20th EPIRA Implementation Status Report

(Period Covering November 2011 to April 2012)

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

CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

The 20th Status Report on EPIRA implementation covering the period November 2011 to April 2012 highlights the latest accomplishments and developments in the restructuring of the electric power industry as outlined in Republic Act No. 9136, otherwise known as *Electric Power Industry Reform Act (EPIRA) of 2001.* The present administration strives to address power issues by continuing the implementation of the remaining phase of the reforms particularly the implementation of Retail Competition and Open Access (RCOA).

The Philippine electricity market is now in the process of improving the mechanisms that are envisioned to stimulate competition. Preparations for RCOA are on-going simultaneous with the improvements being infused in the Wholesale Electricity Spot Market (WESM) governance and operations.

In the current power situation in Mindanao, the government called for the cooperation of stakeholders in achieving winnable solutions. These include the possible transfer of power barges, proper contracting of stakeholders for power supply from power utilities, and the rehabilitation of the Agus and Pulangui hydropower complex. Meanwhile, the government's plan to resume privatization of the remaining assets necessitates review and assessment of the impact of the past privatization exercises – which is on-going, including the need to strengthen the participation and understanding of the relevant stakeholders in the privatization process.

II. PRIVATIZATION

A. Privatization of Generating Assets

Power Sector Assets and Liabilities Management (PSALM)'s bidding process is still on-going specifically with the diesel-fired Power Barge (PB) Nos. 101, 102, 103 and 104 which has moved its original bidding date of 13 April 2012 to 16 May 2012. The said postponement and extension of the bid submission deadline by another month is upon the request of the bidders who are still conducting due diligence on the power barges. This is principally for the purpose of giving them ample time to come up with a more responsive bid for the assets. PSALM's remaining assets for privatization and the indicative privatization schedule as of 30 April 2012 are summarized in the table below.

Table 1. Remaining Assets for Privatization

Plant Name	Rated Capacity (MW)	Bid Date	Turn Over Date
Owned Generating Plants			
Luzon Grid			
Malaya Thermal	650.00	July 2012	October 2012
Sub-total Luzon	**650.00**		
Visayas Grid			
PB 101 (Diesel/Bunker)	32.00		

Plant Name	Rated Capacity (MW)	Bid Date	Turn Over Date
PB 102 (Diesel/Bunker)	32.00	May 2012	November 2012
PB 103 (Diesel/Bunker)	32.00		
Sub-total Visayas	**96.00**		
Mindanao Grid			
PB 104 (Diesel/Bunker)	32.00	May 2012	November 2012
Agus 1 & 2 Hydro	260.00	2014	2015
Agus 4 & 5 Hydro	213.10		
Agus 6 & 7 Hydro	254.00		
Pulangui Hydro	255.00		
Sub-total Mindanao	**1,014.10**		
GRAND TOTAL	**1.760.10**		
Decommissioned Plants			
Bataan Thermal	-	2013	2013
Sucat Thermal	-	2013	2013

Source: PSALM

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

PSALM conducted the pre-bid conference on 29 February 2012 for the privatization of diesel-fired Power Barge (PB) Nos. 101, 102, 103 and 104. PSALM's requirement for each bidder is to submit an offer for each of the three packages comprising the sale of the power barges. Package 1 combines PB Nos. 101 and 102, Package 2 includes PB 103, and Package 3 covers PB 104. Another condition for the sale of the power barges currently stationed in the Visayas is the transfer of these barges to Mindanao to augment the power supply in the region. The bidding date, however, is set on 16 May 2012.

Commissioned in 1981, PB Nos. 101 and 102 are currently stationed at Bo. Obrero in Iloilo City. PB Nos. 103 and 104, which began operation in 1985, are moored in Botongon, Estancia, Iloilo, and at the Holcim Compound, Ilang, Davao City, respectively.

- ***Agus Pulangui Plants***

During the report period, the table below shows the status of Operations of the Agus Pulangui Plants.

Table 2. Operational Status of the Agus Pulangui Plants as of 30 April 2012

Plant	Rated Cap. (MW)	Dependable Cap. (MW)	Remarks
Agus 1 HEP			
- Unit 1	40	40	Operational
- Unit 2	40	40	Operational

Plant	Rated Cap. (MW)	Dependable Cap. (MW)	Remarks
Agus 2 HEP			
- Unit 1	60	60	Operational
- Unit 2	60	60	Operational
- Unit 3	60	60	Operational
Agus 4 HEP			
- Unit 1	52.7	52.7	Operational
- Unit 2	52.7	52.7	Operational
- Unit 3	52.7	52.7	Operational
Agus 5 HEP			
- Unit 1	27.5	27.5	Operational
- Unit 2	27.5	27.5	Operational
Agus 6 HEP			
- Unit 1	25	25	Operational
- Unit 2	25	0	Deactivated Shutdown; scheduled for bidding of rehabilitation/ uprating works
- Unit 3	50	50	Operational
- Unit 4	50	50	Operational
- Unit 5	50	50	Operational
Agus 7 HEP			
- Unit 1	27	27	Operational
- Unit 2	27	27	On mechanical run as of April 27, 2012
Pulangui IV HEP			
- Unit 1	85	0	Annual Preventive Maintenance Schedule on-going with rehabilitation at surge pool headrace; Plant shutdown since 30 April 2012; Units scheduled to be on-line by 09 May 2012
- Unit 2	85	0	
- Unit 3	85	0	

Source: PSALM

Meanwhile, in preparation for the sale of Agus I Hydro Electric Power Plant (Agus I-HEP). PSALM will duly publish its Notice of Sale in a nationwide newspaper on 17 May 2012. The public auction sale will be scheduled on 31 May 2012.

B. Privatization Proceeds

As of the report period, the generated proceeds of PSALM amounted to US10.210 Billion. Out of this amount proceeds, the actual collection amounted to US$5.612 Billion.

Table 3. Generated and Collected Proceeds of Privatization as of 30 April 2012, ***(In US$Billion)***

Privatization Assets	Generated	Collected
Generating Assets	3.027	3.064
Decommissioned Plants	0.004	0.004
Transmission Asset (TransCo)	3.950	1.918
Appointment of IPPAs	3.229	0.626
TOTAL	**10.210**	**5.612**

Source: PSALM

The table below shows the actual collection as utilized for debt prepayment, regular payment of debts and IPP obligations, and payment of other privatization-related expenses.

Table 4. Utilization of Privatization Proceeds 30 April 2012

Privatization Proceeds UTILIZED	In US$ Billion
Debt Prepayment	1.298
Regular Debt Service	3.022
Lease Obligations	1.411
Others	0.053
TOTAL	**5.784***

Source: PSALM

** The US$0.17 billion difference in Total Proceeds Collected and Total Proceeds Utilized came from interest income from placements of the privatization proceeds, forfeited performance bonds and other privatization collections.*

C. Transfer of NPC-IPP to Independent Administrators

Table 5 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 2012.

Table 5. Indicative Schedule for Appointment of IPP Administrators, as of 30 April 2012

Plant Name	Contracted Capacity	Bid Date	Turn Over Date
Luzon Grid			
Casecnan Multi-Purpose Hydro	140.00		
Benguet Mini Hydro	30.75	November 2012	January 2013
Caliraya-Botocan-Kalayaan Hydro	728.00	2013	2013
Sub-total Luzon	**898.75**		
Visayas Grid			
Cebu Thermal 1&2 (Naga Complex)	106.80		
Cebu Diesel (1-6) (Naga Complex)	36.00	July 2012	September 2012
Unified Leyte	559.00	August 2012	September 2012
Sub-total Visayas	**701.80**		
Mindanao Grid			
Mindanao Coal-Fired	200.00		

Plant Name	Contracted Capacity	Bid Date	Turn Over Date
Mt. Apo 1 Geothermal	44.52	2015	2016
Mt. Apo 2 Geothermal	48.00		
SPPC Diesel	50.00	2014	2015
WMPC Diesel	100.00		
Sub-total Mindanao	**442.52**		
GRAND TOTAL	**2,043.07**		

Source: PSALM

D. Concession of the National Transmission Network

Based on the Concession Agreement, the National Transmission Corporation (TransCo) conducts inspection of the assets condition and Project Under Construction (PUC) accomplishments consistent with the inspection protocol established with the concessionaire. For January 2012 to April 2012, TransCo conducted inspection of one (1) PUC and eleven (11) transmission facilities. This is in addition to the inspection of eleven (11) PUCs, one (1) New Project, and Twenty one (21) transmission facilities which were reported for CY 2011 as reflected in *Annex 1*.

E. Sale of Sub-Transmission Assets (STAs)

The sale of TransCo's sub-transmission assets involved 131 sale contracts and 107 interested distribution utilities, most of which are electric cooperatives. The subtransmission assets 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 distribution utilities amounting to about PhP1.23 Billion.

As of April 30, 2012, Transco has signed 101 sale contracts with 75 distribution utilities/electric cooperatives/consortia amounting to about PhP5.30 billion. These sales cover an aggregate length of about 3,700 ckt-kms of subtransmission lines and about 33,000 sub-transmission structures and 850 MVA of substation capacity. Of the 101 sale contracts, 44 contracts with total sale price of PhP2.22 billion have been approved by the ERC as of April 30, 2012 posting in the ERC website. The fifty-seven (57) sale contracts are still for ERC filing, evaluation or approval.

Following the EPIRA provision to extend concessional financing to electric cooperatives, TransCo implemented lease purchase arrangements with a term of 20 years. Of the 101 sale contracts already signed, 61 are under lease purchase agreements with 54 electric cooperatives/consortia, valued at about PhP3.42 billion. The remaining 40 involved sales to private distribution utilities/consortia.

TransCo is looking forward to the sale of about 1300 ckt-km of subtransmission lines and about 500 MVA of substation equipment among 44 interested distribution utilities/consortia for the next four years.

III. ELECTRICITY RATES

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

A. PSALM/NPC Effective and Basic Generation Charges

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

NPC's Effective Generation Charges (EGC) for the billing months November 2011 to April 2012 in Luzon, Visayas and Mindanao increased by of PhP0.6892/kWh, PhP0.5138/kWh and PhP0.0465/kWh respectively. The said increases were mainly due to the ERC's final approval of NPC/PSALM's DAA-GRAM and ICERA per its decision on 26 March 2012. The said decision was intended for the NPC/PSALM filing of its DAA-GRAM (10th to 17th) and for 15th and 16th ICERA covering the billing period January 2007 to April 2010 and July 2009 to April 2010 respectively to start effective billing period 26 March 2012 to 25 April 2012 until the end of the corresponding recovery periods or until such time that the full amount have been recovered, as follows:

Table 6. ERC Decisions on Deferred Accounting Adjustments (DAA) - GRAM & ICERA

Grids	Rate (PhP/kWh)		Total Amount	Recovery Period (Months)
	GRAM	ICERA		
Luzon	0.3267	0.3637	0.6904	120
Visayas	0.4847	0.1213	0.6060	126
Mindanao	0.0536	(0.0094)	0.0442	54

Source: ERC

Table 7 . NPC Effective Generation Charges (PhP/kWh)

Billing Month	Billing Period	Luzon	Visayas	Mindanao
November 2011	26 October 2011 - 25 November 2011	5.0185	4.0738	2.9304
December2011	26 November 2011 - 25 December 2011	5.0178	4.0720	2.9295
January 2012	26 December 2011 - 25 January 2012	5.0168	4.0747	2.9315
February 2012	26 January 2012 - 25 February 2012	5.0160	4.0740	2.9321
March 2012	26 February 2012 - 25 March 2012	5.0214	4.0711	2.9334
April 2012	26 March 2012 - 25 April 2012	5.7077	4.5876	2.9769

Source: NPC

B. Transmission Rates

On 17 October 2011, NGCP filed an application for the approval of the Maximum Allowable Revenue (MAR 2012) for calendar year 2012 and the Performance Incentive Scheme (PIS) compliance in accordance with the alternative form of rate setting methodology under the Rules for Setting the Transmission wheeling Rates (RTWR). On 02 January 2012, the Maximum Allowable Revenue for Calendar Year 2012 (MAR 2012) in the amount of PhP40,350.78 million and the Performance Incentive Scheme (PIS) reward claim amounting to PhP503 million was provisionally approved by the Energy Regulatory Commission (ERC) in accordance with the Alternative Form of Rate Setting Methodology under the Rules for Setting the Transmission Wheeling Rates (RTWR) for the National Grid Corporation of the Philippines (NGCP).

C. Distribution Utilities (DUs) Rates

The following discussions provide updates on the electricity rates for the month of November 2011 to April 2012 as well as related developments on regulatory actions, with rate cases being under the exclusive jurisdiction of the ERC.

1. Average Effective Electricity Rates

The country's average electricity rates as of March 2012 is PhP9.6854/kWh, PhP1.7201/kWh higher compared with the October 2011 average systems rate. Among the three major grids, Luzon has the highest rate at PhP10.3545/kWh while Mindanao remains the lowest at PhP7.2475/kWh for March 2012.

The ECs' national unbundled electricity rate for March 2012 is PhP9.3563/kWh, an increase of PhP1.9002/kWh from the October 2011 level. The largest increase in ECs' rates was noted in the Luzon grid at PhP8.2594/kWh in October 2011 to PhP10.3206 in March 2012. Mindanao however, posted the lowest rate at PhP7.7072/kWh.

Table 8. Average Systems Rates, October 2011 vs. March 2012 (Ph/kWh)

Grid	Electric Cooperatives			Private Distribution Utilities			National Average		
	Oct-11	Mar-12	Change	Oct-11	Mar-12	Change	Oct-11	Mar-12	Change
Luzon	8.2594	10.3206	2.0612	8.6006	10.3885	1.7879	8.4300	10.3545	1.9245
Visayas	8.0900	10.0412	1.9512	7.9130	8.7316	0.8186	8.0015	9.3864	1.3849
Mindanao	5.9519	7.7072	1.7553	6.2743	6.7878	0.5135	6.1131	7.2475	1.1344
Philippines	7.4561	9.3563	1.9002	8.4745	10.0145	1.5400	7.9653	9.6854	1.7201

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

Among the PDUs, Manila Electric Company (MERALCO) has the highest average effective rate for the residential customers at PhP10.4875/kWh for the billing period March 2012. On the other hand, Iligan Light & Power, Inc. (ILPI) remains to have the lowest average effective residential rates at PhP6.0046/kWh for the same billing period.

Table 9. PDUs Average Effective Rates (AER), March 2012 (PhP/kWh)

PDU	Residential	Commercial	Industrial	Average
Luzon Grid Average	**10.3885**	**9.3656**	**7.5551**	**8.4831**
MERALCO	10.4875	9.3793	7.5361	8.4677
DECORP	9.0209	8.8400	8.4931	8.8813
LUECO	9.4570	9.9538	10.2722	9.7101
AEC	8.5599	9.0707	15.9094	8.8103
CELCOR	9.8271	9.6150	9.2618	9.6914
SFELAPCO	9.1871	9.5279	7.4417	8.3243
TEI	8.8199	8.2217	7.3624	8.2481
Visayas Grid Average	**8.7316**	**8.8546**	**7.4985**	**8.0713**
MECO	8.1114	7.9828	8.6461	8.3522
VECO	8.9852	9.2318	7.3500	8.0958
BLCI	6.5565	6.3856	-	6.4313
Mindanao Grid Average	**6.7878**	**6.9798**	**6.0576**	**6.3145**
CEPALCO	7.4560	7.0486	6.0229	6.1425
DALIGHT	6.7147	7.1546	6.1015	6.4327
COLIGHT	6.4610	6.9472	6.3283	6.4800
ILPI	6.0046	6.0924	5.1294	5.8228
National Average	**10.0145**	**9.2668**	**7.3957**	**8.3040**

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

For March 2012 billing, MERALCO's effective residential rates for the different residential customer classes ranged from PhP10.1769/kWh to PhP11.6111/kWh of which the highest component was generation costs at PhP5.3955/kWh. Meanwhile, MERALCO distribution charges for its different residential customer classes comprised 19 percent to 28 percent of the total effective residential rates equivalent to PhP1.9417/kWh and PhP3.2235/kW.

Table 10. Summary of MERALCO Residential Unbundled Power Rates, March 2012

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	5.3955	53	5.3955	51	5.3955	49	5.3955	46
Transmission	0.9714	10	0.9714	9	0.9714	9	0.9714	8
System Loss	0.6240	6	0.6240	6	0.6240	6	0.6240	5
Distribution	1.9417	19	2.2990	22	2.6362	24	3.2235	28
Subsidies*	0.1499	1	0.1499	1	0.1499	1	0.1499	1
Universal Charge	0.1188	1	0.1188	1	0.1188	1	0.1188	1
Government Taxes	0.9756	10	1.0157	10	1.0557	10	1.1280	10
TOTAL**	**10.1769**	**100**	**10.5743**	**100**	**10.9515**	**100**	**11.6111**	**100**

Source: MERALCO Website

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

2. Regulatory Actions

a. Private Distribution Utilities (PDUs)

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

Following are the updates:

1st Entry Group (MERALCO, DECORP, CEPALCO)

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

Relative to its application on June 15, 2010, CEPALCO proposed its (Maximum Average Price) MAP at Php1.3467. The ERC issued its decision dated December 19, 2011 approving said proposed rate resulting to a rate reduction of PhP0.0038/kWh.

The ERC has yet to approve the applications for rate translation for the two other PDUs under this group.

2nd Entry Group (MECO, ILPI,CLPC)

The proposed revisions to RDWR for the 2nd Entry Group, for its Third Regulatory Period of April 2013 to March 2017 has undergone Public Consultations on various dates in October and November 2011 and are now still being evaluated by the ERC.

4th Entry Group (AEC, SEZ, CEDC, SFELAPCO, PECO, BLCI)

The group has entered into its Second Regulatory Period commencing on October 1, 2011 and terminating on September 30, 2015 in accordance with the provisions of the RDWR.

Of the 6 PDUs in this group, only AEC's application was already approved. The ERC issued its decision dated December 19, 2011 setting AEC's 2012 MAP at PhP 1.3115/kWh or a 25.54% increase equivalent to PhP0.2668/kWh from its previous rate of PhP1.0447/kWh.

All the other PDU's applications are still undergoing evaluation by the ERC.

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.

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

Total remittances to PSALM as of 30 April 2012 amounted to PhP22.429 billion. Of this amount, PhP21.718 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 deposits and placements of UC funds amounted to PhP0.108 billion. This leaves the UC fund with a balance of approximately PhP0.819 billion.

Table 11. UC Collections & Disbursements, as of 30 April 2012 (In Billion PhP)

Particulars	Collections/ Remittances	Interests	Disbursements	Balances
Missionary Electrification	21.360	0.043	21.379	0.024
Environmental Charge	1.069	0.065	0.339	0.795
Total:	**22.429**	**0.108**	**21.718**	**0.819**

Source: PSALM

For the period November 2011 to April 2012, PSALM received a total of Php3.122 billion in UC remittances from collecting entities, and disbursed to NPC-SPUG the total amount of

Php3.116 billion for missionary electrification. The monthly breakdown of the collections and disbursements are provided in Table 12.

Table 12. UC Collections and Disbursements for the Period November 2011- April 2012 (In Billion PhP)

Month	UC – ME	UC – EWR	Total	UC-ME Disbursements
November 2011	0.499	0.12	0.511	0.496
December 2011	0.453	0.10	0.463	0.461
January 2012	0.512	0.12	0.524	0.509
February 2012	0.547	0.12	0.559	0.535
March 2012	0.539	0.12	0.551	0.545
April 2012	0.572	0.13	0.585	0.570
Total	**3.122**	**0.71**	**3.193**	**3.116**

Source: PSALM

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

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

Pursuant to EPIRA, the Petitions for the UC on SD and SCC were filed by PSALM before the ERC on 28 June 2011.

PSALM determined the final amounts for the UC-SD at PhP0.313 per kWh to be collected over a fifteen-year recovery period and UC-SCC at PhP0.3666 per kWh to be collected over a four-year period in accordance with the revised guidelines issued by the ERC. Hearings for the petitions were conducted in 17 and 30 April 2012.

E. Assumption of Loans of Electric Cooperatives

As 30 April 2012, PSALM has paid NEA, Other Government Agencies (OGAs), and Local Government Units (LGUs) PhP14.150 billion for the condonation of the ECs' outstanding financial obligations. Table 13 shows a summary of PSALM's outstanding financial obligation to NEA and other EC creditors.

Table 13. Status of Loan as of 30 April 2012 (in Billion PhP)

	Total Assumption	Actual Payments		Balance	
		Amount	%	Amount	%
NEA	17.978	14.073 1/	77.40	3.905	21.72
LGU/OGA	0.096	0.077 2/	80.21	0.019	20.15
TOTAL	**18.074**	**14.150**	**77.42**	**3.924**	**21.71**

1/With application of the PhP2.215 Billion collection of NEA from ECs amounting to PhP369,652,000.00
2/ Net of discount from the Provincial Government of Palawan amounting to PhP3,725,000.97
Source: PSALM

Of the PhP14.073 billion total payments to NEA, about 75.29% or PhP10.595 billion was used to pay the Rural Electrification Loans incurred by the ECs, 15.30% or PhP2.154 billion was for the Mini-hydro loans, and 9.33% or Php1.314 billion was for Dendro Thermal loans. Payments intended for house wiring services amounted to PhP0.010 billion or 0.08%. On Table 14 is the summary of these payments.

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 2001 to April 2012, total discounts granted by NPC were reflected in *Annex 14.*

G. Lifeline Rate Subsidy Program

After 10 years of the implementation of the EPIRA, R.A. 10150 was signed into law in June 2011, extending the implementation of the lifeline rate to another ten (10) years, unless further extended by law. If the law has not been amended to provide for the lifeline rate extension, the marginalized household consumers would have to pay the true cost of power effective July 2011. In view of the rapid price increase in basic commodities, perhaps triggered by the rise in oil prices in the world market, extension of this lifeline at this time would effectively alleviate the economic condition of poor electric customers.

However, there are reservations at the current lifeline rate implementation, specifically on how the beneficiaries are identified and how much subsidy goes to those who are not really marginalized. With this in view, the DOE is currently working with other government agencies specifically the ERC and NEA in order to review the current implementation with the end view of coming-out with a more appropriate and feasible mechanism.

IV. COMPETITION

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

A. Wholesale Electricity Spot Market Operations

As of April 2012, the integrated WESM has a total of 113 participants comprised of 47 generating companies and 65 customer trading participants comprised of 6 Private Distribution Utilities, 46 ECs, 6 Bulk end-users and 7 wholesale aggregators. There are 40 applications being evaluated in Luzon, mostly intending trading participants while there were no applications whether generators or customers in the Visayas.

1. Highlights of WESM trading for the period October 2011- April 2012:

- Average system demand for Luzon and Visayas registered at 6,706 MW
- Peak demand was recorded at 8,869 MW which ocurred in the month of March 2012 .
- Spot market transactions amounted to 2,494 GWH, translating to 8.73 percent of the total energy consumed in the Luzon and Visayas regions during the six months period while the remaining 91.27 percent of the total volume was transacted and settled outside the market.
- Average Effective Spot Settlement Price for customers amounted to Php 5,940 per MWH during the six months period.

Table 14. Luzon and Visayas Trading Results

Billing Month		Peak Demand	Coincidental Energy Offers	Average Demand	Average Energy Offers
64	Oct-2011	8,596	8,784	6,658	8,047
65	Nov-2011	8,600	8,826	6,789	8,475
66	Dec-2011	8,583	8,772	6,695	8,423
67	Jan-2012	8,403	8,564	6,414	8,149
68	Feb-2012	8,512	9,239	6,673	8,714
69	Mar-2012	8,869	9,535	7,011	8,821
70	Apr-2012	9,354	9,300	7,024	6,700

Source: PEMC MO

Table 15. Metered Quantity

Billing Month		Metered Quantity (Load), MWh	Spot Quantity (Load), MWh	%	Bilateral Contract Quantity, MWh	%
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%

Source: PEMC MO

- Generation in Luzon and Visayas for the billing period May to October 2011 was dominated by Coal Power Plants at 37.29 percent followed by Natural Gas Plants at 35.63 percent. Geothermal contributed a share of 15.39 percent, hydro with percent. Diesel powered power plants contributed about 1.67 percent, a minimum contribution of generation came from Wind-Based Plants at 0.07 percent.

Table 16. WESM Generation Mix

Billing Month		Hydro	Geo	Coal	Nat Gas	Diesel/Oil	Wind	Biofuel
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-2012	6.0%	15.7%	42.5%	33.4%	2.1%	0.118%	0.065%

Source: PEMC-MO

2. Status of Pending ERC Regulatory Filings

a. Market Fees

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

On 28 October 2011, PEMC received the 6 June 2011 Decision of the ERC, approving the level of market transaction fees (MTF) for CY 2010-2011 with modification, as follows:

i. The MTF for CY 2010 and CY 2011 are approved in the amounts of PhP588,510,675.00 and PhP661,260,413.00 respectively. The cost of the audit of PEMC's books and records for the years 2006 to 2009 shall be included in the revenue requirements upon receipt by PEMC of the costs of the audit from the ERC.

ii. The level of MTF represents the revenue requirements of PEMC for CYs 2010 - 2011 for personnel services (PS), maintenance and other operating expenses (MOOE), Transco loan repayments, capital expenditures (CAPEX), some Market System Enhancement Projects, initial funding for some Market Development Projects, and provision for DOE and ERC monitoring facilities.

iii. The level of MTF is to be apportioned among generators according to the volume traded by each, using the following formula:

$$\textit{Market Transaction Fee Rate (PhP/kWh)} = \frac{\textit{Total Annual Market Transaction Fee}/12}{\textit{Total Generation Metered Quantity}}$$

iv. The ERC reiterated its policy that any excess in the MTF of the previous year will be carried over the succeeding year.

v. The prospective amount to be recovered by PEMC for CY 2011 shall be the total approved revenue requirement for CY 2011 less the sum of: 1) actual market fees collected from Luzon stakeholders at the rate of PhP0.0144/kWh in 2011;

and 2) any unutilized Market Transaction Fees in CY 2010, as shown in the following formula:

$$\textbf{AMTF} = \textbf{TRR}_{2011} - (\textbf{MTF Luzon} + \textbf{Unutilized MTF})$$

Where:

AMTF	=	Adjusted Market Transaction Fee amount to be recovered in 2011
TRR_{2011}	=	Total Revenue Requirement approved for PEMC in CY 2011 plus the cost of audit of PEMC's books and records for the years 2006 to 2009
MTF Luzon	=	Total Market Transaction Fee amount collected from Luzon stakeholders in 2011
Unutilized MTF	=	Total Unutilized MTFs collected in CY 2010

PEMC was directed to submit a report which shall include the actual computation of the adjusted MTF for CYs 2010 and 2011, following the format provided by the ERC.

vi. Consistent with the concept of a single market, the Adjusted MTF for CY2011 shall be allocated among Luzon and Visayas market participants. Considering the integration of the Visayas grid with the Luzon WESM in the billing month of January 2011, PEMC was directed by the ERC to develop a mechanism for allocating revenue earned in 2011 among Luzon and Visayas market participants to prevent cross-subsidy. Collection of the MTF rate for CY 2011 from Visayas participants may be implemented only upon approval by the ERC.

Approval of the level of the market fees for the WESM for Calendar Year 2012

On 4 November 2011, PEMC submitted a breakdown of the budgetary components, actual MF utilization for the nine (9) months ending 30 September 2011, and a breakdown of the Market System Enhancement and Market Development project costs, in compliance with the directives of the ERC during the hearing of the case. An Opposition to NASECORE's Petition for Intervention was filed on the same date.

On 8 November 2011, PEMC received the 3 November 2011 Order of the ERC, denying NASECORE's Petition for Intervention and treating the same as an Opposition to the Application.

A hearing was conducted on 15 November 2011. PEMC filed its Formal Offer of Evidence on 29 November 2011 with a Manifestation that the B2B Project costs include costs for the installation of necessary system requirements that will support changes in the WESM billing & settlement system arising from the registration & participation of

Retail Electricity Suppliers (RES), Local RES, and Suppliers of Last Resort (SOLR) in the WESM. The case is submitted for resolution.

In an Order dated 12 December 2011, the ERC authorized PEMC to continue imposing the approved MF for CY 2011 pending the resolution of PEMC's CY 2012 MF Application.

Approval of the Market Transaction Fees for the Visayas WESM

On 9 March 2012, PEMC submitted the Mechanism for the Collection of MTF from Visayas participants as follows: (i) Visayas MTF will be recovered as a one-time bill in March 2012 and collected in April 2012, (ii) Adjustments in the MTF share of Luzon participants shall be reflected in full in the billing month of March 2012, and (iii) Any excess in the MTF paid by Luzon participants shall be refunded upon collection from Visayas participants.

New Market Management System (NMMS)

PEMC filed a Manifestation and Motion on 3 November 2011, where it requested for additional time to submit the documents required by the ERC and to comply with the 7 March 2011 Order in ERC Case No. 2010-038 RC (MMS Migration Application). The latter Order required PEMC to submit: (i) documents detailing the findings of the TWG on MMS Migration & Enhancement, (ii) evidence to prove the extent of obsolescence of the MMS, and (iii) any cost benefit analysis conducted on the necessity of procuring the NMMS.

PEMC filed a Compliance and Manifestation on 9 November 2011, submitting: (i) PEMC's Disaster Recovery Plan, (ii) Matrix of Features and Functionalities of the NMMS & the current MMS, (iii) Details on the refund of the amount collected for the MMS Migration, and (iv) Letter from HP declaring obsolescence of HP alpha servers. PEMC further submitted the testimony of PEMC's Vice President for Information Systems & Technology (IST) as compliance with the directive to submit a study or cost benefit analysis on the decision to procure the NMMS.

A hearing was conducted on 16 November 2011. PEMC filed its Formal Offer of Evidence on 25 November 2011. The case is submitted for resolution.

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

The ERC issued an Order dated 17 October 2011, directing PEMC to formulate and submit within three (3) months, the Automatic Default Reserve Price Substitution Mechanism (APSM) to be applied to the Reserve and Energy Markets. The APSM sets a trigger mechanism for high or unreasonable reserve market clearing prices based on criteria approved by the ERC. When triggered, dispatch levels exceeding acceptable levels may be settled using several options such as default bids submitted by market

participants, TOU rates, or GPI. PEMC's Manifestation and Motion filed on 26 September 2011.

On 7 March 2012, PEMC filed a Manifestation that it is unable to comply with the directives of the ERC because a substantial amount of the measures to implement the ERC's 6 June 2011 Order shall be undertaken by the SO-NGCP. In addition, it was manifested that the NGCP-PEMC Working Group has been revived to formulate a way forward. Among others, the matter of whether Visayas shall be treated as a single region for reserves shall be submitted to the Working Group for further study and recommendation. However, the most that PEMC can do is to initiate and coordinate with NGCP-SO. It is NGCP-SO that must ultimately act on the directives of the ERC.

3. 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)

- Recommended the PEM Board-approved:
  - Request for authorization to conduct investigation of any or all Market Operator/System Operator- initiated market intervention events.
  - Authorization for the Enforcement and Compliance Office (ECO) to conduct an investigation for possible breaches (non-compliance with the Must-Offer Rule) of the WESM Rules on various intervals by identified Trading Participants.
- Held a Consultative Meeting with the ECO on the enhancement of the investigation process upon instructions by the PEM Board.
- Discussed the list of common operational reasons of non-compliances to RTD schedule by generator-TPs, with the objective of further streamlining the MSC's monitoring and assessment processes of possible non-compliances with the WESM Rules
- Deliberated on the proposed financial penalty scheme to include the following: (1) Proposed Process flowchart/procedure in the Enforcement of Financial Penalty Scheme for the Non-Compliance with the Must-Offer Rule and RTD Schedule; (2) Proposed Process flowchart/procedure for Self-Reporting of Non-Compliance with the WESM Rules; (3) Proposed Non-Compliance Notice Form and (4) Proposed amendments to the MSCEM Manual.
- To ensure compliance with the reportorial requirements under the WESM Rules and the MSCEM Manual, the MSC agreed on a set of timelines and aligned the same in

accordance with the observations and recommendations contained in the Final Process Audit on the MSC by the PEMC-Internal Audit Department.

- On 31 January 2012, the MSC, in separate fact-finding meetings, met with representatives of the NGCP-Visayas System Operations (VSO), Toledo Power Corporation (TPC), Cebu Private Power Corporation (CPPC) and SPC Island Power Corporation (SPIC) relative to the above-cited MI event

b. Dispute Resolution Administrator (DRA)

Proposed the approved general amendments to the Dispute Resolution Framework in the WESM Rules and Dispute Resolution Manual which included the following:

- Revisions in the WESM Rules to streamline and make effective the dispute resolution process;

- Amendments on the structure of the WESM dispute resolution framework where the mediator and arbitrators shall no longer form part of the Dispute Resolution Group (DRG) and the DRG shall no longer be a PEM Committee;

- Clarification on the coverage of disputes cognizable under the WESM dispute resolution process; and

- Establishment of Dispute Management Protocol by the Market Operator and WESM Members.

c. Rules Change Committee (RCC)

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

On 18 January 2012, the RCC, together with DOE, PEMC and ERC, conducted its 2012 RCC Planning Session to identify key activities to be undertaken in 2012 that are intended to address issues and priority concerns. As a result of the Planning Session, the 2012 RCC Work Plan was formulated which will serve as the roadmap for the RCC for the year.

During the covered period, the RCC approved the **Proposed New Technical Committee Market Manual**, which was submitted by the Technical Committee (TC). The proposed new Technical Committee Market Manual establishes the scope, functions and responsibilities of the TC pursuant to its mandates as stated in the WESM Rules. It likewise sets the scope and processes of the TC in undertaking requests for technical reviews or studies submitted by various entities.

The RCC likewise continued its deliberation on the **Proposed Amendments to the WESM Manual on the Management of Must-Run Units**. The proposal involves redefinition of Must Run Unit, designation of Must Stop Unit (MSU), revisions to the criteria for the selection of MRU, and introduction of new pricing mechanism by which MRUs and MSUs are compensated.

d. Technical Committee (TC)

The following were the major activities of the TC within the covered period:

- **MSC Request for Studies**. On the basis of MSC request for technical study on the performance of geothermal power plants in consideration of steam supply availability, the TC set a meeting with Makban Geothermal Plant tentatively scheduled on 08 May 2012.

- **Proposed Shortening of the Trading Interval**. The TC continued its deliberation on its proposal to shorten the trading interval, for submission to the RCC. The TC also reviewed the trading interval of other jurisdictions as an additional reference to the said proposal.

- **Review of the WESM Manual on the Reliability and Security Guidelines (SSRG).** Following the TC's request for comments, the TC received the respective comments and suggestions of NGCP, Grid Management Committee (GMC), Distribution Management Committee (DMC), and PEMC on the SSRG Manual. The TC is scheduled to review the comments along with the TC's proposed amendments to the SSRG Manual in April 2012, which will then be submitted to the RCC.

- **Report on ESAMELCO's Case.** The Eastern Samar Electric Cooperative (ESAMELCO) sought TC's assistance in resolving its market trading node relocation concern. The TC met with ESAMELCO, together with representatives of NGCP, GMC and PEMC, on 10 January 2012 to further clarify and resolve the said issue. The TC submitted on 21 March 2012 its report to the PEM Board regarding the matter citing the requirements needed and the party responsible (e.g. NGCP) for the relocation of the MTN pursuant to the Rules under the WESM Manual on the Market Network Model Development & Maintenance and Philippine Grid Code. The same report will be provided to the ESAMELCO, ERC, and NGCP, for their information.

e. PEM Audit Committee (PAC)

With the conclusion of the 2nd market operations audit, the PAC, continued its monitoring of the PEMC's action plans to address the findings and recommendations of PA Consulting Group Ltd (PA), the external auditor for the said audit.

For the 3rd MO Independent Audit, as agreed by and between PEMC and PA Consulting Group (PA), the Framework Agreement and Statement of Work for the 3rd Independent

Audit of the Market Operations were finalized and executed in counterparty. The 3rd MO audit is expected to commence in July 2012.

For the Metering Arrangement Review on the other hand, on 20 March 2012, the PAC received four (4) Letters of Interest together with the required documents from the following firms:

- PA Consulting Group, in association with Electrix Services and Transfield Services, New Zealand;
- Manabat Sanagustin & Co., CPAs, Philippines;
- Isla Lipana & Co., a member firm of PricewaterhouseCoopers (PwC) in partnership with PwC-USA and India, Intelligent Energy System Pty Ltd (IES) Australia and Alliance of Power & Energy Xponents Inc. (APEX), Philippines; and
- Punongbayan and Araullo, Philippines

Subsequently, on 22 March 2012, the PAC and Metering Arrangements Review-Technical Working Group evaluated the qualifications of the prospective bidders to participate in the bidding process. After a thorough assessment of the firms and their respective documents, the PAC, as contained in its Resolution No.2012-01, approved the prequalification of the four (4) firms, as listed above. Thereafter, the PAC released the Request for Proposals (RFP) to the shortlisted firms on 30 March 2012. The audit activity is expected to commence in May 2012.

4. WESM Registration

Table 17. Registration Update as of April 2012 (Luzon and Visayas)

CATEGORY		EXPECTED (Luz & Vis)	REGISTERED				APPLICANT		NOT REGISTERED	
			DIRECT		INDIRECT					
			LUZ	VIS	LUZ	VIS	LUZ	VIS	LUZ	VIS
Generation Companies		53	26	19			4	3		1
Customer Trading Participants	Private DUs & LGUs	16	3	3	5		2		2	1
	ECs	72	28	24	13	4	3			
	Bulk users	102	6	6	43	16	23	1	7	
	Wholesale aggregators	7	7							
Total Customer Trading Participant		197	44	33	61	20	28	1	9	1
TOTAL PARTICIPANTS/ APPLICANTS		250	70	52	61	20	32	4	9	2

Source: PEMC

Notes:

1. Changes to Expected Number of Participants/Applicants

a. The following companies were added to the expected number of participants/applicants:

- **Luzon (Bulk User – Not registered)**
  - Centerra Corporation (new connection)
- **Visayas (Bulk User – Applicant)**
  - National Grid Corporation of the Philippines

b. The following company is excluded

- **Luzon (Bulk user – Not registered)**
  - Fernando Air Base (transferred to Batangas II Electric Cooperative, Inc.)

c. **Correction**

- **Luzon (Bulk user – Applicant)**

The seven (1) facilities of the National Irrigation Administration (NIA) were previously counted separately, but as the applicant is the same entity, all facilities are now counted as one (1).

2. Former WESM Members

The following companies have ceased their registration in the WESM and are now excluded from the list:

- **Visayas (Bulk Users – Indirect Member)**
  - Armed Forces of the Philippines – Philippine Air Force (560th Air Base Wing Brigadier General Benito N. Ebuen Air Base)
  - General Milling Corporation (Cebu)

3. New WESM Applicants

a. The following have submitted their application for Direct Membership, thus increasing the number of expected participants and number of applicants:

- **Luzon (Generation Companies – Direct Members)**
  - Bataan2020, Inc.
  - GNPower Mariveles Coal Plant Ltd. Co.
- **Luzon (Bulk User – Indirect Member)**
  - Quanta Paper Corporation

b. The following has submitted its application to change membership from Indirect to Direct:

- **Visayas (Electric Cooperative)**
  - Leyte III Electric Cooperative, Inc.

c. The following companies were added to the expected number of participants/applicants have submitted their application for Indirect Membership, thus increasing the number of applicants and decreasing the number of Luzon bulk-users which have not yet registered:

- Luzon (Bulk-User)

- Bataan Technology Park, Inc.
- Centerra Ice Plant and Cold Storage
- First Philippine Industrial Corporation

4. New Approved WESM Members

a. The following company became a Direct Member effective 26 March 2012:

- **Luzon (Generation Company – Direct Member)**
  - Asia Pacific Energy Corporation

b. The following company became an Indirect Member effective 26 March 2012:

- **Luzon (Bulk User)**
  - Itogon-Suyoc Resources, Inc.

c. The following company changed its membership from Indirect to Direct Membership effective 26 March 2012:

- **Visayas (Electric Cooperative)**
  - Southern Leyte Electric Cooperative, Inc.

B. Open Access and Retail Competition

In pursuance to the Department's mandate to implement Retail Competition and Open Access (RCOA), the DOE in coordination with its attached agencies and the Energy Regulatory Commission (ERC) and the Philippine Electricity Market Corporation (PEMC) continues with their efforts for the smooth transition the open and competitive regime.

- *Appointment of the Central Registry Body (CRB)*

On 14 November 2011, the RCOA-Steering Committee (RCOA-SC) issued RCOA-SC Resolution No. 2011-01 entitled "Resolution Endorsing the Deferment of the Implementation and Open Access (RCOA) to 26 October 2012. One of the factors that lead the RCOA-SC to defer its implementation is the absence of a Central Registry Body (CRB) that will monitor the transactions between the Suppliers and the Contestable Market as well as to settle their accounts. The CRB is also tasked to operate an infrastructure which will automatically monitor the switching of customers from one supplier to another as well as to account the delivery of electricity among them for proper settlement.

In support of the RCOA-SC resolution, the DOE issued Department Circular DC 2012-02-0002 on 24 February 2012 designating PEMC as the CRB. The appointment of PEMC as the CRB coincides with its current function as the operator of the WESM. It already has the infrastructure to account for all the supply and delivery of energy in both Luzon and Visayas. The implementation of open access would only mean that PEMC shall do disaggregation of the deliveries made to customers either via the RES (for the Contestable Market) or via DUs (for the Captive Market).

The appointment of PEMC to do the job is combined with the following functions:

a. Review of WESM Rules and Manuals. PEMC is hereby directed to review and propose such changes to the WESM Rules and Manuals as may be necessary to ensure the seamless integration of the WESM operations and RCOA. Such changes shall cover revisions to the registration, metering, and billing and settlement procedures in the WESM to address the implementation of the RCOA.

   PEMC is likewise enjoined to elevate issues and concerns that may arise in order for the DOE to formulate appropriate policy directions to ensure the efficient implementation of the RCOA.

b. Develop market infrastructure, systems, and processes. PEMC is further directed to undertake the development of the infrastructure that shall be capable of supporting the registration, customer switching and information exchange among the retail electricity market participants, PEMC and other service providers, as well as the settlement of retail electricity market participant transactions in the WESM. Where necessary, PEMC shall also implement such changes in the infrastructure, systems, and internal processes of the WESM to carry out the changes in the WESM Rules and Manuals. For the purpose of integrating the RCOA into the WESM operations, all WESM Rules and Manuals changes shall be approved by the DOE.

c. Conduct training for the electric power industry participants. PEMC shall ensure the readiness of all WESM members and service providers for the RCOA by conducting trainings, stakeholder consultations, and other information dissemination activities to inform WESM members and service providers on the changes in the WESM operations brought about by the RCOA integration.

d. Comply with DOE directives. PEMC shall comply with the directives of the DOE on the implementation of the RCOA and shall, for this purpose, submit the project implementation plan with cost estimates and timelines and periodic reports as may be required.

e. Coordinate with relevant stakeholders and other government agencies. Where necessary, PEMC shall directly coordinate with relevant stakeholders and other government agencies to ensure the smooth preparation for the RCOA. Primarily, PEMC shall coordinate and inform the ERC on the progress of the integration process for the purpose of ensuring regulatory support, as may be necessary.

f. Perform such other related functions as may be necessary in the effective and efficient implementation of the RCOA.

The DOE issuance on the CRB is in consonance with the ERC issued resolution in 2006, (ERC Resolution No. 15 series of 2006) designating PEMC as the CRB.

On 12 January 2012, the DOE sent a letter to His Excellency Benigno S. Aquino III seeking approval for the release of funds after an approval was secured from the Economic Managers on

11 January 2012. The fund will be used in upgrading PEMC infrastructures in order to harmonize its systems with its function as CRB.

C. Market Power Monitoring

On 12 March 2012, the ERC issued Resolution No. 4, Series of 2012 setting the installed generating capacity per grid, National grid and the market limitation per grid for year 2012.

Table 18. Capacity Limitations per Grid for 2012

Grid	Installed Generating Capacity (kW) 2011	Installed Generating Capacity (kW) 2012	Difference Increase/(Decrease) Percent (%)
Luzon	11,387,583.53	11,387,583.53	1.9%
Visayas	2,063,199.00	2,063,199.00	0.5%
Mindanao	1,768,848.00	1,768,848.00	0.7%
Philippines	15,219,630.53	15,219,630.53	1.6%

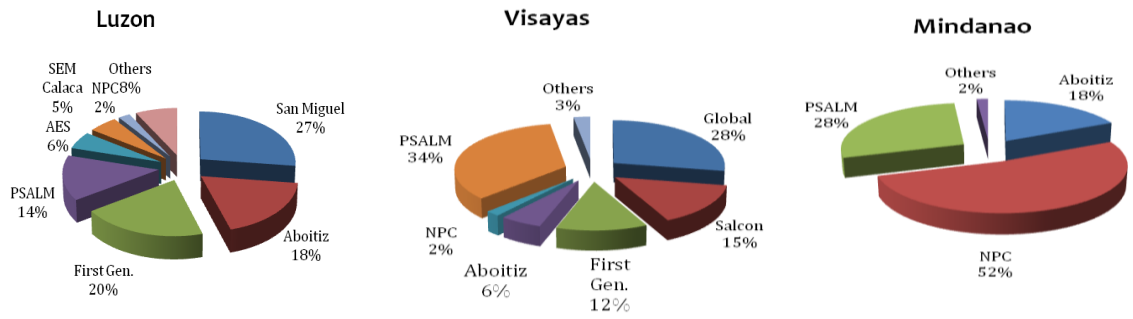
Source: ERC Resolution No. 4, Series of 2012

Installed generating capacity in Luzon increased due to re-commissioning of 104.5 MW Ambuklao Hydro Power Plant of SN Aboitiz in January 2012 after rehabilitation. Also, the 4.2 MW Bacavalley Biomass Power Plant was put online in San Pedro, Laguna added to the capacity in Luzon. However, only a slight increase in capacity was recorded due to the either increase or decrease in capacity of power plants due to the adjustments made by the ERC, based on the recent submissions of the generators.

In the Visayas, no new power plant was recorded to go online. However, there are some power plant who have recorded increase in their capacity, still due to adjustments based on the submissions. In Mindanao, Crystal Sugar, a Biomass Power Plant located in Maramag, Bukidnon added about 21 MW in Mindanao. Also, NPC hydro power plants have recorded slight increase in their capacity while some other plants have slight reduction.

On Market share per company, there was no movement with regard to capacity ownership considering that no power plants were sold or transferred to other companies as of the report period.

Figure 1. Market Share per Grid



Source: ERC Resolution No. 4, Series of 2012

The ERC issuance further stated that there were no generating companies nor any other entity has violated the market share per grid and national grid for the year 2012. The said limitations will be effective until March of 2013.

V. POWER SUPPLY SECURITY AND RELIABILITY

The data on installed generating capacity of each power plant is based on the Monthly Operations Report submitted to the DOE by the generating companies and is counter checked from the Daily Operation Report of the National Grid Corporation of the Philippines (NGCP). Total installed capacity in the country has declined by 1.2 percent in 2011 to 16,162 MW from 16,359 MW in 2010. This is mainly attributed to the decommissioning of the 49MW Northern Negros geothermal power plants in June 2011 and the non-availability of the some diesel power plants, such as Duracom Unit 1 & 2 (133.38 MW) and East Asia Diesel (Duracom Unit 3 & 4 – 109 MW) which was on deactivated shutdown since 2006 due to the change of ownership.

Installed capacity in Luzon was recorded at 11,739 MW, while dependable capacity was at 10,824 MW. This was 3.0 percent increased from 10, 498MW in 2010 due to the testing and commissioning of the 3 x 25 MW Ambuklao hydro facilities during the latter part of the 1st semester of 2011. The first and second units of Ambuklao hydro started its operation last June 2011 and the 3rd unit in October 2011. Also, the recommissioned/transferred from PSALM to Udenna of the 116 MW diesel power plant in Subic during the 2nd quarter of the year contributed to the reported increase in dependable capacity of the Luzon grid.

In the Visayas installed capacity as at 2,402 MWand the dependable capacity went up by 16.73 percent from 1,745 MW in 2010 to 2,037 MW in 2011.

In Mindanao, the stability and reliability of power supply was still considered to be the major challenge in the country since the generation reserve level in the island remained precariously low. Since 2006, the power supply in Mindanao has remained the same while the demand growth continues its strong growth. Even if the existing hydro power plants are running in full capacity, the need for demand control is necessary due to a generation deficiency caused by the scheduled maintenance and the unexpected shutdown or reduced capability of some power plants of others. Thus, Mindanao grid-wide power load curtailment is being implemented to maintain the supply-demand balance. The installed capacity in Mindanao grid posted at 2,022 MW and the dependable capacity went down by 2.55 percent from 1,658 MW in 2010 to 1,616 MW in 2011.

A. Power Generation

Gross electricity generation of 2011 reached 69,050 GWh, posting a minimal increase of 1.93 percent compared to 67,743 GWh in 2010. Generation in Luzon grid registered a decline of 1.0 percent while Visayas registered a remarkable increase of 15.19 percent due to the commissioning of the coal-fired power plants in the grid. In Mindanao, however, though there was suppressed demand in view of capacity constraints, electricity generation rebounded by 5.14 percent brought by the stability of hydro facilities due to cooler temperature all throughout the grid this year as compared to the previous year when the

output of hydroelectric plants was in lower capability when Mindanao was reeling from drought.

Table 19. PHILIPPINES, 2011 and 2010 Comparative Generation, GWh

FUEL TYPE	PHILIPPINES					
	2011		2010		Difference	
	GWh	% Share	GWh	% Share	GWh	%
Coal	25,577	37.0%	23,301	34.4%	2,276	9.8
Oil-based	3,295	4.8%	7,101	10.5%	-3,806	(53.6)
Natural Gas	20,591	29.8%	19,518	28.8%	1,073	5.5
Geothermal	9,942	14.4%	9,929	14.7%	13	0.1
Hydro	9,440	13.7%	7,803	11.5%	1,637	21.0
Wind	88	0.1%	62	0.1%	26	42.3
Biomass	115	0.2%	27	0.0%	88	326.9
Solar	1	0.0%	1	0.0%	0	0.0
Total Generation	**69,050**	**100.00**	**67,743**	**100.00**	**1,307**	**9.38**

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

Table 20. LUZON Grid, 2011 and 2010 Comparative Generation, GWh

FUEL TYPE	LUZON					
	2011		2010		Difference	
	GWh	% Share	GWh	% Share	GWh	%
Coal	19,681	28.5%	20,047	29.6%	-366	(1.8)
Oil-based	1,291	1.9%	3,287	4.9%	-1,996	(60.7)
Natural Gas	20,591	29.8%	19,518	28.8%	1,073	5.5
Geothermal	3,486	5.0%	3,323	4.9%	163	4.9
Hydro	4,581	6.6%	4,013	5.9%	568	14.2
Wind	88	0.1%	62	0.1%	26	42.3
Biomass	44	0.1%	14	0.0%	30	211.7
Total Generation	49,762	100.00	50,265	100.00	-503	9.38

Source: DOE

Table 21. VISAYAS Grid, 2011 and 2010 Comparative Generation GWh

FUEL TYPE	VISAYAS					
	2011		2010		Difference	
	GWh	% Share	GWh	% Share	GWh	%
Coal	4,267	6.2%	1,529	2.3%	2,738	179.1
Oil-based	449	0.6%	1,726	2.5%	-1,277	(74.0)
Geothermal	5,616	8.1%	5,771	8.5%	-155	(2.7)
Hydro	51	0.1%	36	0.1%	15	42.4
Biomass	72	0.1%	13	0.0%	59	451.0
Total Generation	**10,454**	**100.00**	**9,075**	**100.00**	**1,379**	**9.38**

Source: DOE

Table 22. MINDANAO Grid, 2011 and 2010 Comparative Generation, GWh

FUEL TYPE	MINDANAO					
	2011		2010		Difference	
	GWh	% Share	GWh	% Share	GWh	%
Coal	1,629	2.4%	1,726	2.5%	-97	(5.6)
Oil-based	1,555	2.3%	2,087	3.1%	-532	(25.5)
Geothermal	841	1.2%	834	1.2%	7	0.8
Hydro	4,808	7.0%	3,754	5.5%	1,054	28.1
Solar	1	0.0%	1	0.0%	0	21.2
Total Generation	8,834	100.00	8,403	100.00	431	9.38

Source: DOE

The country's total generation from coal-fired power plants increased by 9.8 percent from 23, 301GWh in 2010 to 25,577 GWhin 2011. In the Visayas grid, the higher use of coal for power generation was mainly due to the entry of new coal generating power plants in the grid, such as the 3 x 82 MW owned by Cebu Energy Development Corporation (CEDC) in April and June 2010 (Units 1 and 2) and in January 2011 (Unit 3); 2 x 72 MW by Panay Energy Development Corporation (PEDC) in November 2010 (Unit 1) and April 2011 (Unit 2); and the 2 x 100 MW by KEPCO-Salcon in November 2010 (Unit 1) and March 2011 (Unit 2). On the other hand, Luzon

and Mindanao posted negative growth due to the planned maintenance outages of major coal power plants in Luzon such as Calaca Unit 1 (300 MW) since September 2011, Pagbilao Unit 1 (382 MW) during the whole 4th quarter of 2011 and Sual Unit 1 since 20 August 20 to 16 October 16 2011. Also, in Mindanao, the Mindanao Coal Unit (116 MW) was on planned outage since 15-24 October 2011 while Mindanao Coal Unit 2 since 16-31 July 2011. However, this was compensated by the higher output of the geothermal and hydroelectric plants, respectively.

On the other hand, the country's total generation from oil-based power plants decelerated by 53.6 percent from 7,101 GWh in 2010 to 3, 295 GWh in 2011. As recalled in 2010, oil-based power plants were frequently dispatched as a must run unit to address the insufficient reserve capacity in the Luzon grid. While in Mindanao grid was able to cope up with the limited hydroelectric power plants output, from 2,087 GWh in 2010 to 1,555GWh in 2011, thus, generation from the oil-based power plants were reduced, recorded a decline of 25.5 percent decline.

Meanwhile, generation from natural gas posted an increase of about 5.5 percent in 2011 despite the supply constraint brought about by the maintenance shutdown of the Malampaya natural gas pipeline from 20-26 October 2011. Thus, overall generation sourced from the indigenous gas fuels dripped, as a result of the natural gas restriction of Malampaya, which led to the use of the liquid fuel.

Year-on-year (y-o-y) gross power generation from geothermal power plant accelerated by 0.1 percent or 13 GWh from 9,929 GWh in 2010 compared to 9,942 GWh in 2011 despite the Decommissioning of Northern Negros Geothermal Power Plant (49 MW) and the outage of Palinpinon Geothermal Power Plant Unit for 85 days (Sept 19 to Nov 29) due to main transformer failure. The slight increase of generation from geothermal power plants was attributed to the synchronization to the grid of Unit 1 of Bacman (55 MW) in December 2011 after being out of service since March 2009.

The country's total generation from hydroelectric power plants posted a significant increase of 21 percent, from 7,803 Gwh in 2010 to 9,440 Gwh in 2011. This was driven mainly an increase in generation in Visayas grid by 42.9 percent and by the Mindanao grid by 28.1 percent. In Mindanao, hydro was fully dispatched compared to 2010 wherein the grid experienced drought due to El Nino Phenomenon which affected the hydropower capability due to low water elevation of the Agus-Pulangui complexes.

Contributions from renewable energy such as wind, solar and biomass combined, increased by 127.20 percent or 114 GWh with a share of only 0.30 percent to the total generation. The prevalence of the substantial increase was attributed by the Biomass generation from the 4 MW San Pedro Landfill Methane Recovery in Luzon and 15 MW of Central Azucarera de San Antonio (CASA) in the Visayas.

B. System Peak Demand

System peak demand Luzon grid in 2011 was recorded at 7,552 MW which occurred in the month of June. This 1.36 percent lower than the 7,656 peak demand in 2010. This was brought about by the cooler temperature due to the inception of La Nina in the latter part of 2011.

In the Visayas, coincident peak demand which occurred in December 2011 reached 1,481 MW, higher by about 4 percent compared from the previous year of the same month with 1,431 MW. In sub-grid level, Cebu reflected highest average demand for the whole year of 2011 with a 48 percent share to the total average demand of the Visayas grid. This was followed by Panay at 18 percent share; Negros at 18 percent; Leyte-Samar at 14 percent; and Bohol at 4 percent. The lowest recorded system demand in the grid was on 25 December 2011 (Christmas Day) with 1,202 MW.

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

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

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

C. Electricity Sales and Consumption

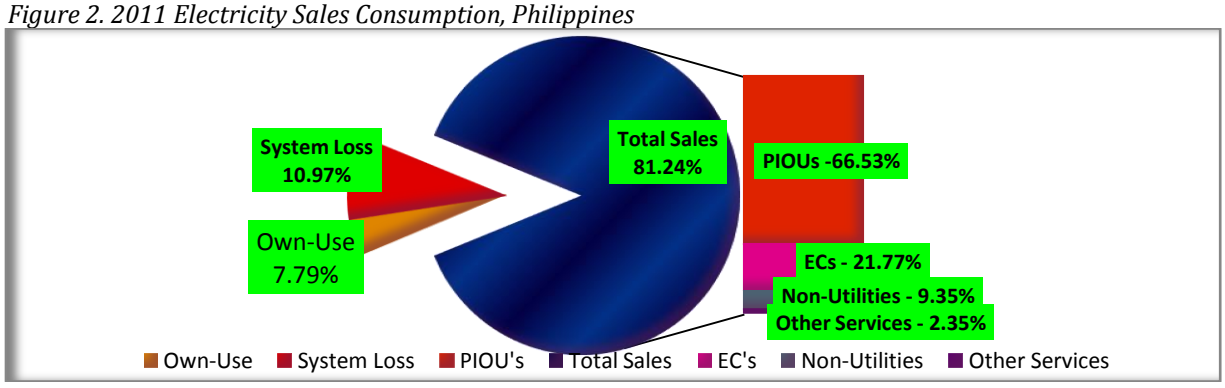
Amidst the weakened domestic economy brought by the slowdown in global trade contributed by the prolonged sovereign debt crisis in Europe, effects of the natural disasters in Japan, the enraged political chaos in the Middle East and North Africa plus the economic uncertainties in western countries, the electric sales and consumption grew in 2011 by a relatively feeble 1.9 percent compared to 9.4 percent in 2010. Likewise, coming from a high base fueled by election exhilarated outflows last year, the domestic economy continued to decelerate, posting a 3.7 percent in 2011 from an elated 7.3 percent growth in 2010.

The timid increase in electricity sales and consumption was mainly due to the cooler temperature this year compared to the previous year, when the country experienced the impact

of the El Niño weather phenomenon. It will be recalled that the country suffered from El Niño in the first half of 2010 which drove up demand for electricity. Meanwhile, La Niña prevailed from the latter half of 2010 until the end of the first quarter of 2011 which brought cooler temperatures. Electricity sales and consumption were hauled behind hugely by the lower consumption of residential users partly due to cooler weather for most of the year. Further, the contraction was also due in part to base effect, as year-ago levels reflected higher than the normal consumption due to restoration efforts in the aftermath of Typhoon Ondoy and election-related activities. However, the subtle increase in energy sales can be traced to higher consumption from both commercial and industrial sectors, which was sufficient to offset the weak performance from the residential sector.

The total electricity sales all over the country posted a decelerated growth of 1.51percent from 55,266 GWh in 2010 to 56,098 GWh in 2011. Out of these total sales, 37,319 GWh or 66.53 percent was contributed by Private Investor Owned Utilities (PIOU's), while electricity sales from Electric Cooperatives, Non-utilities and Other Services were 12,215 GWh or 21.77 percent, 5,242GWh or 9.35 percent and 1,321GWh or 2.35 percent, respectively. Total sales accounted to 56,098 GWh, representing an increase of 81.24 percent to total consumption. "Own-use" of power plants and distribution utilities spiked at 5,377 GWh or 7.79 percent. Losses from generator, transmission and distribution accounted for 7,575 GWh or 10.97 percent (Figure 2).

Figure 2. 2011 Electricity Sales Consumption, Philippines



Source: DOE

On a per grid basis, Visayas grid remained the highest-ranked in terms of growth in electricity sales & consumption, representing an increase of 5.42 percent over the previous year. The continued surge can be attributed to the stable and reliable power supply in the grid upon the entry of the additional installed capacities in 2010 that attracts more business and investments in the grid. Having slowly recovered from the effects of the worldwide economic recession of 2009, the improved power supply coupled with additional infrastructure drew in more regional economic developments which coincide with the rapid expansion of the industry sector in the Visayas. Since the industry sector remains as the grid's engine of economic growth, the upsurge performance in the revenue of industries benefitted from the implementation of the power sector reform such as the commercial operations of the Wholesale Electricity Spot Market in the Visayas (WESM-Visayas) in 2010 that enticed not only local investors but it also revitalized encouragement from the foreign capitals as well.

Consequently, Luzon posted a meager growth of 0.77 percent in electricity sales and consumption mainly due to the cooler temperature this year (the highest recorded according to PAGASA was 36.5°C on 04 May 2011) compared to the previous year, when the country experienced the extensive heat of El Niño Phenomenon that brought Luzon to an all-time peak temperature of 38°C.

Mindanao electricity sales and consumption, on the other hand, increased by 5.14 percent in 2011 from 2.03 percent in 2010. The marginal growth came from the residential and commercial sector which accelerated to 6.71 percent and 4.70 percent, respectively. Electricity sales in Mindanao sustained its year-on-year growth as consumption, though slowing down continued to accelerate due to the reconstruction on damages mainly on the distribution and transmission side caused by the adverse impact of typhoon Pedring in November following the restoration of power from the outages caused by storms experienced in October.

- **Industrial Sector**

Electricity sales of the industrial customers comprised 19,334GWh or 28 percent of total electricity consumption in 2011, implying 4.08 percent growth from 18,576GWh in 2010. Industrial customers in Luzon registered a moderate increase of 2.79 percent in 2011 from a huge increase of 10.9 percent in 2010, a remarkable decline as compared with previous year. Notwithstanding the year-on-year lacklustre movements in the domestic financial markets due to the negative developments overseas, the strong performance of the manufacturing sector adeptly supported by major electronics and semiconductor device manufacturers, industries in the fabricated metal product manufacturing subsector and those that are providing business engage to food products & beverage manufacturers, exporters and suppliers negated the contraction of electricity consumption of industrial customers in Luzon.

However, significant increase was observed in the Visayas grid with 9.66 percent from 2,770 GWh in 2010 to 3,038 GWh in 2011. The significant growth in industry customers in the Visayas was supported by the faster expansion of the manufacturing sub-sector, driven by the continued recovery in global trade in the region. Likewise, the mining and quarrying grew at an accelerated pace compared to the previous year due to the significant contribution of other industry (coal).

On the other hand, electricity sales in Mindanao industry sector edge up from 2,776GWh in 2010 to 2,902 GWh in 2011. The growth reflects the rising demand benefited from the sustained growth of manufacturing mainly due to the cooler temperature this year compared to the previous year, when the country experienced the brunt of the El Niño weather phenomenon having Mindanao industry players, traders, producers and exporters suffered the most since about 50 percent of the power in the area is being sourced by hydropower plants.

❖ Residential Sector

Electricity sales in residential sector were pulled down, posting a decline of 0.74 percent from 18,833 GWh in 2010 to 18,694 GWh in 2011. Sales of residential sector comprised 27.07 percent of the total electricity sales compared to 34.1 percent share in the total electricity sales in 2010. The decline in consumption of the residential customers can be traced to the reduced utilization of cooling system due to cooler temperatures. The decline in the residential electricity sales can also be partly attributed to base effects, as year–ago levels reflected higher-than-normal consumption among the residential customers due to the early onset of summer season and long dry summer months because of El Niño.

The 2.21 percent dropped in Luzon grid's sales for the residential sector affects the whole country and was immensely fueled by the cooler weather. Further, almost half of the residential customers in 2011 are lifeline subsidy customer, consuming 100 KWh or less per month. In addition, the erosion of the purchasing power of the households resulting from rising commodity, energy and transport prices could subsequently fuel contraction on the household utilization of electronic appliances in food preparation and recreation.

In Visayas, electricity sales have also posted a very modest increase of 0.13 percent or an equivalent of 2, 527 GWh from the year-ago level of 2,523 GWh.

On the other hand, sales of electricity in Mindanao were limper than of the other two grids. The catch up reflects the expected recovery of the Mindanaoans from the challenges of the extended scorching heat resulted from the changing weather patterns brought by climate change in 2010 and the resilience of the residential sector in Mindanao helped cushion the impact of the slowdown in the Luzon and Visayas grid as Mindanao residential customers grew by 6.71 percent in 2010 from a 3.5 percent rise in overall residential sales for Mindanao in 2010. The expansion was significant given which was affected by the current economic and tranquil weather conditions all over the grid.

❖ Commercial Sector

Commercial consumption increased at markedly lower rate from a strong growth performance of 10.2 in 2010 to a bland growth of 2.23 percent in 2011. Improved commercial energy sales in 2010 were driven by the increase in cooling load due to El Niño. The modest performance of commercial sector can be attributed 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.

Improvement in electricity sales for the three power grids, on the other hand, was mainly due to the accelerated growth of the real estate, renting and business activities engaged in transport, storage and communication, and the recovery of the trading activities towards the end of the year. Further, the continued demand for services sector such as laundry services, medical and health services, educational services, hotels and restaurants, spas and beauty parlors, justified the constant through restrained growth of electricity sales to the commercial sector.

❖ Others

Others refer to public buildings, street lights, irrigation and "others not elsewhere classified". This group recorded a remarkable decline of 9.38 percent increase from 1,596 GWh in 2010 to 1,446 GWh in 2011 driven by the government under spending on infrastructure 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 and corn, including other crops) and fishing driven by the unfavorable weather and high cost of fuel also contributed to the said decrease in other sector.

❖ Own-use and System Loss

Total percentage share of system loss posted a modest diminution of 2.9percent from7,800 GWh in 2010 to 7,575 GWh in 2011. The slight decrease in the System Loss for 2011 which includes Distribution Utilities Loss and Transmission Loss such as substation use, transformation and other unaccounted losses still demonstrates a steady improvement on loss reduction as compared to previous years, immensely due to the continuing endeavors of the Distribution Utilities such as continuous enhancement in network efficiency and improved pilferage management. Notwithstanding, the national government initiatives through sustained energy efficiency improvement programs, operations and management practices are other relevant factors and intervention that contributed to the system loss reduction in 2011.

Table 23. 2011 and 2010 Comparative Electricity Sales and Consumption, Philippines

Sector	PHILIPPINES					
	2011		2010		Difference	
	GWh	% Share	GWh	% Share	GWh	%
Residential	18,694	27.1%	18,833	27.8%	-139	(0.7)
Commercial	16,624	24.1%	16,261	24.0%	363	2.2
Industrial	19,334	28.0%	18,576	27.4%	758	4.1
Others	1,446	2.1%	1,596	2.4%	-150	(9.4)
Total Sales	56,098	81.2%	55,266	81.6%	832	1.5
Own-Use	5,377	7.8%	4677	6.9%	700	15.0
System Loss	7,575	11.0%	7800	11.5%	-225	(2.9)
Total Consumption	**69,050**		67,743		**1,307**	**1.9**

Source: DOE

Meanwhile, utilities' own-use for office and station use of the power plants sustained its vigorous performance, standing an aggressive double-digit rise at 14.97 percent in from 4,677GWh in 2010 5,377 GWh in 2011.The growth came mainly from the increasing working capital particularly to the bulk demand coming from the additional electronic durable equipment related to the improvements and expansions of the utilities.

D. Status of Transmission Projects

Figure 3. Biñan Substation Expansion

The Biñan Substation Expansion component of the Batangas Transmission Reinforcement Project (BTRP) is 95.51% completed and is expected to be energized within the first half of this year. The BTRP is intended to strengthen the existing transmission network's southern corridor for the efficient and reliable transmission of power generation from various Independent Power Producers in Southern Luzon. This reinforcement is needed to allow the full dispatch of natural gas plants from the Malampaya gas fields (1,100 MW Sta.Rita and 500 MW San Lorenzo).

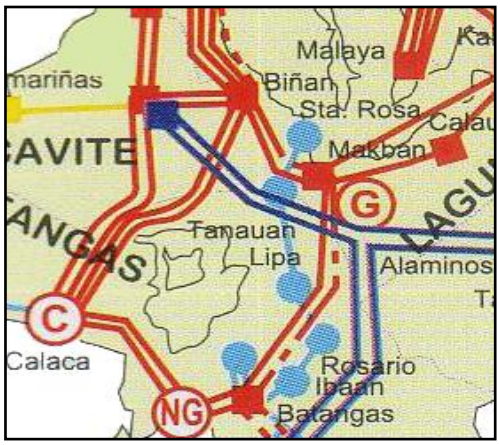


Figure 4. Dasmariñas Substation Expansion

Dasmariñas Substation Expansion is the only remaining component of the Luzon Transmission Line Upgrading I which originally aims to provide N-1 provision at the substation but will now be installed as a replacement to the damaged unit in Dasmañas. This project is expected to be energized on 30 March 2012.

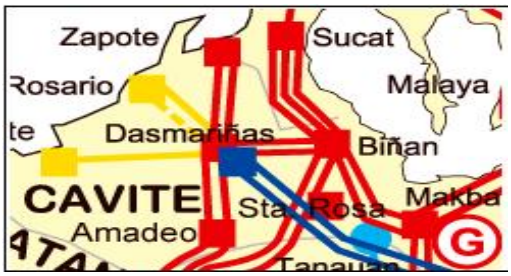
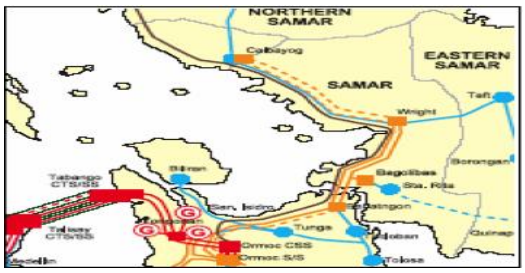


Figure 5. Negros-Panay Interconnection Project

The Negros-Panay Interconnection Project (Panay Side) is an ERC approved project located in Negros and Panay Islands. It is made up of two components namely: Phase 1 on the Panay side of the interconnection and Phase 2 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 last 28 December 2011 while the substation component was completed on 31 December 2011 as well as the energization, which was originally set on 21 January 2012, has been re-scheduled due to some technical requirements to complete all microwave system.

To support the long term power requirements of Samar and to improve the delivery of quality and reliable power in the island, the NGCP has completed on 9 November 2011 the 138 kV Paranas (Wright)-Catayman (Calbayog) transmission line. The new line will replace the old 69 kV woodpole transmission line and will address the overloading of Paranas Substation.

Figure 6. 138 kV Paranas (Wright)-Catayman (Calbayog) Transmission Line



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 the northern and southern Mindanao. Both these projects are designed at 230kV but will initially be energized at 138kV. The Balo-I (Abaga)-Villanueva (Kirahon) 230kV Transmission Project is approximately 80% complete while the Villanueva (Kirahon)-Maramag 230 kV Transmission Project is approximately 65% complete. Both these projects are scheduled for completion on 30 June 2012.

Figure 7. Balo-I (Abaga)-Villanueva (Kirahon) 230kV Transmission Project

E. Distribution Infrastructure Projects

ERC-Approved Capital Expenditure (CAPEX) Projects

During the report period, the ERC approved six (6) Capital Expenditure (CAPEX) Projects applied by Pangasinan I Electric Cooperative, Inc. (PANELCO I), Sorsogon I Electric Cooperative, Inc. (SORECO I), Zamboanga Del Norte Electric Cooperative, Inc. (ZANECO), Aurora Electric Cooperative, Inc. (AURELCO), Davao Del Sur Electric Cooperative, Inc.; and Agusan Del Norte Electric Cooperative, Inc. (ANECO). *Annex 13* shows the said approved CAPEX projects as of 30 April 2012.

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.

As of 30 April 2012, there are 12 ECs enrolled in the EC-PCG Program, representing total loans of PhP1.44 billion from four (4) private banks and one (1) government financial institution.

Table 24. ECs Booked in EC-PCG Program

	EC	Loan Amount (PhP Million)	Lender	Signing Date of Loan and Guarantee Agreements
1	MORESCO I	115.00	Security Bank	July 20, 2010
2	PANELCO I	113.00	Bank of the Philippine Islands (BPI)	September 15, 2010
3	SOCOTECO I	102.42	BPI	October 4, 2010
4	BUSECO	135.901	BPI	February 7, 2011
5	SURNECO	85.00	United Coconut Planters Bank (UCPB)	March 3, 2011
6	FIBECO	143.00	Allied Banking Corporation	May 10, 2011
7	BOHECO I	109.62	Development Bank of the Philippines (DBP)	June 3, 2011
8	CANORECO	133.248	BPI	July 12, 2011
9	DANECO	172.366	UCPB	September 20, 2011
10	CAMELCO	140.00	BPI	November 9, 2011
11	MORESCO II	135.49	BPI	November 22, 2011
12	AURELCO	57.000	BPI	March 21, 2012
12	Total	1,442.05		

Source: DOE, LGUGC

VI. TOTAL ELECTRIFICATION

As of 30 April 2012, the Program has already achieved 99.96 percent of the total potential barangay nationwide. Prior to the launching of ABEP, barangay electrification level only stood at 76.9%, having energized only 32,281 out of 41,975 total barangay coverage. Under the program, the energization of 41,960 barangays was spearheaded by the DOE with assistance from the NEA, NPC-SPUG, and PNOC and its subsidiaries.

Table 25. Targets Per Implementors

DOE	15
BEP	1
RAES	4
ER 1-94	10
MERALCO	0
AMORE	0
Total	15

Source: DOE

All the remaining 15 unenergized barangays are in ARMM areas have implementation issues i.e. right-of-way problem and liquidation issues on previous projects. The DOE is closely coordinating with NEA and concerned LUGs on the possible options to pursue electrification of these barangays.

NEA is currently developing a Sitio Electrification Program Masterplan to energize the remaining sitios in the country without access to electricity. In addition, NEA is finalizing the Barangay Enhancement Masterplan which aims to upgrade the electric facilities of off-grid barangays. This effort of NEA, in coordination with the DOE, is part of attaining 90 percent household electrification by 2017.

Table 26. Barangay Electrification Status as of 30 April 2012

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	2,459	2,444	15	99.39
CARAGA	1,310	1,310	0	100.00
SUB-TOTAL MINDANAO	***10,047***	***10,032***	**15**	**99.85**
TOTAL PHILIPPINES	**41,975**	**41,960**	**15**	**99.96**

Source: DOE

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

A. Qualified Third Party

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

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

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

With the assistance of the RPP, the PSPI became the first QTP duly authorized by the Energy Regulatory Commission (ERC). Its service area, Bgy. RioTuba, Bataraza, Palawan Province, has been deemed as an unviable area waived by the Palawan Electric Cooperative (PALECO) through its Board Resolution No. 077 s. 2004 dated 26 October 2004. Said barangay was also one of the 428 barangays earlier declared by the DOE as "remote and unviable area" and open for QTP participation through DOE's Public Notice No. PN-2005-03-001. Consistent with the DOE and ERC guidelines, PSPI signed a Waiver Agreement with PALECO on 4 July 2008 and entered into QTP Service Contract with NPC-SPUG on 18 July 2008. On 2 March 2009, the ERC issued a provisional authority to the PSPI as QTP in RioTuba and said authority became permanent on June 17, 2010 based on the final decision of the ERC on the said case. Said decision also approved the Full Cost Retail Rate (FCRR) of Php 24.49/kWh and the Subsidized and Approved Retial Rate (SARR) of Php 8.50/kWh for PSPI in the said area.

For the 3rd Quarter of 2011, PSPI reported that its current total connections in RioTuba area have increased to 1,450 households with 24-hour electricity services. The installation of additional 50 kW biomass gasifier is on-going. Said biomass plant intends to take a third of their present load from their existing generation system. As an update for this quarter, PSPI has reported to the DOE-PMO that the said biomass system has already been shipped to the country for possible installation during the next semester of the year.

2) PSPI Malapascua QTP Project in Bantayan, Cebu

The transmission and distribution lines funded by KEPCO for the Malapascua QTP project were fully completed last April 2011. PSPI is working with the full documentation of its Malapascua QTP application for submission to DOE within the year. Presently, PSPI is packaging their application for Certificate of Compliance to Energy Regulatory Commission as one of the requisite documents for their QTP application. PSPI is also actively undertaking project sites identification for their other QTP projects. It has initially identified Liminangcong, Port Barton and Sabang in the Province of Palawan as its potential

QTP sites. To start up the QTP process for the said area, PSPI submitted its preliminary project documents last 1 June 2011 for initiate its QTP application in Malapascua area.

B. Rural Power Project

For the final quarter of the Project in review (October – December 2011), the DOE-PMO focused in the implementation of the consultancy services for the formulation of next programs for household electrification, the monitoring of RPP-initiated decentralized electrification projects, and the conduct of necessary administrative activities for the project closing by end of the year. DOE-PMO continued to undertake the verification and processing of subsidy claims of the outstanding 3,323 units of solar PV installations that met the 30 April 2011 deadline of submission for last PV subsidy claims under the project.

As of 31 December 2011, therefore, the total RPP-supported PV installations at the end of the project is estimated at 20,305 units. It is broken down to 15,289 solar home systems, 2,302 solar PV-supported public facilities and 2,714 solar lanterns.

In terms of the RPP's contribution to the electrification goals, the estimated number of households (HH) served using decentralized systems by the end of the project will be 19,453. Said figures include both the current 18,003 HH with solar PV systems and the 1,450HH connections served by mini-grid system in Rio-Tuba Qualified Third Party (QTP) Project. With the inclusion of public facilities, the Project is expected to register around 21,755 cumulative total connections by the end of the year.

During the quarter, the DOE-PMO has continued the monitoring of the activities of all the PCs/ECs as well as the developments in the various SSMP and EC-RAES Projects supported by RPP. No additional household installations were reported by the ECs and other proponents during the said period.

On the issue of the SSMP 1, the DOE-PMO, through the office of the DOE Secretary, has also endorsed to the Office of the Solicitor General all the pertinent documents and the request for the filing of a court case against the Phoenix Surety and Insurance, Inc., for not honoring the performance securities and warranties amounting to Php 12.88 million arising from the uncompleted obligations of SOLARCO and the eventual termination of latter's SSMP contracts under the Project.

For the Pilot Phase of the ***PV Mainstreaming Project involving six (6) ECs in Visayas*** to implement utility-based, fee-for-service model using solar PV systems to remote unelectrified households, all the six (6) ECs have already completed their procurement process and their selected contractors successfully installed the required number of SHS systems in their respective areas. Said ECs have also been advised and assisted in the submission of their respective MDSF completion reports and liquidations.

The quarter also saw the completion of the procurement process and the implementation of two major consultancy services undertaken by the DOE through the Project. First is the ***"Updating of the Process Flow for the Missionary Electrification Development Plan (MEDP)"*** aims to prepare the updated MEDP 2012-2016 and improve the process flow in the development of the same. The TA has been satisfactorily completed which includes assessment works on the various aspects of SPUG operations in more than 80 small island and isolated grids (SIIGs) in the country as well as related policy and regulatory framework for off-grid, missionary electrification activities, including the QTP experience.

The other TA is the consultancy services entitled "***Strengthen Policy and Regulatory Frameworks for Household Electrification with Roadmap for 90% Household Electrification by 2017"***. It aims for enhancing the existing frameworks for household electrification in the country and the preparation of the Government's national roadmap for the attainment of 90% HE by 2017.

Another major task for the Project is the ***"Procurement of Goods and Services for the 'Rehabilitation of the Solar PV Systems for Public Facilities under the Sustainable Solar Market Packages (SSMP) 1"*** involving the rehabilitation of the community/public facilities for 50 barangays under SSMP 1.

In addition, the DOE also concluded the contracts of all individual consultants and PMO staff upon the completion of their remaining assignments and tasks under the Project.

C. Implementation of E.R. 1-94 Program

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

Table 27. Summary of Financial Benefits as of October 2011 (In PhP Billion)

Particulars	EF	DLF	RWMHEEF	Total
Accrued Financial Benefit	3.17	2.23	2.57	7.97
Approved	2.76	1.10	1.26	5.12
Available/Collectible Balance	0.41	1.19	1.31	2.85

Source: DOE

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

From November 2011 to April 2012, the DOE approved 72 projects with a total amount of PhP249M funded under E.R. 1-94 program from which 29 projects were funded under EF amounting to PhP93M, 26 under DLF amounting to PhP 110M and 17 under RWMHEEF amounting to PhP46M.

The total accrued financial benefit from inception is PhP 7.97 billion from which PhP 5.12 billion was obligated for the implementation of projects. The available funds as of April 2012 stood at around PhP2.85 billion.

VII. CONCERNS AND CHALLENGES

In pursuit of the EPIRA set goals, there remain challenges in the implementation of the remaining mechanisms as follows:

- Need to put in place a dynamic and comprehensive competition policy/guidelines to mitigate possible abuse of market power by few firms which acquired NPC generating assets and control of contracted capacities;

- Need to further encourage private sector investment to boost up capacity requirements and avert possible shortage of supply. The urgent concern is the Mindanao grid which is experiencing generation deficiency to supply the energy and ancillary services requirement particularly when the water level is at low given its high dependence on hydro power, and when any of the power plants goes on preventive maintenance schedule or unplanned outage. The DOE is continuously assessing and developing measures to increase private sector investment appetite not only for Mindanao but for the entire country as the government, considering the NPC and PSALM, are not allowed by EPIRA to enter into new financial obligations;

- Need to strengthen power supply security and reliability standards as well as enforcement thereof to promote efficiency. This aspect requires implementation support to the DOE Circular on the responsibilities of generation companies, system operator, and the distribution utilities in ensuring reliable electric power supply in the country particularly on the penalties and sanctions for non-compliance with protocols, reportorial requirements and minimum inventory requirements for fuel supply that will be put in place to ensure proper industry practice in the delivery of electric power service. Current efforts are focused on close monitoring of compliance/implementation of the Grid Operation Management Program (GOMP);

- Ensure readiness of participants, systems and infrastructure in the implementation of open access and retail competition. The operational guidelines should address the concerns of Contestable Market particularly on the possible exercise of market power by prospective Suppliers. Discussions on RCOA include, among others, the following major concerns:

    1) Fear of getting higher electricity rates due to weak bargaining power of Contestable Customers;

2) Robustness of the rules, procedures and infrastructure for a systematic and more competitive transactions;

3) Distribution Utilities stranded bilateral contracts due to the possible migration of contestable customers to new suppliers;

4) Compliance to government laws and guidelines such as Procurement Law; and

5) Impact to captive customers. Further, there is a need to address the concerns of ecozone locators on uncertainties under RCOA since they are currently enjoying discounted rates under Philippine Economic Zone Authority and private economic zones.

- Provision of adequate funds, absorptive capacity of implementing entities in the completion of sitio and household electrification and the need to design mechanism that will ensure sustainability of electricity service particularly in the marginalized and remote areas.

- Ensuring sustainability of operations in the missionary areas with inadequate subsidies from the universal levy.

LIST OF ANNEXES

Annex 1.Transco Inspection Report Based on Concession Agreement as of April 2012

No.	Inspection Report No.	Location	Name of Project/ Transmission Facilities	Inspection Date
LUZON				
1	PUC-11-18	North Luzon	New Clark Substation	February 23 to 25, 2011
2	PUC-11-18	North Luzon	New Clark – Concepcion Transmission Lines	February 23 to 25, 2011
3	PUC-11-19	North Luzon	Upgrading of San Manuel, Concepcion, Mexico Substations	February 21 to 22, 2011
4	PUC-11-19	North Luzon	Upgrading of San Manuel – Concepcion – Mexico Transmission Lines	February 21 to 22, 2011
5	NLRD5-11-01	Olongapo, Hermosa, Subic, Limay and Botolan	North Luzon District 5	March 28 to April 1, 2011
6	NLRD1-11-03	Bauang S/S, San Esteban S/S, Bantay S/S, Curimao S/S, laoag S/S	North Luzon District 1	May 9 to May 13, 2011
7	NLRD4-11-04	Santiago S/S, Cauayan S/S, Gamu S/S, Ilagan S/S, Tuguegarao, Bayombong , Lagawe S/S	North Luzon District 4	May 23 to May 27, 2011
8	NLRD6-11-05	Central Luzon Area Control Center Mexico S/S Cabanatuan S/S Pantabangan S/S Cruz na Daan S/S	North Luzon District 6	June 13 to June 17, 2011
9	NLRD3-11-08	San Manuel, Nagsaag, Kadampat, Labrador, Mangaldan Substation, Pangasinan	North Luzon District 3	July 25 to 29, 2011
10	NLRD7-11-09	San Jose, Araneta, Dolores, Malaya, Balintawak	North Luzon District 7	August 8 to 11, 2011
11	SLRD2-11-10	Tayabas, Gumaca, Makban, Kalayaan, Caliraya	South Luzon District 2	August 22 to 26, 2011
12	NLRD7 -11-26	San Jose, Del Monte, Bulacan	San Jose 750MVA Transformer Project	January 25 to 28, 2011
13	NP-11-16	Kadampat, Pangasinan and San Jose, Bulacan	2x90MVAR Shunt Reactor	July 25-29, 2011
14	SLRD1-11-20	Dasmariñas, Ternate, Rosario, zapote, Sucat, Biñan, Calaca, Batangas	South Luzon District 1	November 14-18, 2011
15	SLRD3-11-21	Tiwi, Daraga, Iriga, Ligao, Naga, Labo, Calabanga, Talisay, Sta. Magdalena, Balogo,	South Luzon District 3	November 28-December 2, 2011
16	NLOMD2-11-22	La, Trinidad, Ambuklao, Binga,Itogon, Beckel	North Luzon District 2	December 5 – 8, 2011

No.	Inspection Report No.	Location	Name of Project/ Transmission Facilities	Inspection Date
17	NLOMD5-12-02	Hermosa, Limay, Hanjin, Olongapo, Subic, Botolan and Morong	North Luzon District 5	January 16-20, 2012
18	NLOMD1-12-05	Bauang, Bacnotan, San Esteban, Bantay, Currimao, Laoag	North Luzon District 1	February 13-17, 2012
19	NLOMD3-12-06	San Manuel, Bolo, Labrador, Kadampat, Nagsaag, Mangaldan, Cuyapo	North Luzon District 3	February 20-24, 2012
20	NLOMD7-12-07	San Jose, Doña Imelda (Araneta), Tay-Tay (Dolores), Malaya, Quezon (Balintawak)	North Luzon District 7	March 5-9, 2012
21	NLOMD4-12-08	Santiago, Gamu, Tuguegarao, Bayombong, Cauayan, Ilagan, Lagawe	North Luzon District 4	March 12-16, 2012
22	SLRD2-12-09	Tayabas, Gumaca, Makban, Kalayaan, Caliraya	South Luzon District 2	March 19-23, 2012
VISAYAS				
1	VISD3-11-02	Bacolod, Cadiz, Kabankalan, Mabinay, Amlan	Visayas District 3	April 13 to 15, 2011
2	PUC-11-21	Amlan, Mabinay & Bacolod S/S	Visayas PCB Replacement Project	April 13 to 15, 2011
3	VISD2-11-07	Cebu, Talisay, Compostela, Naga, Suba, Ubay, Garcia Hernandez, and Bohol Substations	Visayas District 2	July 11 to 15, 2011
4	PUC-11-22	Corella, Ubay, Bohol	Bohol Backbone 138kV Transmission Project	March 9 to 11, 2011
5	VISD4-11-18	Sta. Barbara, Dingle, San Juan, Panit-an, Baldoza	Visayas District 4	October 24 to 27, 2011
6	VISD1-11-19	Ormoc City, Babatngon, Wright, Isabel, Tabango, Maasin, Bagolibas	Visayas District 1	November 8-11, 2011
7	PUC-11-25	Corella, Ubay, Bohol	Bohol Backbone 138kV Transmission Project	December 12-14, 2011
8	VISD3-12-01	Bacolod, Cadiz, Kabankalan, Mabinay, Amlan	Visayas District 3	January 9-13, 2012
9	PUC-12-01	Sta. Barbara, Iloilo	Southern Panay Backbone Project (Transmission Line Portion)	January 18-20, 2012
10	VISD2-12-04	Banilad, Mandaue, Mactan, Compostela, Quiot, Naga, BDPP, Ubay, Talisay	Visayas District 2	February 6-10, 2012
MINDANAO				
1	PUC-11-20	Zamboanga Sibugay	Zamboanga 138kV Transmission Project	March 9 to 11, 2011
2	MRD2-11-	Overton, Lugait, Balo-i	Mindanao District 2	June 27 to July 1,

No.	Inspection Report No.	Location	Name of Project/ Transmission Facilities	Inspection Date
	06	Substation and Agus 6 Swichtyard		2011
3	PUC-11-23	Cagayan De Oro, Abaga, Kirahon	Abaga – Kirahon 230 kV Transmission Project	August 15 to 18, 2011
4	PUC-11-23	Cagayan De Oro, Abaga, Kirahon	Abaga – Kirahon 230kV Substation Project	August 15 to 18, 2011
5	PUC-11-24	Kirahon, Misamis Oriental, Maramag, Bukidnon, Mindanao	Kirahon – Maramag 230kV Transmission Line Project	August 15 to 18, 2011
6	MIND1-11-11	Zamboanga, Lunzuran, Sangali, Sta. Clara, Aurora	Mindanao District 1	September 5 to 9, 2011
7	MIND4-11-12	Butuan, Nasipit, Anislagan, San Francisco, Bislig	Mindanao District 4	September 12 to 16, 2011
8	MIND5-11-13	Davao, Kidapawan, Bunawan, Maco, Matanao, Nabunturan	Mindanao District 5	September 19 to 23, 2011
9	MIND6-14	Gen. Santos, Tacurong, Sultan Kudarat	Mindanao District 6	September 26 to 30, 2011
10	MIND3-11-15	Carmen, Tagoloan, Jasaan, Kibawe, Maramag	Mindanao District 3	October 3 to 7, 2011
11	MIND2-12-03	Lugait, Iligan(Overton), Balo-i(Abaga), Mindanao RCC, Metering Facilities and Microwave Station	Mindanao District 2	January 23-27, 2012
12	MIND5-12-10	Davao City, Bunawan, Matanao, Maco, Nabunturan, Kidapawan	Mindanao District 5	April 10-13, 2012
13	MIND3-12-11	Carmen, Tagoloan, Jasaan, Kibawe, Maramag	Mindanao District 3	April 23-26, 2012

Source: Transco

Annex 2. NGCP Related Petitions to ERC as of 30 April 2012

ERC DECISION/ CASE NO.	DATE OF FILING	NATURE OF PETITION	GROUNDS FOR FILING	STATUS
ERC Case No. 2011-178RC	20 December 2011	In the Matter of the Application for the Approval of Connection Charges and Residual Subtransmission Charges for Calendar Years 2011 and 2012 on the Excluded Services Covering the Existing Subtransmission Assets of the National Grid Corporation of the Philippines (NGCP), with Prayer for Provisional Authority Rates	• Issue a Provisional Authority to implement and commence the billing period of 26 December 2011 – 25 January 2012 and 26 December 2012 – 25 January 2013; • After due notice and hearing, approve the recovery of the computed CY 2011 and 2012 Connection Charges and Residual Subtransmission Charges provided in this application to all customers.	• ERC posted on its website an Order and Notice of Hearing dated January 4, 2012 and docketed on January 9, 2012. • On February 20, 2012, the initial hearing, Jurisdictional hearing and Expository presentation for Luzon stakeholders were held. Then on Feb 22 & 23, 2012, Expository presentation was done in ERC Visayas and ERC Davao respectively. • On February 28, 2012, the cross examination was completed but the witness may be subject to recall as may be deemed necessary in the course of the proceedings. The Commission's directives are as follows: ➢ NGCP to provide the interveners the list of assets, computation and single line diagram for their respective franchise area prior to schedule conference/road shows; ➢ NGCP to submit report to the Commission regarding the outcome of the conference/roadshow; ➢ NGCP conducted a conference meeting with TransCo on March 5, 2012. • On March 21, 2012, TransCo filed its Reply to NGCP's Opposition (filed on February 28, 2012). • On March 22, 2012, the scheduled hearing was re-set on May 3, 2012. • On April 11, 2012, NGCP received a copy of PELCO II and PASAR's motion to lift order of general default and petition to intervene.

Source: Transco

Annex 3. Summary of MERALCO November 2011 - April 2012 Residential Unbundled Power Rates

BILL SUBGROUP	Nov	Dec	Jan	Feb	Mar	Apr
0 to 200 kWh (P/kWh)						
Generation	5.8473	5.5632	5.5213	5.6297	5.3955	5.7241
Transmission	1.1878	1.1569	1.1840	1.0303	0.9714	0.9898
System Loss	0.6980	0.6705	0.6594	0.6585	0.6240	0.6670
Distribution	1.9417	1.9417	1.9417	1.9417	1.9417	1.9417
Subsidies	0.1474	0.1440	0.1508	0.1577	0.1499	0.1514
Universal Charge	0.1188	0.1188	0.1188	0.1188	0.1188	0.1188
Gov't Taxes	0.9803	0.9590	0.9823	1.0083	0.9756	1.0316
TOTAL	**10.9213**	**10.5541**	**10.5583**	**10.5450**	**10.1769**	**10.6244**
201 to 300 kWh (P/kWh)						
Generation	5.8473	5.5632	5.5213	5.6297	5.3955	5.7241
Transmission	1.1878	1.1569	1.1840	1.0303	0.9714	0.9898
System Loss	0.6980	0.6705	0.6594	0.6585	0.6240	0.6670
Distribution	2.2990	2.2990	2.2990	2.2990	2.2990	2.2990
Subsidies*	0.1474	0.1440	0.1508	0.1577	0.1499	0.1514
Universal Charge	0.1188	0.1188	0.1188	0.1188	0.1188	0.1188
Gov't Taxes	1.0204	0.9991	1.0223	1.0483	1.0157	1.0316
TOTAL	**11.3187**	**10.9515**	**10.9556**	**10.9423**	**10.5743**	**10.9817**
301 to 400 kWh(P/kWh)						
Generation	5.8473	5.5632	5.5213	5.6297	5.3955	5.7241
Transmission	1.1878	1.1569	1.1840	1.0303	0.9714	0.9898
System Loss	0.6980	0.6705	0.6594	0.6585	0.6240	0.6670
Distribution	2.6362	2.6362	2.6362	2.6362	2.6362	2.6362
Subsidies*	0.1474	0.1440	0.1508	0.1577	0.1499	0.1514
Universal Charge	0.1188	0.1188	0.1188	0.1188	0.1188	0.1188
Gov't Taxes	1.0603	1.0389	1.0622	1.0882	1.0557	1.0717
TOTAL	**11.6958**	**11.3285**	**11.3327**	**11.3194**	**10.9515**	**11.3590**
Over 400kWh (P/kWh)						
Generation	5.8473	5.5632	5.5213	5.6297	5.3955	5.7241
Transmission	1.1878	1.1569	1.1840	1.0303	0.9714	0.9898
System Loss	0.6980	0.6705	0.6594	0.6585	0.6240	0.6670
Distribution	3.2235	3.2235	3.2235	3.2235	3.2235	3.2235
Subsidies*	0.1474	0.1440	0.1508	0.1577	0.1499	0.1514
Universal Charge	0.1188	0.1188	0.1188	0.1188	0.1188	0.1188
Gov't Taxes	1.1326	1.1113	1.1345	1.1605	1.1280	1.1117
TOTAL	**12.3554**	**11.9882**	**11.9923**	**11.9790**	**11.6111**	**11.9863**

* *Includes Distribution, Supply and Metering Charges*

** *Subsidies covered by customers consuming 101 kWh consumption and up*

** **Total rates excluding Government Taxes*

Source: MERALCO Website

Annex 4. NPC Generation Charges in PhP/kWh

Month & YEAR		LUZON	VISAYAS	MINDANAO
2003	January	2.4573	2.3429	1.2914
	February	2.4664	2.3520	1.3005
	March	2.4664	2.3520	1.3005
	April	2.4664	2.3520	1.3005
	May	2.4009	2.5095	1.3050
	June	2.4009	2.5095	1.3050
	July	2.4009	2.5095	1.3050
	August	2.0065	2.5095	1.3050
	September	2.0065	2.5095	1.3050
	October	2.4962	2.6429	1.2933
	November	2.4962	2.6429	1.2965
	December	2.4897	2.6364	1.2666
2004	January	2.4897	2.7199	1.2666
	February	2.3887	2.8391	1.3219
	March	2.3887	2.8391	1.3219
	April	2.3887	2.8391	1.3219
	May	2.4614	2.9118	1.4499
	June	2.5981	2.9338	1.8317
	July	2.5981	2.9338	1.8317
	August	2.5981	2.8349	1.8317
	September	2.5981	2.8349	1.8317
	October	3.9662	3.1888	2.2787
	November	3.9384	3.1610	2.2509
	December	3.9384	3.1610	2.2509
2005	January	3.9384	3.1610	2.2509
	February	3.9384	3.1610	2.2509
	March	3.9384	3.1610	2.2509
	April	3.9384	3.1610	2.2509
	May	4.4080	3.2823	2.5307
	June	4.4080	3.2823	2.5307
	July	4.4080	3.2823	2.5307
	August	4.4080	3.2823	2.5307
	September	4.4080	3.2823	2.5307
	October	4.4080	3.2823	2.5307
	November	4.4080	3.2823	2.5307
	December	4.5303	3.3654	2.5965
2006	January	4.5303	3.3654	2.5965
	February	4.5303	3.3654	2.5965

Annex 4. NPC Generation Charges in PhP/kWh

Month & YEAR		LUZON	VISAYAS	MINDANAO
	March	4.5303	3.3654	2.5965
	April	4.5303	3.3654	2.5965
	May	4.5303	3.3654	2.5965
	June	4.5303	3.2259	2.5965
	July	4.5303	3.4043	2.5965
	August	4.9100	3.4043	2.6205
	September	4.9100	3.4043	2.6205
	October	4.9100	3.4043	2.6205
	November	4.9100	3.4043	2.6205
	December	4.9100	3.4043	2.6205
2007	January	4.9100	3.4043	2.6205
	February	4.9100	3.4043	2.6205
	March	4.8670	3.0892	2.6160
	April	4.8670	3.0892	2.6160
	May	4.7857	3.0892	2.6160
	June	4.7857	2.9056	2.6160
	July	4.6636	2.9056	2.6160
	August	4.6636	2.9056	2.6160
	September	4.5887	2.9056	2.6160
	October	4.3344	2.8343	2.5523
	November	4.3344	2.8343	2.5523
	December	3.6745	2.8343	2.5523
2008	January	4.3184	2.8343	2.5523
	February	3.6469	2.8343	2.5523
	March	3.6469	2.8043	2.5523
	April	3.8896	2.8043	2.5523
	May	3.8896	2.9056	2.5523
	June	3.1780	2.9934	2.5277
	July	3.1780	2.9934	2.5277
	August	3.1780	2.9934	2.5277
	September	3.1780	2.9934	2.5277
	October	3.1780	2.9934	2.5277
	November	3.1780	2.9934	2.5277
	December	3.3611	2.9934	2.5277
2009	January	3.5589	2.9934	2.5319
	February	3.5589	2.9934	2.5319
	March	4.0271	3.8310	3.0030
	April	4.0271	3.8310	3.0030
	May	4.0271	3.8309	3.0030

Annex 4. NPC Generation Charges in PhP/kWh

Month & YEAR		LUZON	VISAYAS	MINDANAO
	June	4.0271	3.8309	3.0030
	July	4.0271	3.8309	3.0030
	August	4.0271	3.8309	2.8459
	September	4.0271	3.8309	2.8459
	October	4.0271	3.8309	2.8459
	November	4.0271	3.8309	2.8459
	December	4.0271	3.8309	2.8459
2010	January	4.0271	3.8309	2.8459
	February	4.0271	3.7710	2.8459
	March	4.5046	4.0557	2.9425
	April	4.3761	4.0367	2.9630
	May	4.3930	4.1113	2.9570
	June	4.3431	4.0250	2.8948
	July	4.5649	4.0686	2.9189
	August	4.6187	4.0167	2.9180
	September	4.6103	4.0156	2.9166
	October	4.6096	4.0156	2.9176
	November	4.6201	4.0230	2.9193
	December	4.6484	4.0890	2.6651
2011	January	4.6576	4.0967	2.6665
	February	4.6602	4.0967	2.6692
	March	4.6727	4.1004	2.6729
	April	4.6786	4.0996	2.6751
	May	4.6735	4.0971	2.6739
	June	5.0196	4.0953	2.6745
	July	5.0140	4.0976	2.6742
	August	5.0056	4.0726	2.6719
	September	5.0154	4.0768	2.9286
	October	5.0105	4.0743	2.9279
	November	5.0185	4.0738	2.9304
	December	5.0178	4.0720	2.9295
2012	January	5.0168	4.0747	2.9316
	February	5.0160	4.0740	2.9321
	March	5.0214	4.0711	2.9334
	April	5.7077	4.5876	2.9769

Source: NPC Website

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%

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

Billing Month		Metered Quantity (Load), MWh	Spot Quantity (Load), MWh	%	Bilateral Contract Quantity, MWh	%
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%
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%

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

Billing Month		Metered Quantity (Load), MWh	Spot Quantity (Load), MWh	%	Bilateral Contract Quantity, MWh	%
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%
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%

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

Billing Month		Metered Quantity (Load), MWh	Spot Quantity (Load), MWh	%	Bilateral Contract Quantity, MWh	%
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%

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

Billing Month		Peak Demand	Coincidental Energy Offers	Average Demand	Average Energy Offers	Average Capacity on Outage
27	Sep-2008	6,448	6,516	5,120	6,534	1,300
28	Oct-2008	6,520	6,316	5,124	5,825	1,845
29	Nov-2008	6,395	6,361	4,986	5,828	1,204
30	Dec-2008	6,338	6,826	4,711	6,327	946
31	Jan-2009	6,050	6,512	4,191	5,603	1,472
32	Feb-2009	6,421	6,240	4,853	5,969	1,281
33	Mar-2009	6,638	6,721	5,167	6,315	1,104
34	Apr-2009	6,810	7,220	5,068	6,374	1,383
35	May-2009	6,842	7,493	5,157	6,788	1,250
36	Jun-2009	6,932	7,374	5,203	6,876	1,432
37	Jul-2009	6,819	7,482	5,258	6,875	980
38	Aug-2009	6,833	7,263	5,255	6,692	1,577
39	Sep-2009	6,870	7,044	5,228	7,007	1,592
40	Oct-2009	6,501	6,532	4,935	6,511	2,427
41	Nov-2009	6,585	7,474	5,141	6,912	1,024
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

Billing Month		Peak Demand	Coincidental Energy Offers	Average Demand	Average Energy Offers	Average Capacity on Outage
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	
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	

Source: PEMC

Note: For the average capacity on outage column, data for the previous months pertain to outage based on ACNO (available capacity not offered)

Starting Feb 2010, data will be based on per unit; the same is also published in monthly reports and WESM exchange.

Annex 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	

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%	

Billing Month		Hydro	Geo	Coal	Nat Gas	Diesel/Oil	Wind	Biofuel
25	**Jul-2008**	12.88%	9.40%	29.65%	42.99%	5.04%	0.04%	
26	**Aug-2008**	15.07%	11.42%	21.23%	47.02%	5.18%	0.08%	
27	**Sep-2008**	14.91%	10.41%	24.68%	45.40%	4.54%	0.05%	
28	**Oct-2008**	15.37%	9.31%	32.54%	39.82%	2.84%	0.12%	
29	**Nov-2008**	10.92%	9.59%	36.02%	40.69%	2.61%	0.18%	
30	**Dec-2008**	11.44%	9.28%	33.34%	45.08%	0.57%	0.29%	
31	**Jan-2009**	11.61%	12.99%	36.68%	37.97%	0.34%	0.40%	
32	**Feb-2009**	10.16%	10.24%	35.38%	42.23%	1.81%	0.17%	
33	**Mar-2009**	7.77%	10.10%	32.95%	46.79%	2.31%	0.09%	
34	**Apr-2009**	6.17%	9.72%	32.54%	46.65%	4.76%	0.15%	
35	**May-2009**	11.42%	8.92%	29.58%	44.95%	4.95%	0.17%	
36	**Jun-2009**	14.27%	8.46%	26.88%	45.88%	4.44%	0.08%	
37	**Jul-2009**	13.85%	8.33%	30.58%	45.82%	1.38%	0.04%	
38	**Aug-2009**	17.95%	7.75%	26.92%	43.92%	3.42%	0.04%	
39	**Sep-2009**	17.01%	7.12%	24.69%	47.59%	3.56%	0.04%	
40	**Oct-2009**	21.46%	8.08%	20.64%	46.80%	2.92%	0.11%	
41	**Nov-2009**	11.41%	8.84%	30.12%	46.82%	2.62%	0.19%	
42	**Dec-2009**	9.76%	8.91%	30.80%	48.50%	1.79%	0.24%	
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%	

Billing Month		Hydro	Geo	Coal	Nat Gas	Diesel/Oil	Wind	Biofuel
51	Sep-2010	11.36%	6.56%	33.22%	44.17%	4.62%	0.06%	
52	Oct-2010	9.87%	7.46%	33.21%	43.92%	5.46%	0.08%	
53	Nov-2010	12.15%	7.51%	34.93%	42.51%	2.64%	0.26%	
54	Dec-2010	9.70%	7.70%	37.60%	42.70%	2.00%	0.30%	
55	Jan-2011	8.30%	18.00%	39.10%	33.10%	1.10%	0.30%	0.006%
56	Feb-2011	7.66%	16.58%	34.94%	39.66%	0.93%	0.22%	0.009%
57	Mar-2011	7.07%	15.25%	38.49%	38.16%	0.72%	0.25%	0.071%
58	Apr-2011	8.3%	18.0%	39.8%	32.9%	0.7%	0.312%	0.013%
59	May-2011	7.6%	16.7%	35.0%	39.4%	1.0%	0.218%	0.023%
60	Jun-2011	7.1%	15.2%	38.4%	38.0%	1.1%	0.239%	0.050%
61	Jul-2011	5.6%	15.9%	39.8%	37.6%	0.8%	0.219%	0.122%
62	Aug-2011	4.4%	14.6%	42.2%	35.7%	2.9%	0.056%	0.036%
63	Sep-2011	5.8%	15.1%	41.1%	36.9%	1.0%	0.049%	0.000%
64	Oct-11	13.7%	14.3%	34.6%	34.3%	3.1%	0.100%	0.006%
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%

Source: PEMC

Annex 9. 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

EFFECTIVE SETTLEMENT PRICES (PhP/MWh)				
Billing Month		ESP (w/ Surplus)	ESP (w/o Surplus)	Cumulative Average ESP
26	Aug-2008	4,124.77	4,124.77	5,016
27	Sep-2008	3,911.62	3,911.62	4,981
28	Oct-2008	4,009.38	4,009.38	4,955
29	Nov-2008	5,520.95	4,833.61	4,954
30	Dec-2008	1,244.97	786.69	4,831
31	Jan-2009	1,881.33	1,797.76	4,733
32	Feb-2009	3,062.87	2,893.06	4,662
33	Mar-2009	3,395.09	2,774.35	4,614
34	Apr-2009	4,350.10	3,798.38	4,598
35	May-2009	2,871.07	2,516.38	4,548
36	Jun-2009	2,519.61	2,207.39	4,497
37	Jul-2009	3,294.88	2,041.02	4,459
38	Aug-2009	2,291.13	1,986.39	4,395
39	Sep-2009	2,080.29	1,148.78	4,328
40	Oct-2009	1,445.37	1,396.63	4,264
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

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

Source: PEMC

Annex 10. Private Sector Initiated Power Projects (Luzon) as of June 2012

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	COAL			**3,035.00**		
Committed	**2 X 300 MW Coal-Fired Power Plant**	**GN Power**	**Mariveles, Bataan**	**600**	**Under construction**	**Unit 1 (300 MW) - August 2012 Unit 2 (300 MW) - October 2012**
Committed	**Puting Bato Coal Fired Power Plant**	**South Luzon Thermal Energy Corp. (SLTEC)(formerly TAOil)**	**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, transfer of ECC to SLTEC on 14 Dec. 2011; on-going negotiations with GIS and Semirara Corporation for the coal supply; Financial close on 28 Oct. 2011**	**September 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 August 2012	Q4 2013
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 2014
Indicative	2 X 300 MW Coal-Fired Power Plant	Redondo Peninsula Energy, Inc.	Sitio Naglatore, Cawag, Subic	600	Environmental Compliance Certificate Unit 1 on 2007 and Unit II on Q4 2011, Grid Impact Studies, other permits obtained; on-going financing arrangements; request for proposal of	Phase I - Q4 2014 Phase II - Q2 2015

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
					engineering, equipment procurement and construction of plant issued with award to be given on Dec. 2011; site preparation construction ongoing; 52% owned by Meralco PowerGen Corp. (MPGC); public consultations conducted in Subic on 29 June 2012	
Indicative	135 MW Puting Bato Coal Fired Power Plant Phase II	South Luzon Thermal Energy Corp. (SLTEC) (formerly TAOil)	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 9.6 Billion	Q4 2015
Indicative	Quezon Power Expansion Project	Quezon Power Phils.	Mauban, Quezon	500	ECC issued June 4, 2007; Extension of validity granted on May 31, 2012 for a 3 year extension; Municipal LGU endorsement issued April 19, 2005; Award EPC contract estimate July 2013; Design and construction to start January 2014	Q2 2016
Indicative	SLPGC Coal-Fired Power Plant (Formerly Calaca Expansion)	Southwest Luzon Power Generation Corporation	Brgy. San Rafael, Calaca, Batangas	600	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	Phase I - 2014 Phase II - 2017
Indicative	2 X 300 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	Unit 3 (300 MW) - 3rd Quarter 2016 Unit 4 (300 MW) - 3rd Quarter 2016
	DIESEL			**171.00**		
Committed	**CIP 2 Bunker Fired Power Plant**	**CIP II Power Corporation (TAOil)**	**Bacnotan, La Union**	**21**	**Completed ECC on 2 Aug. 2010; Ongoing GIS; EPC contractor awarded; financing from internal funds; construction started February 2011**	**3rd Qtr. 2012**

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
Indicative	Aero Derivative Combined Cycle Power Plant	Calamba Aero Power Corporation	Calamba, Laguna	150	On-going securing of permits and other regulatory requirements; granted clearance by DOE for the conduct of GIS	June 2013
	NATURAL GAS			**1,150.00**		
Indicative	2 X 100 MW Gas Turbine Power Project 2 X 50 MW Steam Turbine Power Project	Energy World International, Ltd	Brgy. Ibabang Polo, Grande Island, Pagbilao, Quezon	300	Various permits obtained; with financing from Standard Chartered Bank; granted permits by DOE on the LNG terminal on January 24, 2011. On-going earth moving activities at the project site.	December 2013
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	3rd Quarter 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	3rd Quarter 2015
	GEOTHERMAL			**140.00**		
Committed	**Maibarara Geothermal Power Project**	**Maibarara Geothermal, Inc.**	**Sto. Tomas, Batangas**	**20**	**Obtained Geothermal Service Contract with DOE; ECC obtained in August 2010; BOI Registration obtained in January 2011; Selected IEE Corp & Fuji Electric as main and subcontractors for the power plant EPC; Secured project financing with RCBC and BPI Capital; GIS from NGCP completed in March 2011; Certificate of Confirmation of Commerciality from DOE obtained.**	**October 2013**
Indicative	Tanawon	Energy Development	Bacman	40	ECC certificate ongoing;	September 2015

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	Geothermal Project	Corporation	Geothermal Field, Sorsogon		LGU endorsement obtained; Water rights secured; turnkey contract for bidding	
Indicative	Rangas Geothermal Project	Energy Development Corporation	Bacman Geothermal Field, Sorsogon	40	ECC certificate ongoing LGU endorsement obtained; Water rights secured; Turnkey contract for bidding	September 2015
Indicative	Manito-Kayabon Geothermal Project	Energy Development Corporation	Bacman Geothermal Field, Sorsogon	40	ECC certificate obtained; LGU endorsement obtained; Water rights secured;	March 2017
	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	December 2020
	WIND			**353.50**		
Committed	**Pililla Wind Power Project**	**Alternergy Wind One Corporation**	**Pililla, Rizal**	**67.5**	**AWOC to finance the implementation of the project with 100% equity.**	**December 2012 (Subject to FIT)**
Indicative	Pasuquin East Wind Energy Project Phase One	Energy Logistics Philippines, Inc.	Pasuquin, Ilocos Norte	45	ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors committment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets	June 2013 (Subject to FIT)
Indicative	Burgos Wind Power Project	Energy Development Corporation	Nagsurot-Saoit, Burgos, Ilocos Norte	86	DOE Service contracts obtained; Civil Aviation Authority clearance obtained; DENR-ECC obtained; LGU endorsement obtained	December 2013 (Subject to FIT)
Indicative	Mabitac Wind Power Project	Altenergy Sembrano Wind Corporation	Mabitac, Rizal	90	On-going securing necessary permits, applied for conversion from pre-development stage to development/commercial stage.	2013

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
Indicative	Pasuquin East Wind Energy Project Phase Two	Energy Logistics Philippines, Inc.	Pasuquin, Ilocos Norte	75	ECC secured 15 June 2010; GIS secured Dec. 2010; Equity Investors commitment secured; Selected Preferred EPC Turn-key Tenderer for both the wind energy farm and the connection assets	February 2014 (Subject to FIT)
Indicative	Cavinti Wind 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.	
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; On-going negotiation with financial institutions; Construction will commence at financial close and is scheduled to take 18 months.	Q1 2014
Indicative	Abra de Ilog Wind Farm Project	Alternergy Abra de Ilog Wind Corporation	Abra de Ilog, Mindoro	40	On-going securing necessary permits, applied for conversion from pre-development stage to development/commercial stage.	2015
	BIOMASS			**56.30**		
Committed	**Green Future Biomass Project**	**Green Future Innovations Inc.**	**Isabela**	**13**	**Construction started October 2010; 4.3 Billion loan from Banco de Oro already approved; permits and other requirements obtained; Certificate of Endorsement for ERC obtained.**	**July 2012**
Indicative	Unisan Biogas Project	Unisan Biogen Corporation	Quezon Province	11.2	LGU permits obtained; BOI certification obtained; EPC contract with Areva Bioenergy India; awaiting financial closure	December 2013
Indicative	Lucky PPH Biomass project	Lucky PPH International	Isabela	3.6	Various permits obtained; awaiting loan approval from Land Bank; awaiting PSA approval with ISELCO	December 2013
Indicative	17.5 MW Nueva Ecija Biomass	Green Power Nueva Ecija Philippines, Inc.	Brgy. Tambo-	17.5	Various permits issued, MOA on the Establishment of Trust Account Obtained; ECC	December 2014

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	Power Project		Tabuating, San Leonardo, Nueva Ecija		issued, Biomass Supply Contract obtained	
Indicative	San Jose City I Power Corporations' Biomass Project	San Jose City I Power Corporation	Nueva Ecija	11	Various permits obtained; awaiting financial closure	December 2014

Total Rated Capacity	**5,430.80**
Total Committed Rated Capacity	**856.50**
Total Indicative Rated Capacity	**4,574.30**

*** Committed Project(s)**

COAL
DIESEL / OIL
NATURAL GAS
GEOTHERMAL
HYDROPOWER
WIND
BIOMASS

Annex 11. Private Sector Initiated Power Projects (Visayas) as of June 2012

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	COAL			**446.00**		
Committed	**2 x 100 MW Concepcion Coal-fired power plant**	**Palm Thermal Consolidated Holdings Corp. (Formerly DMCI Concepcion Power Corp.)**	**Brgy. Nipa, Concepcion, Iloilo**	**200**	**Acquired land on Nov. 2010; permits and other requirements obtained; Secured Letter of Intent from from CEBECO, PECO and ILECO 111; EPC Contractor expected by September 2012; appointed SNC-Lavalin, Inc. as the Owner's Engineer; secured clearance from DOE for the conduct of GIS, awaiting for the release of final GIS by NGCP; follow-up visits are still on-going to other ECs in Panay and Visayas area; Coal Supply Contract is being finalized.**	**1st Unit - 3rd Qtr. 2015 2nd Unit - Nov. 2016**
Indicative	CEDC Expansion Project (2 X 82 MW Coal-Fired Power Plant	Cebu Energy Development Corporation	Brgy. Daanlungsod, Toledo City, Cebu	164	Securing necessary permits; secured clearance from DOE for the conduct of GIS.	2015
Indicative	PEDC Expansion Project (1 X 82 MW Coal-Fired Power Plant)	Panay Energy Development Corporation	Brgy. Ingore, La Paz, Iloilo	82	Securing necessary permits; secured clearance from DOE for the conduct of GIS.	2015
	GEOTHERMAL			**100.00**		
Committed	**Nasulo Geothermal**	**Energy Development Corporation**	**Nasuji, Valencia, Negros Oriental**	**20**	**Obtaining necessary permits and requirements; Turnkey contracts for bidding**	**December 2013**

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
Indicative	Dauin Geothermal	Energy Development Corporation	Dauin, Negros Oriental	40	On-going feasibility studies; LGU endorsement obtained; water rights obtained	2017
Indicative	Southern Leyte Geothermal Project (formerly Cabalian Geothermal Project)	Energy Development Corporation	Southern Leyte	40	ECC obtained; LGU Endorsement obtained;	2019
	HYDROPOWER			**8.00**		
Committed	**Villasiga HEP**	**Sunwest Water & Electric Co., Inc.**	**Sibalom, Antique**	**8**	**LGU endorsement done; Water Permit done; Reconnaisance Permit done; ECC certificate done; DOE Hydropower Service Contract done; BOI Registration done; with financing from Land Bank of the Philippines**	**December 2012**
	WIND			**54.00**		
Indicative	54 MW San Lorenzo Wind Power Project (8 MW & 46 MW)	Trans-Asia Oil and Energy Development Corporation	San Lorenzo, Guimaras Island	54	Securing various LGU permit; obtained DENR land classification 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	January 2014

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	BIOMASS			**116.00**		
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.**	**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.); Electricity Supply Agreement with Ileco I (3 MW) and Ileco II (7 MW); Biomass supply contract obtained; Certificate of Endorsement from DOE obtained on April 30, 2010; Signed Engineering, Procurement and Construction Contract with Poyry Energy, Inc.	Phase I - December 2013 Phase II - December 2014
Indicative	Asea One Biomass Project	Asea One Power Corporation	Banga, Aklan	12	Obtaining necessary permits; Signed PSA with AKELCO; on-going negotiation for financing and EPC contractor	December 2013
Indicative	Negros Biomass Power Project Phase 2	Green Power Negros Philippines, Inc.	Negros	35	Obtaining necessary permits, negotiation with NGCP on the conduct of GIS is on-going; negotiation with local banks for financing is on-going	December 2014
Indicative	Asea One Biomass Project	Asea One Power Corporation	Ajuy, Iloilo	30	Obtained necessary permits; signed PSA with ILECO; awaiting financial closure	December 2014

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning

Total Rated Capacity	**724.00**
Total Committed Rated Capacity	**232.00**
Total Indicative Rated Capacity	**492.00**

*** Committed Project(s)**

COAL
GEOTHERMAL
HYDROPOWER
WIND
BIOMASS

Annex 12. Private Sector Initiated Power Projects (Mindanao) as of June 2012

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	COAL			**700.00**		
Committed	**2 X 100 MW Southern Mindanao Coal Fired Power Station**	**Sarangani Energy Corporation (formerly Conal Holdings Corp.)**	**Maasim, Sarangani**	**200**	**Various permits obtained; BDO, DBP, RCBC and UCPB have obtained their respective pre-clearances to enter into the transaction; Power Sales Agreement for 70MW between Sarangani Energy Corporation and South Cotabato II Electric Cooperative, Inc (SOCOTECO II) was executed on June 3, 2011; Issuance of Notice to Proceed to the EPC Contractor is scheduled on March 2012; Project cost $ 450 Million; Testing and commissioning will commence 29 months after Notice to Proceed; Commercial operation will commence 35 months after issuance of Limited Notice to Proceed.**	**2014**
Indicative	2 X 150 MW Coal-Fired Therma South Energy Project	Therma South Inc. *(Aboitiz Power Corporation)*	Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur	300	Project cost Php 24B; Secured right to land; on-going negotiation for financing; various permits obtained; secured SEC, BIR, BOC, BOI, ECC permits; LGU/Sangguniang Panlalawigan Davao City Reclassification already	2nd Quarter 2014

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
					granted and issued on 12 Dec. 2011; Site development works by 3rd Qtr. of 2012	
Indicative	Steag Expansion Project	Steag State Power Corp.	Phividec, Misamis Oriental	200	On-going feasibility study; on -going discussions with NPC/PSALM regarding the common facilities	December 2014
Indicative	ZAM 100 MW Circulating Fluidized Bed (CFB) Coal-Fired Power Station	San Ramon Power Inc.	San Ramon, Zamboanga City	100	On-going securing permits; DENR had issued ECC in April 2012; on-going marketing.	2015
Indicative	Sibuguey Power Plant Project	Philippine National Oil Company (PNOC-EC)	Sibugay, Zamboanga	100	Technical and economic feasibility study was completed in July 2011; Ongoing bid precessing for the EIS consultancy leading to ECC application and other permits;	2016
	OIL			**57.50**		
Committed	**2 X 13.75 MW Bunker Fired Power Plant**	**Mindanao Energy Systems, Inc.**	**Tablon, Cagayan de Oro**	**27.5**	**Project commissioned on March 2012**	**Operational**

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
Committed	**15 MW Diesel Power Plant**	**Mapalad Energy Gererating Corporation (MEGC)**	**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 PhP 379 Million; Financing by Bank of the Philippine Islands (BPI) and Cagayan de Oro Lending Center**	**August 2012**
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; financing already secured, to be sourced from internal cash generation of EEI Power Corp.; Equipment Supply Contract secured**	**4th Quarter 2012**
	GEOTHERMAL			**50.00**		
Committed	**Mindanao 3 Geothermal**	**Energy Development Corporation**	**Kidapawan, North Cotabato**	**50**	**Ongoing resource assessment; DENR ECC obtained; Land use permits obtained**	**September 2014**
	HYDROPOWER			**265.00**		
Committed	**2 X 4 MW Cabulig Mini-Hydro Power Plant**	**Mindanao Energy Systems, Inc.**	**Plaridel, Jasaan, Misamis Oriental**	**8**	**RE Service contract from DOE obtained; civil works started in November 2009; Project cost Php 814 Million; actual accomplishments as of June 2012 is 91%**	**September 2012**
Indicative	Agus 3 Hydroelectric Plant	Lanao Hydropower Development Corporation	Lanao del Norte	225	Updated feasibility study; secured ECC; signed Joint Sales agreement with NPC; Submitted application to DOE for the issuance of service contract on 07 June	December 2015

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
					2011.	
Indicative	Tagoloan Hydropower	Mindanao Hydro Power Corp.	Bukidnon	20	Completed feasibility study	December 2016
Indicative	12 MW Tamugan Hydropower Project	Hedcor	Baguio District, Davao City	12	Permits/government requirements already obtained: Certificate of Endorsement from DOE, GIS by NGCP, registered as Pioneering project from BOI	July 2018
	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	**1,347.50**
Total Committed Rated Capacity	**315.50**
Total Indicative Rated Capacity	**1,032.00**

Committed / Indicative	Name of the Project	Project Proponent	Location	Rated Capacity (MW)	Project Status	Target Commissioning
	*** Committed Project(s)**					
	COAL					
	OIL					
	GEOTHERMAL					
	HYDROPOWER					
	WIND					
	BIOMASS					
	SOLAR					

Annex 13. ERC Approved Capital Expenditure Projects as of 30 April 2012

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
Pangasinan I Electric Cooperative, Inc. (PANELCO I)	Replacement of Kilowatt-hour (kWh) Meters	Replacement of eight thousand six hundred three (8,603) units of kWh meters with General Electric (GE) 1-70 S kWh meters	• To promote accuracy in the meter registration of energy sales • To comply with the specified level +/-2% under Sec. 2.11.5 (c) of the Amended Distribution Services and Open Access Rules (DSOAR)	21,718,274.00	July 1, 2010/ November 28, 2011
	Clustering (Relocation) of Residential Kilowatt-hour (kWh) Meters	Clustering (relocation) of residential kWh meters from consumers' premises and mount them, in eight (8) slots with a common service entrance wire, on the electric poles of the distribution system	• To mitigate the occurrence of pilferage and comply with the provisions of the Magna Carta for Residential Electricity Consumers	120,027,357.00	
	Replacement of Existing and Old Distribution Transformers (DTs) with Brand New DTs	Replacement of one thousand fifty two (1,052) units of existing silicon core type DTs with amorphous core type DTs	• To reduce technical systems losses	107,250,375.00	
	Installation of Service Drop Wires	Installation of service drop wires with a total length of sixty-five thousand one hundred nineteen (65,119) meters for new residential consumer connections	• To comply with the mandate of providing electric service consumers with its franchise area	1,677,478.00	
	Installation of New Electric kWh Meters	Installation of new electric kWh meters to two thousand one hundred seventy one (2,171) new	• To comply with the mandate of providing electric service consumers with its	5,498,582.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		residential consumers within its new franchise area	franchise area		
Aurora Electric Cooperative, Inc. (AURELCO)	**Projects for 2010**				August 9, 2010/ December 5, 2011
	Replacement of Rotten Poles and Cross-Arms with Concrete and Steel Poles	Replacement of rotten poles and cross-arms with concrete and steel poles will involve the installation of the following: a) four (4) pieces of a forty feet (40 ft.) steel poles; b) twenty-one (21) pieces of a forty feet (40 ft.) concrete poles; c) fifteen pieces (15) of a thirty-five feet (35 ft.) steel poles; d) one hundred ninety eight (198) pieces of thirty-five feet (35 ft.) concrete poles; ten pieces (10) of thirty-feet (30 ft.) concrete poles; and g) two hundred twenty-five (225) pieces of cross-arms	• To improve distribution system's reliability	3,725,000.00	
	Refurbishment and Installation of a 5 MVA Substation	Refurbishment and installation of the Alcala 5 MVA Substation	• To address load growth	15,840,000.00	
	Construction of a 69 kV Subtransmission Line (To Alcala Substation)	Construction of a 69 kV subtransmission line to Alcala Substation	• To improve distribution system's reliability	25,668,993.00	
	Replacement of Overloaded Distribution Transformers (DTs)	Replacement of overloaded 10 kVA DTs with one hundred eight (108) brand new DTs of 15 kVA to 50 kVA capacity	• To improve distribution system's reliability	1,993,000.00	
	Clustering (Relocation) of Kilowatthour (kWh)	Clustering of kWh involves the installation of	• To mitigate the occurrence of pilferage	8,734,330.21	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Meters	five hundred thirty-four (534) clustering boxes and three thousand two hundred (3,200) kWh meters	and comply with the provisions of the Magna Carta for Residential Electricity Consumers		
	Installation of Capacitors	Installation of three (3) units of 100 kVAR capacitors with double bushing, single-phase 7,620 volts	• To improve the distribution system's power factor and eliminate voltage crop	60,000.00	
	Installation of Fuse Cut-Out Assembly	Installation of thirty (30) units of fuse cut-out assemblies to backbone lines and laterals	• To improve distribution system's reliability	187,000.00	
	Repair of Corroded Splices or Connectors	Repair of one thousand (1,000) pieces of YPC28AU and one thousand one hundred (1,100) pieces of YPC26R8AU connectors with brand new connectors	• To improve distribution system's reliability	26,000.00	
	Replacement of Damaged Insulators	Replacement of damaged insulators with one hundred fifty (150) units of pin type insulators and one hundred (100) units of suspension type insulators	• To improve distribution system's reliability	111,000.00	
	Conversion of Single Phase Line to Three (3) Phase Lines	Conversion of single phase line to three (3) phase conductor lines which is an all MCM All Aluminum Wire in Sitio Labasin, Sabang, Baler	• To address load growth	528,143.84	
	Construction of a Double Circuit (DC) Line	Construction of a DC Line from san Isidro Substation to Hiwalayan, San Luis	• To address load growth	4,807,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Projects for 2011, 2012 and 2013				
	Replacement of Rotten Poles and Cross-Arms with Concrete and Steel Poles	Replacement of rotten poles and cross-arms with concrete and steel poles will involve the installation of the following: a) four (4) pieces of a forty-feet (40 ft.) steel poles; b) four (4) pieces of a forty feet (40 ft.) concrete poles; c) fifteen pieces (15) of a thirty-five feet (35 ft.) concrete poles; d) twenty-five pieces (25) of thirty-five feet (35 ft.) concrete poles; e) ten (10) pieces of thirty feet (30 ft.) concrete poles.	• To improve distribution system's reliability	2,811,000.00	
	Replacement of Overloaded Distribution Transformers (DTs)	Replacement of overloaded 10 kVA to 37.50 kVA DTs with one hundred eight (108) brand new DTs of 15 kVA to 50 kVA capacity	• To improve distribution system's reliability	5,979,000.00	
	Clustering (Relocation) of kWh meters	Clustering of kWh involves the installation of five hundred thirty-four (534) clustering boxes and three thousand two hundred (3,200) kWh meters	• To mitigate the occurrence of pilferage and comply with the provisions of the Magna Carta for Residential Electricity Consumers	26,202,990.63	
	Installation of Fuse Cut-Out Assembly	Installation of thirty (30) units of fuse cut-out assemblies to backbone lines and laterals	• To improve distribution system's reliability	561,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Repair of Corroded Splices or Connectors	Repair of one thousand (1,000) pieces of YPC28AU and one thousand one hundred (1,100) pieces of YPC26R8AU connectors with brand new connectors	• To improve distribution system's reliability	78,000.00	
	Replacement of Damaged Insulators	Replacement of damaged insulators with one hundred fifty (150) units of pin type insulators and one hundred (100) units of suspension type insulators	• To improve distribution system's reliability	333,000.00	
	Installation of 5 MVA Substation	Installation of a 5 MVA substation in the following areas: a) Dinalugan, b) Casiguran, c) Dilasag, and d) Dinapigue	• To address load growth	27,663,665.00	
	Construction of a 69 kV Subtransmission Line (To Dinalugan, Casiguran, Dilasag, and Dinapigue)	Construction of a 69 kV Subtransmission Line to Dinalugan, Casiguran, Dilasag, and Dinapigue	• To improve distribution system's reliability	8,169,383.68	
Zamboanga Del Norte Electric Cooperative, Inc. (ZANECO)	Uprating of the existing 5 MVA Substation to 10 MVA Substation	Uprating of the existing 5 MVA Substation to 10 MVA Substation located at Roxas, Zamboanga del Norte	• To serve the Dipolog Coconut Oil Mill, Inc. (DCOMI) located at Lower Irasan, Municipality of Roxas with 3MW load	20,316,162.00	February 24, 2011/ December 19, 2011
	Projects for 2011				
	Acquisition of One (1) Unit of Current Transformer (CT) Analyzer/Tester	Acquisition of one (1) unit of CT analyzer or tester capable of providing wide range of test and measurements	• To reduce distribution system's loss	2,400,000.00	
	Acquisition of Kilowatthour (kWh)	Acquisition of ten thousand (10,000) units of	• Provision for accurate registration of	8,720,264.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
Agusan Del Norte Electric Cooperative, Inc. (ANECO)	Meters and Replacement of Old kWh Meters (Single Phase)	single phase, 240 V, 30 A bottom connected kWh meters and two thousand five hundred (2,500) units of 1 Ph, 240 V, Class 200 socket type kWh meters	consumers' power consumption		May 25, 2010/ December 19, 2011
	Acquisition of kWh Meters and Replacement of Old kWh Meters (Polyphase)	Acquisition of ten thousand (10,000) units of single phase, 240 V, 30 A bottom connected kWh meters and two thousand five hundred (2,500) units of 1 Ph, 240 V, Class 200 socket type kWh meters	• Provision for accurate registration of consumers' power consumption	1,410,424.00	
	Acquisition of Brand New Distribution Transformers (DTs) and Replacement of Under or Overloaded Distribution Transformers (DTs)	Acquisition of ninety-five (95) units of brand new DTs to replace under or overloaded DTs	• Improvement of power quality and reliability • To address load growth	4,255,195.00	
	Acquisition of Outdoor CTs of Various Sizes and Replacement of CTs 600 V	Acquisition of Outdoor CTs of various sizes to replace over rated 600 V CTs	• To improve power quality and reliability • To address load growth	202,500.00	
	Acquisition of Steel Poles and Replacement of Wooden Poles	Acquisition of one hundred (100) pieces of thirty-five (35) footer steel poles and sixty (60) pieces of forty (40) footer steel poles to replace wooden poles	• To improve power quality and reliability • To provide protection to the distribution system and safety to the public and personnel doing maintenance works	2,251,756.00	
	Procurement of Aluminum Cable Steel Reinforced (ACSR) Wires	Procurement of ACSR Wires of various sizes, the following: a) forty thousand meters (40,000	• To improve power quality and reliability	2,059,895.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		m.) of Duplex #6 AWG, b) twenty thousand meters (20,000 m.) of Duplex #4 AWG, c) ten thousand meters (10,000 m.) of Duplex #2 AWG, and d) four thousand meters (4,000 m.) of Duplex 1/0 AWG			
	Installation of Vacuum Reclosers	Installation of vacuum reclosers	• To improve power quality and reliability	1,320,000.00	
	Procurement of Maintenance Vehicles	Procurement of three (3) units of maintenance vehicles	• To improve response time and increase mobility of personnel	3,000,000.00	
	Procurement of Utility Trucks with Winch (Surplus Boom Trucks)	Procurement of three (3) utility trucks with winch (surplus boom trucks)	• To improve response time and increase mobility of personnel	2,400,000.00	
	Projects for 2012				
	Acquisition of kWh Meters and Replacement of Old kWh Meters (Single Phase)	Acquisition of ten thousand (10,000) units of single phase, 240 V, 30 A bottom connected kWh meters and two thousand five hundred (2,500) units of 1 Ph, 240 V, Class 200 socket type kWh meters	• Provision for accurate registration of consumers' power consumption	8,720, 264.00	
	Acquisition of kWh Meters and Replacement of Old kWh Meters (Polyphase)	Acquisition of ten thousand (10,000) units of single phase, 240 V, 30 A bottom connected kWh meters and two thousand five hundred (2,500) units of 1 Ph, 240 V, Class 200 socket type kWh meters	• Provision for accurate registration of consumers' power consumption	1,410,424.00	
	Acquisition of Brand New DTs and	Acquisition of ninety-five (95) units of brand new	• Improvement of power	4,255,195.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Replacement of Under or Overloaded DTs	DTs to replace under or overloaded DTs	quality and reliability • To address load growth		
	Acquisition of Outdoor CTs of Various Sizes and Replacement of CTs 600 V	Acquisition of Outdoor CTs of various sizes to replace over rated 600 V CTs	• Improvement of power quality and reliability • To address load growth	405,000.00	
	Acquisition of Steel Poles and Replacement of Wooden Poles	Acquisition of two hundred (200) pieces of thirty-five (35) footer steel poles and one hundred twenty (120) pieces of forty (40) footer steel poles to replace wooden poles	• Improvement of power quality and reliability • To provide protection to the distribution system and safety to the public and personnel doing maintenance works	4,503,511.00	
	Procurement of Aluminum Cable steel reinforced (ACSR) Wires	Procurement of ACSR Wires of various sizes, the following; a) forty thousand meters (40,000 m.) of Duplex #6 AWG, b) twenty thousand meters (20,000 m.) of Duplex #4 AWG, c) ten thousand meters (10,000 m.) of Duplex #2 AWG, and d) four thousand meters (4,000 m.) of Duplex 1/0 AWG	• Improvement of power quality and reliability	2,059,895.00	
	Installation of Vacuum Reclosers	Installation of Vacuum Reclosers	• Improvement of power quality and reliability	1,980,000.00	
	Procurement of Maintenance Vehicles	Procurement of two (2) units of maintenance vehicles	• To improve response and increase mobility of personnel	2,000,000.00	
	Projects for 2010				
	Replacement of	Replacement of sixty-eight	• To address load	6,484,931.43	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
Sorsogon I Electric Cooperative, Inc. (SORECO I)	Overloaded Distribution Transformers (DTs)	(68) units of overloaded DTs	growth and improve power quality and reliability		August 18, 2010/ December 19, 2011
	Acquisition of 69 kV Subtransmission Lines	Acquisition of 69 kV subtransmission lines	• To address load growth and improve power quality and reliability	31,161,760.93	
	Refurbishment of 69 kV Subtransmission Lines	Refurbishment of 69 kV Abuyog-Irosin subtransmission line. The project consists in the repair and replacement of broken and rotten poles and supporting structures of the said 69 kV line.	• To promote safety in the distribution system	1,604,126.02	
	Installation of Back-Up Protection and Sectionalizing Devices	Installation of nineteen (19) units of back-up protection and sectionalizing devices (automatic reclosers)	• To address load growth and improve power quality and reliability • To promote safety in the distribution system	7,192,300.74	
	Refurbushment of Distribution Lines	Refurbishment of Distribution Lines includes the replacement of broken and dilapidated wooden poles with one hundred forty four (144) pieces of either concrete or steel poles	• To promote safety and improve the integrity of the distribution system	2,622,370.49	
	Installation and Replacement of Old kWh Meters	Installation and replacement of five thousand three hundred sixty seven (5,367) units of kWh meters	• To address load growth and improve power quality and reliability	4,654,144.00	
	Clustering of kWh Meters	Clustering (relocation) of residential kWh meters	• To mitigate the occurrence of pilferage	3,846,457.04	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		from consumers' premises to electric poles of the distribution system	and comply with the provisions of the Magna Carta for Residential Electricity Consumers		
	Installation of Standard Connection Facilities	Installation of standard connection facilities for new consumer connections	• To address load growth and improve power quality and reliability	2,547,345.15	
	Procurement and Installation of Distribution Network Transformers	Procurement and Installation of eight (8) units of distribution network transformers for new consumer service connections	• To address load growth and improve power quality and reliability	689,314.36	
	Expansion of Secondary Distribution Lines	Expansion of secondary distribution lines for new consumer service connections	• To address load growth and improve power quality and reliability	5,564,152.07	
	Extension of Distribution Lines for Rural Electrification	Extension of distribution lines for rural electrification	• To address load growth and improve power quality and reliability	6,147,218.40	
	Enhancement of Radio Communication Capability	Enhancement of radio communication capability (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	762,000.00	
	Procurement of Vehicles	Procurement of three (3) units of departmental service vehicles, construction vehicles and motorcycles (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	3,000,000.00	
	Construction of Office Buildings	Construction of multi-storage facility	• To address consumers' service satisfaction and improve efficiency in	1,600,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
			operation		
	Projects for 2011				
	Transfer of Loads and Phase Balancing of Connected Distribution Transformers (DTs)	Transfer of loads and phase balancing of connected DTs. The project involves the construction of a one kilometer (1km) tie line	• To address the load growth and improve power quality reliability	2,555,824.73	
	Acquisition of an Existing One (1) Unit of 5 MVA Power Transformer	Acquisition of one (1) existing unit of 5 MVA power transformer owned by the National Power Corporation (NPC) at the Sta. Teresita Substation, Bulan, Sorsogon	• To address load growth and improve power quality reliability	1,587,200.95	
	Refurbishment of 69 kV Subtransmission Lines	Refurbishment of 69 kV Abuyog-Irosin subtransmission line. The project consist in the repair and replacement of broken and rotten poles and supporting structures of the said 69 kV line	• To promote safety in the distribution system	482,826.63	
	Acquisition of 69 kV Subtransmission Lines Accessories	Acquisition of 69 kV subtransmission line accessories at the Balogo Substation	• To address load growth and improve power quality reliability	3,940,836.08	
	Relocation of a New Substation	Relocation of a new substation to the load center at Bulan, Sorsogon. The project consists of relocating the said substation to the load center and creating two (2) new feeders for the Municipalities of	• To address load growth and improve power quality reliability	30,600,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		Magallanes and Bulan, Sorsogon			
	Installation of Additional Capacitor	Installation of five (5) units of 25 kVAR capacitor at Casiguran and balancing of load at Feeder 4	• To address load growth and improve power quality reliability	104,727.07	
	Refurbishment of Distribution Lines	Refurbishment of distribution lines consists of the replacement of broken and dilapidated wooden poles with one hundred fifty four (154) units of either concrete or steel poles	• To address load growth and improve power quality reliability	2,730,139.14	
	Installation and Replacement of Old kWh Meters	Installation and replacement of five thousand (5,000) units of kWh meters	• To address load growth and improve power quality reliability	4,654,144.00	
	Clustering of kWh Meters	Clustering (relocation) of residential kWh meters from consumers' premises to electric poles of the distribution system	• To mitigate the occurrence of pilferage and comply with the provisions of the Magna Carta for Residential Electricity Consumers	5,616,508.06	
	Installation of Standard Connection Facilities	Installation of standard facilities for new consumer connections	• To address load growth and improve power quality reliability	2,508,946.71	
	Procurement and Installation of Distribution Network Transformers	Procurement and installation of ten (10) units of distribution network transformers for new consumer service connections	• To address load growth and improve power quality reliability	689,314.36	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Expansion of Secondary Distribution Lines	Expansion of secondary distribution lines for new consumer service connections	• To address load growth and improve power quality reliability	5,542,846.76	
	Extension of Distribution Lines for Rural Electrification	Extension of distribution lines for rural electrification	• To address load growth and improve power quality reliability	4,022,222.78	
	Enhancement of Radio Communication Capability	Enhancement of radio communication capability (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	116,200.00	
	Procurement of Vehicles	Procurement of three (3) units of departmental service vehicles, construction vehicles and motorcycles 9a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	2,560,000.00	
	Procurement of Materials for Logistical Support	Procurement of infrared scanner and transformer turns ratio test instrument (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	2,200,000.00	
	Development of ICT	Development of ICT. The project consists of the procurement of hardware and software for data storage	• To address consumers' service satisfaction and improve efficiency in operation	5,169,900.00	
	Construction of Office Buildings	Construction of staff and guests house	• To address consumers' service satisfaction and improve efficiency in operation	3,800,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Projects for 2012				
	Refurbishment of Distribution Lines	The refurbishment of distribution lines includes the replacement of broken and dilapidated wooden poles with one hundred twenty four (124) pieces of either concrete or steel poles	• To promote safety and improve the integrity of the distribution system	2,227,218.77	
	Installation and Replacement of Old kWh Meters	Installation and replacement of five thousand (5,000) units of kWh meters	• To address load growth and improve power quality and reliability	4,654,144.00	
	Clustering of kWh Meters	Clustering (relocation) of residential kWh meters from consumers' premises to electric poles of the distribution system	• To mitigate the occurrence of pilferage and comply with the provisions of the Magna Carta for Residential Electricity Consumers	6,178,158.87	
	Installation of Standard Connection Facilities	Installation of standard connection facilities for new consumer connections	• To address load growth and improve power quality and reliability	2,478,423.63	
	Procurement and Installation of Distribution Network Transformers	Procurement and installation of ten (10) units of distribution network transformers for new consumer service connections	• To address load growth and improve power quality and reliability	689,314.36	
	Expansion of Secondary Distribution Lines	Expansion of secondary distribution lines for new consumer service connections	• To address load growth and improve power quality and reliability	5,401,685.51	
	Extension of Distribution Lines for	Extension of distribution lines for rural	• To address load growth and improve	2,613,216.48	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Rural Electrification	electrification	power quality and reliability		
	Enhancement of Radio Communication Capability	Enhancement of radio communication capability (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	151,200.00	
	Procurement of Vehicles	Procurement of five (5) units of departmental service vehicles, construction vehicles and motorcycles (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	2,480,000.00	
	Development of ICT	Development of ICT. The project consists of the procurement of hardware and software for data storage	• To address consumers' service satisfaction and improve efficiency in operation	294,400.00	
	Construction of Office Buildings	Construction of the internal audit office	• To address consumers' service satisfaction and improve efficiency in operation	1,600,000.00	
	Projects for 2013				
	Refurbishment of 69 kV Subtransmission Lines	Refurbishment of 69 kV Abuyog-Irosin subtranmission line. The project consists of the repair and replacement of broken and rotten poles and supporting structures of the said 69 kV line	• To promote safety in the distribution system	594,911.38	
	Refurbishment of Distribution Lines	Refurbishment of distribution lines consists of the replacement of the broken and dilapidated wooden poles with one	• To promote safety and improve the integrity of the distribution system	2,191,295.89	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		hundred twenty two (122) pieces of either concrete or steel poles			
	Installation and Replacement of Old kWh Meters	Installation and replacement of five thousand (5,000) units of kWh meters	• To address load growth and improve power quality and reliability	4,654,144.00	
	Clustering of kWh Meters	Clustering (relocation) of residential kWh meters from consumers' premises to electric poles of the distribution system	• To mitigate the occurrence of pilferage and comply with the provisions of the Magna Carta for Residential Electricity Consumers	5,663,312.30	
	Installation of Standard Connection Facilities	Installation of standard connection facilities for new consumer connections	• To address load growth and improve power quality and reliability	2,449,624.80	
	Procurement and Installation of Distribution Network Transformers	Procurement and installation of nine (9) units of distribution network transformers for new consumer service connections	• To address load growth and improve power quality and reliability	689,314.36	
	Expansion of Secondary Distribution Lines	Expansion of secondary distribution lines for new consumer service connections	• To address load growth and improve power quality and reliability	5,278,038.64	
	Extension of Distribution Lines for Rural Electrification	Extension of distribution lines for rural electrification	• To address load growth and improve power quality and reliability	2,293,033.73	
	Enhancement of Radio Communication Capability	Enhancement of radio communication capability (a non-network project)	• To address consumers' service satisfaction and improve efficiency in	116,200.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
			operation		
	Procurement of Vehicles	Procurement of fifteen (15) units of departmental service vehicles, construction vehicles and motorcycles (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	1,820,000.00	
	Development of ICT	Development of ICT. The project consists of the procurement of hardware and software of data storage	• To address consumers' satisfaction and improve efficiency in operation	294,400.00	
	Projects for 2014				
	Refurbishment of 69 kV Subtransmission Lines	Refurbishment of 69 kV Abuyog-Irosin subtransmission line. The project consists of the repair and replacement of broken and rotten poles and supporting structures of the said 69 kV line	• To promote safety in the distribution system	5,897,937.04	
	Refurbishment of Distribution Lines	Refurbishment of distribution lines consists of the replacement of broken and dilapidated wooden poles with two hundred eight (208) pieces of either concrete or steel poles	• To promote safety and improve the integrity of the distribution system	3,735,979.88	
	Installation and Replacement of Old kWh Meters	Installation and replacement of three thousand four hundred forty one (3,441) units of kWh meters	• To address load growth and improve power quality and reliability	3,544,596.07	
	Installation of Standard Connection Facilities	Installation of standard connection facilities for new consumer connections	• To address load growth and improve power quality and	2,426,977.08	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
			reliability		
	Procurement and Installation of Distribution Network Transformers	Procurement and installation of ten (10) units of distribution network transformers for new consumer service connections	• To address load growth and improve power quality and reliability	689,314.36	
	Expansion of Secondary Distribution Lines	Expansion of secondary distribution lines for new consumer service connections	• To address load growth and improve power quality and reliability	5,135,569.13	
	Extension of Distribution Lines for Rural Electrification	Extension of distribution lines for rural electrification	• To address load growth and improve power quality and reliability	2,110,585.24	
	Enhancement of Radio Communication Capability	Enhancement of radio communication capability (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	464,200.00	
	Procurement of Vehicles	Procurement of sixteen (16) units of departmental service vehicles, construction vehicles and motorcycles (a non-network project)	• To address consumers' service satisfaction and improve efficiency in operation	1,240,000.00	
	Development of ICT	Development of ICT. The project consists of the procurement of hardware and software for data storage	• To address consumers' service satisfaction and improve efficiency in operation	294,400.00	
	Construction of Office Buildings	Consultation of the service centers	• To address consumers' service satisfaction and improve efficiency in operation	3,200,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
Davao Del Sur Electric Cooperative, Inc. (DASURECO)	**Projects for 2010**				August 11, 2010/April 16, 2012
	Construction of Medium Voltage (MV) Switchgear	Construction of Medium Voltage (MV) Switchgear including its standard accessories consist of the installation of transformers, circuit breakers, relays, and other electrical hardware and components.	• Improvement of efficiency and provide highly effective automatic fault detection system	14,000,000.00	
	Acquisition of Distribution Transformers (DTs) with Amorphous Core	Acquisition of Distribution Transformers (DTs) in such number of units and capacities, namely: 1) one hundred eighty two (182) units of 10 kVA DT; 2) two hundred fifty three (253) units of 15 kVA DT; and 3) two hundred seventy six (276) units of 25 kVA DT	• Reduction of overall technical systems loss in the distribution system	69,901,202.00	
	Procurement of Scanning Tools and Equipment	Procurement of one (1) piece of an infrared scanner, one (1) piece of a Calport 200 and Calsource 200	• Improvement of efficiency in the operation of the distribution system • Improvement of research and direct monitoring of electrical parameters	9,625,000.00	
	Acquisition of Electronic Single Phase kWh Meters with Infrared Reader	Acquisition of twenty eight thousand five hundred (28,500) units of electronic kWh meters with infrared reader	• Reduction of overall technical systems loss in the distribution system	27,075,000.00	
	Procurement of Distribution System Loss Segregator or	Procurement of a system loss segregator or synergy software	• Improvement of load forecasting and	1,605,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Synergy Software		modeling and reliability modeling		
	Procurement of a 69 kV Sulfur Hexaflouride (SF6) Gas Circuit Breaker	Procurement of a 69 kV Sulfur Hexaflouride (SF6) Gas Circuit Breaker for high power and high voltages application	• Compliance with the provisions of the Philippine Grid Code (PGC)	3,500,000.00	
	Procurement and Installation of 7.62 kV 100 kVAR Power Capacitors	Procurement and installation of forty (40) units of 7.62 kV 100 kVAR Power Capacitor	• Improvement of power quality and reduction of systems loss in the distribution system	4,800,000.00	
	Projects for 2011				
	Acquisition of distribution Transformers (DTs) with Amorphous Core	Acquisition of Distribution Transformers (DTs) in such numbers of units and capacities, namely: 1) one hundred eighty two (182) units of 10 kVA DT; 2) two hundred fifty three (253) units of 15 kVA DT; and 3) two hundred seventy six (276) units of 25 kVA DT	• Reduction of overall technical systems loss in the distribution system	85,051,202.00	
	Procurement of a Load Logger and Profiler Equipment	Procurement of the following equipment: 1) six (6) units of load profiler; and b) six (6) units of a load logger	• Improvement of efficiency in the operation of the distribution system • Improvement of research and direct monitoring of electrical parameters	9,750,000.00	
	Acquisition of Electronic Single Phase kWh Meters with Infrared Reader	Acquisition of twenty eight thousand five hundred (28,500) units of electronic kWh meters with infrared meter	• Overall of technical systems loss in the distribution system	27,075,000.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
	Procurement and Installation of 7.62 kV 100 kVAR Power Capacitors	Procurement and installation of forty (40) units of 7.62 kV 100 kVAR Power Capacitor	• Improvement of power quality and reduction of systems loss in the distribution system	4,800,000.00	
	Acquisition of 69 kV Subtransmission Asset	Acquisition of 69 kV subtransmission asset from the National Grid Corporation of the Philippines (NGCP)	• Improvement of power quality and reliability • Relief from continuous payment of residual connection charges	39,200,000.00	
	Projects for 2012				
	Procurement of Hot Line Maintenance Tools and Equipment	Procurement of the following hot line maintenance tools and equipments: 1) one (1) set of live line maintenance safety equipment	• Provision for safety to personnel and improvement of reliability	3,825,000.00	
	Procurement of Maintenance Tools and Equipment	Procurement of the following maintenance tools and equipments: 1) one (1) piece of transformer turn ratio tester; 2) one (1) piece of DGA tester; 3) one (1) piece of micro ohmmeter; 4) one (1) piece of insulation resistance tester; 5) one (10 piece of power factor meter; 6) one (1) piece of phase sequence indicator; 7) one (1) piece of volt ampere recorder; 8) one (1) piece of Alternate Current (AC) Hi-pot test set; 9) one (1) piece of Direct Current (DC) Hi-pot test set; 10) one (1) piece of Earth tester; 11)	• Improvement of efficiency in operation • Improvement of reliability	10,238,274.00	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (MPhP)	DATE FILED/ APPROVED
		one (1) piece of flicker severity monitoring equipment; 12) one (1) piece of a flicker severity monitoring equipment; 12) one (1) piece of a forklift five (5) tonner; 13) one (1) piece of printer plotter; 14) one (1) piece of oil di-electric test; and 15) one (1) six (6) sets of battery charger			
	Procurement of Utility Trucks with Insulated Boom KANGLIM Brand	Procurement of three (3) units of utility trucks with insulated boom KANGLIM Brand	• Provision to improve mobilization in responding to consumer complaints in real time • Improvement of reliability	15,289,098.00	
	Procurement and Installation of 7.62 kV 100 kVAR Power Capacitors	Procurement and installation of forty (40) units of 7.62 kV 100 kVAR Power Capacitor	• Improvement of power quality and reduction of systems loss in the distribution system	4,800,000.00	

Source: ERC website

Annex 14. Amount Incurred by NPC for the Grant of MRR, 2001- April 2012

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

Billing Month	MERALCO	REST OF LUZON	TOTAL LUZON	VISAYAS	MINDANAO	TOTAL
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
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
TOTAL	**1,682,838,262.79**	**1,683,410,449.76**	**3,266,822,289.15**	**1,898,176,928.26**	**3,018,034,979.73**	**28,278,324,196.14**

Source: NPC