUIMELCO | 3,250,000.00 | |
| **Davao Del Norte Electric Cooperative, Inc. (DANECO)** | Immediate Replacement of the Damaged Power Transformer at Maco Substation | DANECO proposed to acquire a brand new power transformer unit of a higher capacity of 10 MVA. It was proposed for immediate installation with the following specification:<br><br>Power Transformer; 10/12.5 MVA ; 3-Phase; 60 HZ; OA/FA; cooling; 69 kV Pri./13.200-7.620 KV sec. with BCT; Delata-Wyve connection with neutral ground 7.5% of below impedance; BIL 350 KV; No Load Tap Changer complete with protective relays; meters; annunciator; PRD; BOULCHLZ; Controls; Panel and wirings accessories. | • To address the unexpected power supply deficiency brought about by by the untimely damage of the power transformer<br><br>• To solve the the resulting problem of under voltage, poor power quality and reliability in the affected areas | 11,261,933.00 | April 11, 2012/ March 4, 2013 |
| **Zamboanga Del Sur II Electric Cooperative, Inc. (ZAMSURECO II)** | **NETWORK PROJECTS** | | | | |
| | **Projects for 2011** | | | | |
| | Acquisition of 69 kV Subtransmission Assets | Acquisition of TRANSCO's Subtransmission Assets- the Sta. Clara to Malangas 69 kV Line and the Sta. Clara to Ipil 69 KV Line | • To gain leverage in the environment of open access and retail competition | 84,757,300.00 | December 12, 2011/ March 4, 2013 |
| | New Customers Accessories and Kilowatthour (kWh) Meters | Procurement of single-phase kWh meters, accessories and service drop wires for new LV customer and three-phase kWh meters and accessories for new HV customers | • To accommodate new customers | 19,364,603.75 | |
| | Additional Distribution Transformers | Procurement of the following: 1) distribution transformers of various | • To address additional loads and serve new low voltage customers | | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | rating and protection devices required to address load growth; and 2) fuse links of various ratings for use in the service of said distribution transformers. | | 10,546,862.00 | |
| | Line Materials for Reliability Improvement | Procurement of line hardware, insulators, conductors, and poles | • To ensure continuous electric service | 15,016,078.00 | |
| | Additional Secondary Lines, Open Secondary and Under-Built | Expansion of open secondary lines and uder-built (conductors, hardware, and accessories) | • To accommodate loads/new service applicants | 8,430,497.23 | |
| | Kilowatthour (kWh) Meters in Replacement for Meters in Service for Over Fifteen (15) Years | Replacement of the following: 1) Defective kWh meters; and 2) meters that are in service for over fiftenn (15) years | • To improve system loss and prevent billing complaints | 12,080,409.50 | |
| | | | **Projects for 2012** | | |
| | Refurbishment of Sirawai Substation, Primary and Secondary Structure | • Refurbishment of Sirawai Substation, primary and secondary structure, protection and metering accessories; and<br>• Upgrading of distribution feeder 1 serving Sirawai, Siocon and Baliguin from single circuit to double circuit for about 3.2 km. | • To improve system reliability | 15,346,927.83 | |
| | Placement of Automatic Circuit Recloser | Installation of three-phase auto reclosers at the backbone lines of the entire coverage area and single-phase reclosers to replace the fuse cut-out in the long single phase lateral lines | • To improve system reliability | 14,571,296.77 | |
| | Conversion of Distribution Line in Pangi Substation Coverage | Conversion of the 12.3 km. distribution line in Brgy. Dalangin to Brgy. Banco, Titay from single-phase to three-phase and calibration, inspection, testing and resealing as wee as replacement of old, dilapidated and defective kWh meters | • To accommodate the increasing number of high voltage customers<br>• To prevent accidents or major damages in case of sudden breakdown of rotten poles | 6,534,047.89 | |
| | Conversion of Distribution Line in Sta. Barbara | • Conversion of two-phase to three-phase distribution line from Lutiman, Alicia to | • To address power quality problems | | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Substation Coverage | Olutanga;<br>• Conversion of two-phase to three-phase distribution line from Buug to Lakewood, Zamboanga Sibugay;<br>• Conversion of two-phase to three-phase distribution line from San Jose, Imelda to Bayog; and<br>• Replacement of rotten poles and re-routing of portions that traverse rice field and private lots. | | 51,645,537.00 | |
| | Conversion of Distribution Line in R.T. Lim Substation Coverage | • Conversion of two-phase distribution line to three-phase from Tungawan to Vitali, Zamboanga City; and<br>• Conversion of one-pahse distribution line to three-phase from Poblacion, R.T. to Don Perfecto, R.T. Lim | • To improve power quality and reliability and accommodate potential industrial customers | 16,628,961.39 | |
| | 69 kV Subtransmission Refurbishment project | Refurbishment of 69 kV Subtransmission project | • To ensure system reliability | 6,333,487.24 | |
| | New Customers Accessories and Kilowatthour (kWh) Meters | Procurement of single-phase kWh meters, accessories and service drop wires for new LV customers and three-phase kWh meters and accessories for new HV customers | • To accommodate new customers | 19,364,603.75 | |
| | Additional Distribution Transformers (DTs) | Procurement of the following: 1) distribution transformers of various rating and protection devices required to address load growth; and 2) fuse links of various ratings for use in the service of said distribution transformers. | • To address additional loads and serve new low voltage customers | 10,546,862.00 | |
| | Line Materials for Reliability Improvement | Procurement of line hardware, insulators, conductors, and poles | • To ensure continuous electric service | 15,016,078.00 | |
| | Additional Secondary Lines, Open Secondary and Under-Built | Expansion of open secondary lines and uder-built (conductors, hardware, and accessories) | • To accommodate loads/new service applicants | 8,430,497.23 | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Kilowatthour (kWh) Meters in Replacement for Meters in Service for Over Fifteen (15) Years | Replacement of the following: 1) Defective kWh meters; and 2) meters that are in service for over fiftenn (15) years | • To improve system loss and prevent billing complaints | 12,080,409.50 | |
| | **Projects for 2013** | | | | |
| | Uprating of Pangi Substation Power Transformer from 10 MVA to 20 MVA and Reconfiguration of Feeders | • (1)-20 MVA power transformer 3-pahse, oil immersed, cooling OA/FA, with standard accessories;<br>• 15 kV XLPE power cables including suitable termination lits for outdoor application;<br>• Modification works | • To reduce system loss as well as increae the lines capacity | 4,078,656.00 | |
| | New Customers Accessories and Kilowatthour (kWh) Meters | Procurement of single-phase kWh meters, accessories and service drop wires for new LV customers and three-phase kWh meters and accessories for new HV customers | • To accommodate new customers | 19,364,603.75 | |
| | Additional Distribution Transformers (DTs) | Procurement of the following: 1) distribution transformers of various rating and protection devices required to address load growth; and 2) fuse links of various ratings for use in the service of said distribution transformers. | • To address additional loads and serve new low voltage customers | 10,546,862.00 | |
| | Line Materials for Reliability Improvement | Procurement of line hardware, insulators, conductors, and poles | • To ensure continuous electric service | 15,016,078.00 | |
| | Additional Secondary Lines, Open Secondary and Under-Built | Expansion of open secondary lines and uder-built (conductors, hardware, and accessories) | • To accommodate loads/new service applicants | 8,430,497.23 | |
| | Kilowatthour (kWh) Meters in Replacement for Meters in Service for Over Fifteen (15) Years | Replacement of the following: 1) Defective kWh meters; and 2) meters that are in service for over fiftenn (15) years | • To improve system loss and prevent billing complaints | 12,080,409.50 | |
| | **Projects for 2014** | | | | |
| | Installation of Automatic Voltage Regulator (AVR) in | Installation of three (3) units single-phase 38.1 kVA, 7.62 kV, Automatic Volatge Regulator (AVR) at section | • To address the expected power quality problems due to increase in demand | | |

<table>
<tr><th>APPLICANT</th><th>PROJECT</th><th>DESCRIPTION</th><th>RATIONALE</th><th>PROJECT COST (MPhP)</th><th>DATE FILED/ APPROVED</th></tr>
<tr><td></td><td>Olutanga</td><td>DXAL-0032-226 line going to Olutanga</td><td></td><td>991,949.66</td><td></td></tr>
<tr><td></td><td>Installation of Automatic Voltage Regulator in Baliguian</td><td>Installation of two (2) units sinlge-phase, 38.1 kVA, 7.62 Automatic Volatge Regulator (AVR) at section M3SC-0175 line going to Baliguian</td><td>• To address existing under-volatge problems</td><td>610,430.56</td><td></td></tr>
<tr><td></td><td>New Customers Accessories and Kilowatthour (kWh) Meters</td><td>Procurement of single-phase kWh meters, accessories and service drop wires for new LV customers and three-phase kWh meters and accessories for new HV customers</td><td>• To accommodate new customers</td><td>19,364,603.75</td><td></td></tr>
<tr><td></td><td>Additional Distribution Transformers (DTs)</td><td>Procurement of the following: 1) distribution transformers of various rating and protection devices required to address load growth; and 2) fuse links of various ratings for use in the service of said distribution transformers.</td><td>• To address additional loads and serve new low voltage customers</td><td>10,546,862.00</td><td></td></tr>
<tr><td></td><td>Line Materials for Reliability Improvement</td><td>Procurement of line hardware, insulators, conductors, and poles</td><td>• To ensure continuous electric service</td><td>15,016,078.00</td><td></td></tr>
<tr><td></td><td>Additional Secondary Lines, Open Secondary and Under-Built</td><td>Expansion of open secondary lines and uder-built (conductors, hardware, and accessories)</td><td>• To accommodate loads/new service applicants</td><td>8,430,497.23</td><td></td></tr>
<tr><td></td><td>Kilowatthour (kWh) Meters in Replacement for Meters in Service for Over Fifteen (15) Year</td><td>Replacement of the following: 1) Defective kWh meters; and 2) meters that are in service for over fiftenn (15) years</td><td>• To improve system loss and prevent billing complaints</td><td>12,080,409.50</td><td></td></tr>
<tr><td colspan="6">NON-NETWORK PROJECTS</td></tr>
<tr><td colspan="6">Projects for 2012</td></tr>
<tr><td></td><td>Procurement of Maintenance Vehicles</td><td>Procurement of the following:<table><tr><th>Vehicle</th><th>Qty.</th><th>Cost</th></tr><tr><td>Maintenance Vehicle, KIA KC270015 KV</td><td>2</td><td>Php2,219,600.00</td></tr><tr><td>Military jeep</td><td>2</td><td>PhP868,000.00</td></tr><tr><td>Utility Truck with</td><td>1</td><td>Php7,453,800.00</td></tr></table></td><td>• To replace old vehicles that are costly to maintain</td><td></td><td></td></tr>
</table>

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | | Insulated boom, "Kanglim" \| \| <br> Total \| 5 \| Php10,541,400.00 | | 10,541,400.00 | |
| | Meter Shop and Transformers Rewinding Building | Construction of a new building dedicated for meter calibration shop and transformer rewinding shop | • To attend to routine testing, repair and calibration of electric meters and other auxiliary devices and equipment for metering of electric power and energy | 575,000.00 | |
| | Acquisition of Engineering Analysis Software | Acquisition of electrical network simulation aand analysis software | • To address monitoring and system evaluation for regulatory compliance requirements | 1,750.000.00 | |
| | Acquisition of Testing Instruments | Acquisition of the following instruments:<br>Electrical Instruments \| Qty. \| Cost<br>Portable Meter Test Set \| 1 \| Php2,210,625.00<br>Power Quality Analyzer \| 1 \| Php699,835.50<br>Insulation Resistance Tester \| 1 \| Php467,815.50<br>Earth Tester \| 1 \| Php133,735.50<br>Total \| 4 \| Php3,512,011.50 | • To provide efficient monitoring of power distribution equipment | 3,512,011.50 | |
| | Procurement of Line Tools and Equipment | Procurement of lineman tools and equipment for use in the deployment of the area engineering concept | • To increase effieciency and ensure safety of linemen in the maintenance and repair works of even energized lines<br>• To minimize power interruptions | 2,781,348.00 | |
| | Development Project for Billing Software | Procurement of uniPaaS V1.9c development tools and deployment licenses | • To improve the billing and collection system of ZAMSURECO II | 1,232,000.00 | |
| | Wide Area Network Infrastructure Project | Establishment of Wireless communication backbone linking all field offices and collection centers | • To improve onlibe billing and collection system | 11,032,285.04 | |
| | Computerization Project | Procurement of computers and other computer accessories | • To replace old and slow computers | 6,331,124.14 | |
| | Meter Reading Billing and Collection (MRBC) System | Procurement of fifteen (15) units read and bill device | • To improve collection efficiency and minimize labor and overhead expenses | | |

| APPLICANT | PROJECT | DESCRIPTION | RATIONALE | PROJECT COST (MPhP) | DATE FILED/ APPROVED |
|---|---|---|---|---|---|
| | Project | | | 1,749,795.00 | |
| | Automated Mapping and Facilities Management Geographical Information System | Establishment of a Global Positioning Ssystem (GPS) technology | • To enhance ZAMSURECO II' capability in the location and immediate identification of its network assets | 5,671,000.00 | |
| | **Projects for 2013** | | | | |
| | Construction of Multi-purpose Building | Construction of a multi-purpose building within ZAMSURECO II's compound | • To provide consumers comfort and convenience as well as to afford venue for ZAMSURECO II's activities such as the annual general membership assembly meetings | 2,839,620 | |
| | Meter Reading Billing and Collection (MRBC) System Project | Procurement of fifteen (15) units read and bill device | • To improve collection efficiency and minimize labor and overhead expenses | 1,749,795.00 | |

*Source: ERC website*

*Annex 14. Amount Incurred by NPC for the Grant of MRR, 2001- April 2013*

| Billing Month | MERALCO | REST OF LUZON | TOTAL LUZON | VISAYAS | MINDANAO | TOTAL |
|---|---|---|---|---|---|---|
| 2001 | | | | | | 1,682,000,000.00 |
| 2002 | | | | | | 3,051,860,000.00 |
| 2003 | | | | | | 3,223,300,000.00 |
| 2004 | | | | | | 3,467,100,000.00 |
| 2005 | | | | | | 3,267,100,000.00 |
| 2006 | | | | | | 2,624,120,000.00 |
| 2007 | | | | | | 2,679,840,000.00 |
| 2008 | 786,079,461.86 | 832,317,675.85 | 1,618,397,137.71 | 561,119,367.51 | 635,133,615.12 | 2,814,650,120.34 |
| January-09 | 47,806,643.10 | 62,542,055.24 | 110,348,698.34 | 47,015,229.93 | 55,007,710.33 | 212,371,638.60 |
| February-09 | 42,273,187.20 | 64,217,843.86 | 106,491,031.06 | 50,088,622.44 | 58,532,264.35 | 215,111,917.85 |
| March-09 | 44,040,781.71 | 72,167,723.34 | 16,208,505.05 | 40,353,083.65 | 45,253,008.77 | 201,814,597.47 |
| April-09 | 53,118,020.70 | 72,821,969.18 | 125,939,989.88 | 54,326,480.12 | 59,947,414.10 | 240,213,884.10 |
| May-09 | 64,030,998.00 | 98,241,624.26 | 162,272,622.26 | 51,704,193.10 | 59,122,138.86 | 273,098,954.22 |
| June-09 | 68,204,346.90 | 56,650,477.52 | 124,854,824.42 | 51,278,066.68 | 58,609,301.03 | 234,742,192.13 |
| July-09 | 63,628,967.70 | 65,161,685.28 | 128,790,652.98 | 48,742,591.72 | 54,649,917.21 | 232,183,161.91 |
| August-09 | 58,986,725.10 | 61,356,596.29 | 120,343,321.39 | 48,943,598.40 | 57,173,785.23 | 226,460,705.02 |
| September-09 | 50,732,551.80 | 69,253,355.08 | 119,985,906.88 | 49,727,759.66 | 61,284,765.87 | 230,998,432.41 |
| October-09 | 38,966,161.50 | 55,868,121.86 | 94,834,283.36 | 50,266,616.81 | 58,345,501.27 | 203,446,401.44 |
| November-09 | 31,832,086.00 | 19,908,900.00 | 51,740,986.00 | 37,384,175.00 | 60,168,998.00 | 149,294,159.00 |
| December-09 | 24,530,890.00 | 7,880,404.00 | 32,411,294.00 | 37,104,752.00 | 61,082,278.00 | 130,598,323.00 |
| January-10 | 23,572,436.00 | 5,680,029.00 | 29,252,465.00 | 35,947,500.00 | 61,143,896.00 | 126,343,861.00 |
| February-10 | 16,988,494.00 | 7,383,173.00 | 24,371,667.00 | 35,584,880.00 | 57,003,485.00 | 116,960,032.00 |
| March-11 | 30,078,723.00 | 7,188,075.00 | 37,266,798.00 | 32,586,053.00 | 44,935,288.00 | 114,788,139.00 |
| April-10 | 27,989,214.10 | 6,994,305.08 | 34,983,519.18 | 33,097,892.60 | 55,781,074.41 | 123,862,486.19 |
| May-10 | 26,945,954.12 | 8,335,549.24 | 35,281,503.36 | 46,852,306.73 | 58,602,559.43 | 140,736,369.52 |
| June-10 | 25,829,411.99 | 7,667,101.81 | 33,496,513.80 | 38,496,958.90 | 66,213,086.12 | 138,206,558.82 |
| July-10 | 7,577,968.93 | 9,467,995.19 | 17,045,964.12 | 37,035,208.59 | 56,583,928.26 | 110,665,100.97 |
| August-10 | 8,449,485.54 | 8,726,414.90 | 17,175,900.44 | 33,892,800.66 | 57,451,146.62 | 108,519,847.72 |
| September-10 | 8,625,603.24 | 6,891,672.75 | 15,517,275.99 | 35,104,382.96 | 57,349,652.55 | 107,971,311.50 |
| October-10 | 9,210,107.25 | 6,795,056.53 | 16,005,163.78 | 33,663,960.20 | 58,237,764.61 | 107,906,888.59 |
| November-10 | 8,996,042.05 | 6,614,179.19 | 15,610,221.24 | 32,882,418.91 | 62,022,299.56 | 110,454,939.71 |
| December-10 | 7,929,051.20 | 1,951,050.19 | 9,880,101.39 | 32,407,720.28 | 78,841,735.75 | 121,129,557.42 |
| January-11 | 12,866,368.66 | 4,279,707.63 | 17,146,076.29 | 30,440,344.80 | 65,272,213.70 | 112,858,634.79 |

| Billing Month | MERALCO | REST OF LUZON | TOTAL LUZON | VISAYAS | MINDANAO | TOTAL |
|---|---|---|---|---|---|---|
| February-11 | 11,901,724.80 | 4,185,132.98 | 16,086,857.78 | 26,155,577.14 | 57,774,813.96 | 100,017,248.88 |
| March-11 | 9,768,215.70 | 3,969,708.66 | 13,737,924.36 | 23,742,284.14 | 51,874,251.31 | 89,354,459.81 |
| April-11 | 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-11 | 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-11 | 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-11 | 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-11 | 9,207,207.46 | 4,691,365.50 | 13,898,572.96 | 20,978,035.54 | 62,271,564.88 | 97,148,173.38 |
| September-11 | 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-11 | 5,551,114.71 | 4,515,770.27 | 10,066,884.98 | 21,339,283.45 | 62,856,303.08 | 94,262,471.51 |
| November-11 | 3,969,132.06 | 4,583,955.34 | 9,126,664.00 | 20,614,468.60 | 64,639,733.34 | 94,380,865.94 |
| December-11 | 5,463,569.37 | 4,143,157.34 | 9,606,726.71 | 19,708,235.60 | 64,896,365.46 | 94,211,327.77 |
| January-12 | 934,471.58 | 1,868,028.00 | 2,802,499.58 | 18,851,497.97 | 64,076,315.36 | 85,730,312.91 |
| February-12 | 1,311,195.54 | 1,839,662.40 | 3,150,857.94 | 19,181,446.72 | 60,517,280.85 | 82,849,585.51 |
| March-12 | 1,392,820.86 | 1,853,163.30 | 3,245,984.16 | 18,412,336.44 | 54,976,695.50 | 76,635,016.10 |
| April-12 | 1,555,958.33 | 2,111,709.30 | 3,667,667.63 | 17,061,517.71 | 57,238,872.87 | 77,968,058.21 |
| May-12 | 1, 554330.71 | 2,111,281.50 | 3,665,612.21 | 18,500,897.45 | 61,089,720.41 | 83,256,230.07 |
| June-12 | 1,615,760.64 | 1,958,480.10 | 3,574,240.74 | 20,209,017.40 | 65,117,974.74 | 88,901,232.88 |
| July-12 | 1,496,653.14 | 1,913,728.50 | 3,410,381.64 | 19,926,688.18 | 56,887,839.01 | 80,224,908.83 |
| Aug-12 | 1,527,035.72 | 1,707,646.50 | 3,234,682.22 | 18,564,718.00 | 60,684,395.62 | 82,483,795.84 |
| Sep-12 | 1,475,938.50 | 1,784,565.90 | 3,260,504.40 | 17,883,184.25 | 60,119,644.27 | 81,263,332.92 |
| Oct-12 | 1,445,567.31 | -- | 1,445,567.31 | 19,489,295.83 | 57,886,442.12 | 78,821,305.26 |
| Nov-12 | 1,532,946.47 | -- | 1,532,946.47 | 18,408,963.30 | 57,957,528.1 | 77,899,437.87 |
| Dec-12 | 1,246,604.82 | -- | 1,246,604.82 | 18,870,037.99 | 57,979,575.82 | 78,096,218.63 |
| Jan-13 | 1007519.67 | -- | 1,007,519.67 | 19,039,165.16 | 62,591,536.19 | 82,638,221.02 |
| Feb-13 | 881888.4 | -- | 881,888.40 | 19,295,027.19 | 61,232,145.13 | 81,409,060.72 |
| Mar-13 | 1,098,789.00 | -- | 1,098,789.00 | 18,295,974.54 | 45,672,696.54 | 65,067,460.08 |
| Apr-13 | 1,343,510.00 | -- | 1,343,510.00 | 16,843,335.83 | 64,181,388.54 | 82,368,234.37 |
| **TOTAL** | **1,699,064,807.17** | **1,692,886,152.26** | **3,292,524,536.03** | **2,124,463,129.88** | **3,729,435,866.22** | **29,241,713,531.13** |

*Source: NPC*