16th EPIRA Implementation Status Report

(Period Covering November 2009 to April 2010)

Prepared by the Department of Energy

With Contributions from

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









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I. INTRODUCTION

The 16th Status Report of Electric Power Industry Reform Act (EPIRA) Implementation highlights major accomplishments for the period November 2009 to April 2010. On the privatization, however, the report included developments as of May 2010. The past six months saw successes in the compliance to the remaining EPIRA set pre-conditions for the implementation of open access and retail competition. Also during this period, major reforms were implemented to improve the governance and operations of the Wholesale Electricity Spot Market to include reconstitution of the Board of Directors governing the Philippine Electricity Market Corporation and the conduct of operational, technical, financial and legal audit to identify areas for improvement in the entire WESM operations and the preparation as well to the transfer to an Independent Market Operator. The period likewise marked near completion of the 100 percent barangay electrification target with only 99 barangays unenergized. On the regulatory aspect, the Energy Regulatory Commission (ERC) has promulgated new guidelines in the rate approval processes to address concerns on rate approvals.

Challenges in the reform implementation however remain particularly the threat to supply security experienced by the entire country in the light of the El Niño phenomenon that affected power production of hydroelectric plants, particularly in Mindanao and Luzon, coupled by some operational and technical problems in the three major grids. On positive developments, it is during the period when the private generating company, Cebu Energy Development Corporation, commissioned its first unit of the 3 x 82 MW coal-fired power plant in Toledo City, Cebu. The project is expected to augment the power supply problem in Visayas which has been experiencing rotating brown-outs since the last quarter of 2008.

II. DEVELOPMENTS IN THE PRIVATIZATION EFFORT

The period November 2009 to April 2010 underscores significant accomplishments in the government's privatization efforts both in the generating capacities and the transfer of the management and control of energy outputs under contract with National Power Corporation (NPC). The sale of Angat HEPP marked 91.8 percent privatization level of NPC generation assets in the Luzon and Visayas grids. Also, with the success of the Ilijan Independent Power Producer Administrator (IPPA) bidding, the government was able to turn-over the management and control of nearly two-thirds of energy outputs under contract with NPC.

Proceeds earned by the government from the privatization, excluding that of the subtransmission assets (STAs) amounted to US\$ 10.6 Billion (Table 1).

A. Privatization of Generating Assets

Two significant operating power plants were bidded out for the period in review namely the

Table 1 - Privatization Proceeds

Item	Amount in million US\$			
Generating Plants	3,394.78			
Turned-over IPPs	44.51			
Decommissioned Plants	7.31			
TransCo Concession	3,950.00			
Transfer of NPC-IPP contracts to IPPA	3,229.00			
TOTAL	10,625.60			

Source: PSALM

218-MW Angat HEPP and the 150-MW BacMan geothermal power plant¹ (GPP). As of May 2010, the government was able to privatize twenty five (25) operating/generating power facilities where twenty comprised the Joint Congressional Power Commission (JCPC) approved initial list of plants for privatization with an aggregate rated capacity of 3,468.23 MW accounting for 91.8 percent of the total 3,778.23 MW total rated capacity of NPC generating assets in the Luzon and Visayas grids.

Below are the details of the privatization for Angat HEPP and BacMan GPP while Annex 1 shows the complete list of privatized operating/generating plants.

1. Angat (HEPP)

Korea Water Resources Development Corp. (K-Water), a new player in the Philippine electric power sector, was declared by the Power Sector Assets and Liabilities Management Corporation (PSALM) as the highest bidder with its \$440.88-million offer for the 218-megawatt Angat HEPP in a successful sale held last 28 April 2010.

The Korean firm beat local bidders such as First Gen Northern Energy Corp., San Miguel Corp., SN Aboitiz Power-Pangasinan, Inc., Trans-Asia Oil and DMCI Power Corp. PSALM will verify the accuracy, authenticity, and completeness of the bid documents that K-Water had submitted before the company can be formally declared the winning bidder for the Angat HEPP.

Located in San Lorenzo, Norzagaray in Bulacan, the Angat HEPP consists of four main units, each with a 50-MW capacity. The units were commissioned between 1967 and 1968. To augment its operation, the plant uses five auxiliary units including two turbines capable of generating a total of 28 MW. These turbines are owned by the MWSS and were not part of the bidding.

In successfully bidding out the Angat HEPP, which operates through the Angat Dam, PSALM stressed that only the power plant component of the dam was privatized. Angat accounts for 97 percent of Metro Manila's water supply benefitting at least 12 million residents of the big city.

2. BacMan GPP

PSALM successfully bidded out the 150-MW Bacon-Manito (BacMan) GPP package last 05 May 2010 with Bac-Man Geothermal Inc. of the Lopez Group emerging as the highest bidder. Bac-Man Geothermal's offer of US\$28.25 million for the Bicol-based geothermal plants bested the US\$17.8 million bid of Therma Power Inc., a subsidiary of the Aboitiz Group.

PSALM will formally declare Bac-Man Geothermal as the winning bidder for the BacMan plants as soon as it has verified the accuracy, authenticity, and completeness of the bidding documents that the Bac-Man Geothermal had submitted.

¹ Although BacMan was bidded out in 05 May 2010, this was included to provided recent relevant information

Located in the provinces of Albay and Sorsogon, the BacMan plant package consists of two steam plant complexes. The BacMan I geothermal facility comprises two 55-MW turbines, which were both commissioned in 1993. BacMan II, on the other hand, consists of two 20-MW units namely, the Cawayan located in Barangay Basud and the Botong in Osiao, Sorsogon City. The Cawayan unit was commissioned in 1994 and the Botong unit in 1998. The Energy Development Corporation (EDC) supplies the steam fueling the BacMan GPP.

Meanwhile, the remaining plants to be privatized by PSALM in 2010 are the 310-MW Navotas Gas Turbine and the 114-MW Iligan Diesel power plants.

B. Transfer of NPC- IPP to IPPA

Following the successful transfer of the management and control of the NPC-contracted outputs in Sual and Pagbilao, the administrators for the contracted energy output for the San Roque, Bakun, and Benguet mini hydroelectric power plants and Ilijan Combined Cycle Power Plant were selected by PSALM on 15 December 2009 as follows:

- Strategic Power Devt. Corp (SPDC) who offered US\$450 million will administer the contracted capacity of the 345 MW San Roque multipurpose HEPP
- Amlan Power Holdings Corporation (APHC) who gave a bid of US\$145 million will administer the 70-MW Bakun and 30-MW Benguet contracted energy output package. Bakun was packaged with the assignment of the Electricity Power Supply Agreements of the Benguet plants, for which APHC is to pay US\$10,000.
- San Miguel Energy Corporation who was declared as the highest bidder last 16
 April 2010 with an offer of US\$870.0 million won the administration of the
 1,200- MW Ilijan. The Ilijan power plant is operated by the Korea Electric Power
 Corporation (KEPCO), through KEPCO Ilijan Corporation, under a build-operatetransfer contract that will expire in 2022.

Meanwhile, the next IPP contracts to be tendered may involve the contracted capacity of the 630-MW Malaya Thermal Plant and the 559-megawatt Unified Leyte A and B Geothermal Plants (Luzon portion only). PSALM issued the Invitation to Bid last 14-16 April 2010, and the bidding date is set on 16 June 2010. PSALM will subsequently tender the contracted capacity of the 559-MW Unified Leyte A and B Geothermal Plants. The list of successfully bidded-out NPC contracted energy outputs are listed in Table 2.

Table 2 - List of Privatized NPC-IPP Contracts

Name of Plant	Rated Capacity (MW)	Location	Bid Date	Bid Date Winning Bidder		Turn Over Date
Sual CFPP	1,000	Pangasinan	28-Aug-09	San Miguel Energy Corp.	1,072	1-Oct-2009
Pagbilao CFPP	700	Quezon Province	28-Aug-09	Therma Luzon Inc.	691	6-Nov-2009
San Roque HEPP	345	Pangasinan	15-Dec-09	Strategic Power Development Corp.	450	26-Jan-2010
Bakun HEPP and Benguet Mini-Hydros	100.75	Benguet, Ilocos Sur	15-Dec-09	Amlan Power Holdings Corp.	145	26-Feb-2010
Ilijan NGFCPP	1,200.00	Batangas	16-Apr-10	San Miguel Corp.	870	2010 ¹ /
Total:	3,345.75				3,229	

^{1/}Indicative Turnover Date Source: PSALM

C. Sale of Sub-Transmission Assets

The EPIRA provides that the STAs shall be operated and maintained by TransCo until their disposal to qualified distribution utilities (DUs) that are in a position to take over the responsibility for operating, maintaining, upgrading and expanding said assets.

The sale of TransCo's STAs involves some 131 sale packages covering some 107 interested DUs, mostly electric cooperatives (ECs). In cases where more than one DU is connected to a transmission line, there is a need for the connected and qualified DUs to form a consortium to buy and thereafter operate the asset.

The STAs involved a total of about 6,200 circuit-kilometers (ckms.) comprising mostly of 69kV transmission lines and 1,600 MVA of substation capacity. Estimated cost of these assets is placed at about PhP7.6 Billion based on December 31, 2007 net book values.

For the period November 1, 2009 to April 30, 2010, five (5) sale contracts amounting to about PhP185 Million were signed by TransCo as shown in Table 3:

Meetings and negotiations with some 22 DUs/Consortia nationwide is underway to

further push for the sale of STAs. Included in this drive is the negotiation for the sale of about 1,000 ckms. of subtransmission lines worth PhP0.954 Billion.

As of 30 April 2010, TransCo has been able divest to PhP3.42 Billion (67 sale of **STAs** packages) worth including 325 MVA 56 transformers to DUs.

Table 3- STA Sale Contracts Signed November 2009 – April 2010

Distribution Utility	Contract Amount PhP Million
Visayan Electric Co. (VECO)	7.83
Manila Electric Company (MERALCO)	85.84
Leyte 4 Electric Cooperative, Inc. (LEYECO 4)	42.21
Camiguin Electric Cooperative, Inc. (CAMELCO)	38.74
Don Orestes Electric Cooperative, Inc. (DORELCO)	10.4
TOTAL	185.02

Source: TransCo

Included in the sale packages are forty (40) Lease Purchase Agreements with 32 ECs under concessional terms amounting to about PhP2.46 Billion. The balance of over PhP960 Million represents sales to Private Distribution Utilities (PDUs). Thirty one (31) sale contracts have been approved by the ERC amounting to PhP1.49 Billion as of 30 April 2010.

III. ELECTRICITY RATES

The DOE continuously monitors data on electricity rates in view of the concern of high electricity rates which affects the country's competitiveness as an investment location. This section's contents were based on reports submitted by the ERC and on data and information gathered by the DOE from relevant sources to fully substantiate and provide the JCPC with significant updates to serve as reference in identifying areas that requires legislative actions.

A. NPC Basic Generation Charges (BGC)

The ERC provisionally authorized the NPC on 16 February 2009 and 23 February 2009, to increase its BGC by an average of PhP0.4682/kWh for Luzon; PhP0.8376/kWh for Visayas; and PhP0.714/kWh for Mindanao. According to ERC, the provisional relief granted to NPC and its co-applicant, PSALM was intended to immediately alleviate NPC's current financial difficulties given its current costs of generating power, including the costs of the discounts that it is mandated to extend to certain customers. To date, public hearings towards the final resolution for the NPC/PSALM's petition for the adjustment of its basic generation charge were suspended upon approval by the ERC of a motion filed by intervenor Philippine Chamber of Commerce and Industry (PCCI) and Freedom from Debt Coalition (FDC) to suspend the public hearings pending resolution of the proposed Asset Revaluation Policy Guidelines filed by PSALM and NPC on 09 January 2009 and the recovery of costs of IPPs like Naga-Salcon, which was included in the calculation of the BGC.

Relative to the NPC's recovery of fuel, power purchase and forex cost components of its generation charges, it can be recalled that the ERC, on 03 August 2009, has issued and promulgated Resolution No. 19 which provides for the Rules for the Automatic Recovery of Monthly Fuel and Purchased Power Costs and Foreign-Exchange Related Costs by NPC replacing the then Generation Rate Adjustment Mechanism (GRAM) and the Incremental Currency Exchange Rate Adjustment (ICERA). However, in view of PSALM's motion for clarification filed with the ERC on the references/benchmark for

fuels, economic and financial indicators to be used in the formula for the generation costs adjustments, the ERC amended Resolution No. 19 through issuance of Resolution 25 on 14 December 2009, entitled "A Resolution Adopting the Rules for the Automatic Recovery of Monthly fuel, Purchased Power. and Foreign Exchange-Related Costs by the NPC ("Rules"). The said resolution provided specific benchmarks/indexes.

Table 4 - NPC Effective Generation Charges (PhP/kWh)

Item	Luzon	Visayas	Mindanao
Average Basic TOU Rate	4.3648	3.7255	2.8177
GRAM	$(0.0490)^1$	-	-
ICERA	$(0.3132)^1$	0.0278^2	-
FPPCA	0.2895	0.2517	0.0882
FxA	0.1880	0.330	0.0084
FBHC	0.0245	0.0177	0.0282
Total	4.5046	4.0550	2.9425

¹ Effective for 23 months from January 2009 NPC billing period or until further notice whichever comes earlier. Provisional Authority under 11th ICERA and 12th GRAM approval dated January 19 2009.

The Rules took effect last 27 February 2010 or fifteen (15) days following its publication on 12 February 2010 in the Philippine Star. Accordingly, the automatic cost adjustment was implemented by NPC/PSALM starting March 2010 billing month, covering the period 27 February – 25 March. Hence, in view of the previous lag in the recovery of its costs, NPC/PSALM is simultaneously implementing the GRAM and ICERA DAA approved by the ERC which covers the billing period July – September 2008 for the Luzon grid and July – December 2006 for the Visayas grid and the automatic cost

² Effective for 30 months from June 2008 NPC billing period or until further notice whichever comes earlier. Final Authority under 8th ICERA and 9th GRAM approval dated December 15, 2008.

adjustment for the March billing month covering the period 27 February to 25 March 2009. Given this, the resulting NPC average effective rate is shown in Table 4.

Meanwhile, NPC/PSALM is still waiting for the ERC ruling on its other GRAM and ICERA applications covering the billing period October 2008 to June 2009 for the Luzon grid and the period January 2007 to June 2009 for the Mindanao and Visayas grids. PSALM/NPC however is yet to file with ERC the remaining unapplied GRAM and ICERA covering the test period July to December 2009. The amounts that NPC/PSALM has yet to recover pursuant to GRAM and ICERA are summarized in Table 5 while the summary of applications which still awaits ERC rulings are in Annex 2.

Table 5 – NPC/PSALM DAA Amount for Recovery (PhP)

The test of the End British on the covery (1 th)							
	LUZON	VISAYAS	MINDANAO	TOTAL			
For ERC Resolution							
Total GRAM	12,008,454,448	14,113,850,148	825,225,522	26,947,530,118			
Total ICERA	(3,769,393,886)	2,487,624,103	(1,235,548,493)	(2,517,318,276)			
Sub-total	8,239,060,562	16,601,474,251	(410,322,971)	24,430,211,842			
For Filing:							
16 th GRAM	7,958,363,957	292,610,049	508,507,412	8,759,481,418			
15th ICERA	8,093,791,477	211,190,830	180,571,840	8,485,554,147			
Sub-total	16,052,155,434	503,800,879	689,079,252	17,245,035,565			
Grand Total	24,291,215,996	17,105,275,130	278,756,281	41,675,247,407			

Source: PSALM

B. Transmission Rates

Pursuant to the Rules for Setting Transmission Wheeling Rates for 2003 to Around 2027, as revised and re-issued by the ERC, (ERC Case No. 2009-008RM, dated July 20, 2009, hereafter referred to as the 'RTWR'), the NGCP, on 16 November 2009 filed (under ERC Case No. 2009-160 RC) an application for approval of its Maximum Allowable Revenue (MAR) for calendar year 2010. A Provisional Authority was granted by the ERC on 19 January 2010 approving NGCP's application of its MAR for 2010 in the amount of PhP44,991 million

The ERC also approved NGCP's application under ERC Case No. 2009-029 RC, for the Ancillary Services Procurement Agreement (ASPA) executed between the NGCP and NPC. In its decision, the ERC approved NPC Ancillary Service rates as shown in Table 6.

Table 6 - ERC-Approved NPC Ancillary Service Charges

GRID	Luzon	Visayas	Mindanao
Regulating Reserve, Contingency Reserve and Dispatchable Reserve, PhP/kW per hour	1.1805	1.7368	1.3044
Reactive Power Support, PhP/mVar/hour	0.0533	0.0241	0.0295

On November 13, 2009, NGCP filed under ERC Case No. 2009-153 RC an application for approval of Connection Charges and Residual Sub-transmission Charges for calendar year 2009 on the excluded Services covering the existing STAs of the NGCP. The ERC

have conducted hearings in January and February 2010 and the case is still undergoing evaluation.

Likewise, docketed under ERC Case No. 2009-161 RC filed on November 16, 2009 is an application for approval of Force Majeure (FM) event regulated FM Pass through for some incidents of sabotage in Mindanao. In the said application, NGCP is seeking approval to charge its customers for expenditures incurred for the rehabilitation/repair of transmission assets in Mindanao caused by the bombing and sabotage by lawless elements. Hearing was conducted on January 21, 2010 and the case is now for review and evaluation by the ERC.

On December 21, 2009, the NGCP filed under ERC Case No. 2009-180RC an application for the Approval of its MAR for the 3rd Regulatory Period (2011 to 2015). The case is still undergoing hearings and evaluation.

On 08 March 2010, the ERC issued a PA authorizing the implementation of the ASPA between NGCP and Therma Marine Inc., under ERC Case No. 2010-011 RC. Accordingly, NGCP can pass-through the costs of ancillary services to be provided by Therma Marine.

C. Distribution Utilities (DUs) Rates

The ERC started to implement a new rate methodology for the on-grid ECs under ERC Resolution No. 20 Series of 2009 Rules for Setting the Electric Cooperatives' Wheeling Rates (RSEC-WR). Since the RSEC-WR is not applicable for the off-grid ECs, the ERC lifted the moratorium for ECs' rate applications through Resolution No. 10 Series of 2009 and started to accept rate filings of off-grid ECs. Meanwhile, six (6) PDUs has entered the Performance-Based Rate (PBR) methodology while there are three (3) PDUs who are yet to enter the reset process in September 2010. Significant increase in the average effective electricity rates were noted between the period December 2008 and December 2009 which were mainly brought by significant increases in the generation costs components.

1. Average Effective Electricity Rates

The country's total average effective electricity rates as of December 2009 was estimated at PhP7.2491/kWh, higher than PhP1.4766/kWh compared with the December 2008 average effective electricity rates mainly as a result of the increase in basic generation rates in the three grids, notably, the NPC basic generation rates. Among the three major grids, Visayas has the highest average effective electricity rates at PhP7.4313 for December 2009 and it also posted the highest increase at PhP1.6612/kWh compared to the December 2008 level. The average effective rates in Mindanao remains the lowest at PhP5.8445/kWh. The PhP0.7150/kWh increase in Mindanao's average effective electricity rates can be mainly attributed to the increase in NPC generation rates from PhP2.1030/kWh to PhP2.8177/kWh, as per ERC Order dated 16 February 2009, reflecting an upward movement of PhP0.7147/kWh.

Table 7 - Average Effective Electricity Rates, December 2009 vs. December 2008 (PhP/kWh) -

Grid	Elec	Electric Cooperatives			ate Distribution Utilities National Average			ge	
	December 2008	December 2009	Change	December 2008	December 2009	Change	December 2008	December 2009	Change
Luzon	6.7746	8.1182	1.3436	6.0307	7.3408	1.3101	6.40265	7.7295	0.3268
Visayas	6.2131	8.0478	1.8347	5.3272	6.8148	1.4876	5.77015	7.4313	1.6612
Mindanao	5.3920	6.4694	1.0774	4.8670	5.2195	0.3525	5.1295	5.8445	0.7150
Philippines	6.1266	7.5452	1.4186	5.4184	6.9530	1.5346	5.7725	7.2491	1.4766

Note: ECs - Based on NEA submitted Quarterly Unbundled Power Rate Schedules

PDUs - based on PDUs' submitted Monthly Operations Report

The ECs' national average effective electricity rates for December 2009 was estimated at PhP7.5452/kWh, an increase of PhP1.4186/kWh from the December 2008 level. Generation costs comprised 46.2 percent of ECs' national average effective electricity rates followed by distribution costs sharing 23.0 percent of the total. The highest increase in ECs' rates was noted in the Visayas grid from PhP6.2131/kWh in December 2008 to PhP8.0478/kWh in December 2009.

Table 8 - EC's Average Effective Residential Electricity Rates, December 2009 (PhP/kWh)

Bill Subgroup	LUZC	NO	VISAYAS		MINDANAO		NATIONAL	
	PhP/kWh	Percent share	PhP/kWh	Percent share	PhP/kWh	Percent share	PhP/kWh	Percent share
Generation	3.7494	46.2	3.9158	48.7	2.7968	43.2	3.4873	46.2
Transmission	1.0779	13.3	1.1966	14.9	1.0055	15.5	1.0933	14.5
System Loss	0.7782	9.6	0.6917	8.6	0.5645	8.7	0.6781	9.0
Distribution *	1.8748	23.1	1.6919	21.0	1.6508	25.5	1.7392	23.0
Subsidies	0.0350	0.4	0.0593	0.7	0.0066	0.1	0.0338	0.4
Government Taxes	0.6029	7.4	0.4925	6.1	0.4452	6.9	0.5135	6.8
Total	8.1182	100.0	8.0478	100.0	6.4694	100.0	7.5452	100.0

^{*} Includes Distribution, Supply and Metering Charges Based on ECs submission of their unbundled effective rates to NEA

The national average effective electricity rates of PDUs increased by PhP1.5346/kWh from PhP5.4184/kWh in December 2008 to PhP6.9530/kWh in December 2009. The highest increase was also noted in the Visayas grid while the lowest was in Mindanao. Among the PDUs, MERALCO remains to have the highest average effective rates at PhP7.38/kWh for the billing period December 2009. On the other hand, Davao Light and Company (Dalight) has the lowest average effective rates at PhP5.10/kWh for the same billing period on account of lower costs for the generation component of Dalight's charges.

For the average effective residential rates, MERALCO still has the highest at PhP8.47/kWh Dalight while is lowest at PhP5.48/kWh. Meralco's effective residential rates for the different residential customer classes ranged from PhP7.13/kWh to PhP8.21/kWh of which the highest component was generation costs at

PhP4.17/kWh.

Table 9 -PDUs Average Effective Rates, December 2009

PDU	Residential	Commercial	Industrial	Others	Average
DECORP	6.5535	6.5866	6.0268	7.4422	6.4996
AEC	6.4605	6.5601	7.2585	5.8310	6.5163
SFELAPCO	6.6364	6.1324	5.5722	6.0484	6.0250
IEEC	6.8668	6.0542	8.4299	5.7905	6.8454
MERALCO	8.4749	7.4709	6.0791	8.8894	7.3845
VECO	7.5120	7.7059	6.3307	6.9602	6.9901
BLCI	5.8120	6.0307	ı	5.2343	5.8589
CEPALCO	6.5887	6.5781	5.5701	5.5900	6.1192
DALIGHT	5.4773	5.3538	4.7779	5.1181	5.0979
COLIGHT	5.9427	6.3332	4.9562	5.8095	5.5620

Note: Based on Monthly Operations Report submitted by Private DUs

Meanwhile, Meralco distribution charges for its different residential customer classes comprised 21 percent to 32 percent of the total effective residential rates equivalent to PhP1.50/kWh and PhP2.59/kWh, respectively.

Table 10 - MERALCO's Effective Residential Unbundled Rates, December 2009

	0-200	kWh	201-300	kWh	301-400 kWh		401-over kWh	
Bill Subgroup	PhP/kWh	Percent Share	PhP/kWh	Percent Share	PhP/kWh	Percent Share	PhP/kWh	Percent Share
Generation	4.1741	59	4.1741	56	4.1741	54	4.1741	51
Transmission	0.7445	10	0.7445	10	0.7445	10	0.7445	9
Distribution *	1.5017	21	1.8057	24	2.0916	27	2.5903	32
System Loss	0.5983	8	0.5983	8	0.5983	8	0.5983	7
Lifeline Subsidy**	0.1125	2	0.1125	2	0.1125	1	0.1125	1
Total ***	7.1311	59	7.4351	100	7.7210	100	8.2197	100

^{*} Includes Distribution, Supply and Metering Charges

Source: MERALCO Website

2. Regulatory Actions

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

For the ECs, the ERC reported that following the effectivity of the Rules for RSEC-WR which was promulgated last 23 September 2009, ninety-five (95) on-grid ECs filed their respective rate applications and were given PA by the ERC on December 15, 2009.

^{**} Starts @ 101 kWh consumption

^{** *}Total rates excluding Subsidies and Government Taxes.

In consideration that the revision of rate-setting methodology will only be applicable to on-grid ECs, the ERC recognized the need to allow the "off-grid ECs" to file for rate adjustment petition/applications. Accordingly, the ERC lifted the moratorium and accepted off-grid ECs' application for rate adjustment using the Cash-Base Rate Methodology. Summary of these cases and status are in Table 11.

Table 11 – Summary of Off-Grid ECs' Rate Applications Decided by ERC

EC	Case No.	Date Filed	Per Application			Final Approval		
			Annualized	Proposed	Proposed	Date of	Approved	Approved
			Sales	Revenue	Average	Decision	Revenue	Average
			(kWh)	Requirement	Rate		Requirement	Rate
				(PhP	(PhP/kWh)		(PhP)	(PhP/kWh)
				·				
			(a)	(b)	(c) = (b/a)		(d)	e = (d/a)
BANELCO	2009-064 RC	23 Sep 09	14,145,242	31,520,000	2.2283	29 Nov 09	25,719,547	1.8182
MARELCO	2009-074 RC	28 Oct 09	23,398,321	76,046,578	3.2501	29 Mar 10	45,723,913	1.9542
CAMELCO	2010-001 RC		5,959,472	19,141,605	3.2120	29 Mar 10	13,827,960	2.3203

Source: ERC

For the PDUs, the ERC has adopted the Performance-Based Regulation² (PBR) and was implemented on entry point basis with five (5) entry groups, each with a limit of five (5) PDUs. Entry to the first group was made optional by the ERC and on a first-come first-in basis. Initially three (3) PDUs qualified to enter the PBR. These are the Manila Electric Company (MERALCO), Dagupan Electric Corporation (DECORP), and Cagayan Light and Power Company (CEPALCO) respectively. The grouping for the PDUS' entry point to the PBR is listed in Annex 3. Six (6) PDUs have already applied the PBR, while six (6) will enter their first regulatory year under the PBR on July 2010.

The reset process for the 4th group PBR will start September 2010. In the meantime, the asset valuation for 4th Group PBR is on-going. Parsons Brinckerhoff Associates (PBA) in partnership with Asian Appraisal Company, Inc. has conducted ocular inspection for the valuation of assets for the 4th group for the period of January to April 2010. Draft report will be submitted for comments by the 4th Group private utilities PBR and ERC. Summarized in Annex 4 are the updates on the rates application filed by the PDUs under the PBR.

Since the PDUs under the 4th entry group are yet to enter PBR in 2011, the PDUs under this group continue to apply under the Return on Rate Base Methodology. For the report period, the status of their rate applications are summarized in Table 12.

Table 12 - Status of PDUs Rate Application to ERC

Date Filed	Case No.	Name of Private Utility	Status
		San Fernando Electric Light and Power Company,	Deliberated Dec. 14, 2009 For
8-Sep-09	2009-061 RC	Inc. (SFELAPCO)	Resolution by Legal Service
			Deliberated April 19, 2010
10-Sep-09	2009-062 RC	Panay Electric Company, Inc. (PECO)	For resolution by Legal Service
15-Oct-09	2009-067 RC	Clark Electric Distribution Corporation (CEDC)	ON GOING

² Performance-Based Regulation (PBR) is the alternative rate-setting methodology adopted by the ERC pursuant to Section 43(f) of the EPIRA.

D. Administration of Universal Charge (UC)

The UC is a non-bypassable charge, mandated under Section 34 of the EPIRA, to be imposed on all electricity end-users, including self-generation entities, for the following specific purposes:

- Payments for stranded debts and stranded contract costs;
- Missionary electrification;
- Equalization of taxes and royalties applied to indigenous or renewable sources of energy vis-á-vis imported energy fuels;
- An environmental charge for watershed rehabilitation and management; and
- A charge to account for all forms of cross-subsidies.

The UC is collected from all end-users every month by the National Grid Corporation of the Philippines (NGCP) and DUs based on the approval made by the ERC and remitted to PSALM every 15th of the following month.

PSALM administers the UC fund collections which are placed in Special Trust Accounts (STF) established separately for each of the intended purposes of the UC, for disbursement in an open and transparent manner. At present, only the UC for Missionary Electrification (UC-ME) in the amount of PhP0.0978/kWh (as provisionally approved per ERC Case No. 2009-028 RC dated August 17, 2009) and UC for Environment and Watershed Rehabilitation (UC-EWR) in the amount of PhP0.0025/kWh have been imposed and are being collected.

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

Total UC collections/remittances to PSALM as of 31 March 2010 amounted toPhP13.26 billion, PhP12.80 billion of which was disbursed by PSALM to NPC for missionary electrification and environment and watershed rehabilitation which leaves the UC fund with a balance of about PhP459.03 million. For the period October 2009 - March 2010, PSALM remitted to NPC-SPUG the total amount of PhP1,986 million in UC Remittances (Table 13).

Table 13 - Collections & Disbursements, As of 31 March 2010 (In PhP)

Particulars	Collections/ Remittances	Disbursements	Balances
Missionary Electrification	12,487,734,877.02	12,465,255,578.00	22,479,299.02
Environmental Charge	775,249,304.76	338,928,492.72	436,320,812.04
Main Trust Account- UC	226,080.47	-	226,080.47
Total:	13,263,210,262.25	12,804,184,070.72	459,026,191.53

Source: PSALM

Pursuant to the ERC Orders issued on 19 December 2005 and 10 February 2006, disbursements to NPC as of 31 December 2009 includes PhP2.03 billion, chargeable against the UC-ME fund, for the recovery of the Deferred Accounting Adjustment (DAA) portion of NPC-SPUG's ICERA and GRAM, respectively.

For the period October 2009 to March 2010, PSALM disbursed to NPC-SPUG the total amount

Table 14 – Annual Disbursements for the Recovery of the NPC-SPUG DAA Portion As of December 31, 2009

Month	PhP
2006	198,391,078.97
2007	489,411,257.78
2008	215,000,000.00
2009	1,126,474,281.25
Total	2,029,276,618.00

Source: PSALM

of PhP1,907 million. For the full year 2009, PSALM's disbursement to NPC-SPUG was

PhP1.2 billion. In terms of utilization, this amount covers only 29 percent of the total operating subsidy requirements by NPC-SPUG. The remaining subsidy requirements have significantly contributed to the NPC financial losses.

Table 15 - UC Collections/Remittances for the Period October 2009 -March 2010

Month	UC - ME	UC - EWR	Total
October'09	165,762,949.34	11,075,380.13	176,838,329.47
November	257,654,670.07	11,079,283.31	268,733,953.38
December	331,909,757.43	9,964,911.78	341,874,669.21
January '10	379,957,201.16	10,661,384.35	390,618,585.51
February	415,059,713.31	11,376,385.73	426,436,099.04
March	372,087,011.87	9,797,280.74	381,884,292.61
Total	1,922,431,303.18	63,954,626.04	1,986,385,929.22

Source: PSALM

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

Recovery for the NPC/PSALM's SCC for fiscal year 2009 and projected SD for the fiscal years 2009-2029 was filed by PSALM before the ERC for the recovery under the UC. For the petition on SCC, PSALM seeks ERC's approval for it to recover the shortfall incurred in operating the eligible IPPs in the Luzon Grid in the amount of PhP 22,256 million over a period of five (5) years. On the other hand, in order to stabilize and mitigate increases in the level of NPC's SD, PSALM sought for the

approval of a levelized UC-SD amounting to PhP470.1 billion which is proposed to be recovered over a 17-year period. The calculated levelized SD is the estimated shortfall of NPC in paying its financial obligations. The applicable charges, if approved by the ERC are summarized in Table 16.

Table 16 – Proposed UC for the Recovery of SCC and SD (PhP/Wh)

	SD (1 III	/K ** 11)			
Proposed		Luzon			
Recovery	UC-	UC-SD	Total	Visayas/ Mindanao	
Period	SCC	UC-SD	Total	Willialiao	
Year 1	.0920	0.3049	0.3969	0.3049	
Year 2	.0920	0.3049	0.3969	0.3049	
Year 3	.0920	0.3049	0.3969	0.3049	
Year 4	.0920	0.3049	0.3969	0.3049	
Year 5	.0920	0.3049	0.3969	0.3049	
Year 6-17		0.3049	0.3049	0.3049	

Source: PSALM

Following PSALM's filing of the petitions, series of public hearings conducted nationwide by the ERC on the SCC and SD rate applications have been attended by PSALM from September 2009 up to the

reporting period.

On 24 March 2010, ERC approved the extension of the deadline for filing the petition for the recovery of NPC's SCC for CY 2009 and the true-up adjustment for SD under the UC.

Hearings for this case are still on-going.

Table 17 – UC-ME Disbursements of PSALM

Month	Amount (PhP)
October 2009	162,052,401.68
November 2009	250,000,000.00
December 2009	300,000,000.00
January 2010	400,000,000.00
February 2010	400,000,000.00
March 2010	395,000,000.00
Total	1,907,052,401.68
Less: GRAM*	56,052,401.68
Total	1,851,000,000.00

Source: PSALM

*ERC Decision on Case No. 2005-038 dated 10 February 2010

E. Assumption of Loans of Electric Cooperatives

As of 31 March 2010, PSALM has paid a total of PhP10.3 billion worth of financial obligations of ECs to NEA, other government agencies (OGA) and local government units (LGU). This comprised around 43.0 percent of ECs' collective loans that was assumed by PSALM, leaving a balance of PhP 7.8 billion. Total payments made by PSALM to NEA was PhP10.2 billion while that for LGU/OGA was PhP76.6 million. (Table 18)

Table 18 – Status of Loan Condonation as of 31 March 2010 (PhP)

	Total	Actual Payme	ents	Balance	
	Assumption	Amount	%	Amount	%
NEA	17,977,951,553	10,245,769,952	57.0	7,732,181,602	43.0
LGU/OGA	95,889,778	76,566,473	80.0	19,323,306	20.0
TOTAL	18,073,841,332	10,322,336,424	57.0	7,751,504,908	43.0

Source: PSALM

Of the total payments to NEA, about 74.8 percent or PhP7.66 billion was used to pay the rural electrification loans incurred by the ECs, 15.7 percent or PhP1.61 billion was for mini-hydro loans, and 9.4 percent or PhP966.6 million was for dendro thermal loans.

Payments intended for house wiring services only amounted to PhP7.7 million.

PSALM assumption of ECs' loans with LGUs/OGA amounts to PhP95.9 million with PhP52.6 million owed to LGUs while that for OGA amounts to PhP43.2 million. A total of PhP76.6 million was already paid by PSALM to the LGUs (PhP49.4 million) and OGAs (PhP27.1 million) as of 31 March 2010.

Table 19 - Payments per Type of Loan

Type of Payment	Amount Paid (In PhP)	Percentage to Total
Rural Electrification Loan	7,658,793,417	74.8
Mini-hydro	1,612,699,445	15.7
Dendro Thermal	966,557,674	9.4
House wiring	7,719,416	0.1
TOTAL	10,245,769,952	100.00%

Source: PSALM

F. Mandatory Rate Reduction

The grant of PhP0.30/kWh to residential customers through the Mandatory Rate Reduction as stipulated in the EPIRA is continuously being implemented and shouldered by NPC for the term of the Transition Supply Contract (TSC). Relative to TSC's assigned to NPC-successor generating companies (NPC-SGCs), the ERC ruled, through Resolution No. 13 Series of 2009, that the NPC-SGCs shall continue to implement the MRR until the expiration of the term of the assigned and transferred TSCs subject to the execution of a written instrument between NPC and/or PSALM and the NPC-SGCs containing the assumption by the NPC-SGC's obligation to implement the MRR. In the absence of such instrument, the NPC and/or PSALM shall continue to bear the cost of implementing the MRR.

Prior to issuance of the said Resolution, on 23 September 2009, the ERC convened with several stakeholders to address concerns on the arrangements for the settlement of MRR between the DUs and PSALM. It was agreed that PSALM shall be directly billed with corresponding adjustments for any amount the DUs have advanced for its implementation. Further, any MRR that accrued after Closing Date and was not extended by the NPC-SGCs, should be shouldered by PSALM. For the amounts that the NPC-SGCs failed to implement, DUs and PSALM shall make arrangements for MRR payments, which may be allowed to be made in monthly installments but not to exceed six (6) months.

The clarification was communicated through letters distributed to PSALM, NPC, SGCs and DUs.

For the period November 2009 to March 2010, NPC has granted a total of PhP638.0 Million for the MRR of which 27 percent accounts for the Luzon residential customers. Of the same amount, residential customers of MERALCO alone shared 20 percent. From 2001 to March 2010, NPC has already incurred a cumulative total of PhP25.65 billion for the grant of MRR.

Table 20 - Monthly Amount Incurred by NPC for the Grant of MRR, November 2009 - March 2010

Billing Month	MERALCO	REST OF LUZON	TOTAL LUZON	VISAYAS	MINDANAO	TOTAL
Nov-09	31,832,086	19,908,900	51,740,986	37,384,175	60,168,998	149,294,159
Dec-09	24,530,890	7,880,404	32,411,294	37,104,752	61,082,278	130,598,323
Jan-10	23,572,436	5,680,029	29,252,465	35,947,500	61,143,896	126,343,861
Feb-10	16,988,494	7,383,173	24,371,667	35,584,880	57,003,485	116,960,032
Mar-10	30,078,723	7,188,075	37,266,798	32,586,053	44,935,288	114,788,139
TOTAL	127,002,628	48,040,582	175,043,210	178,607,360	284,333,944	637,984,514

Source: NPC

G. Lifeline Rate Subsidy Program

As of the report period, the ERC has approved modifications of lifeline level and discounts for Marinduque Electric Cooperative (MARELCO) and Bantayan Electric Cooperative (BANELCO). For MARELCO, Residential customers with consumption of kWh and below shall be given a Lifeline Rate Discount of 25 percent while those consuming 11-20 kWh shall be extended a discount of 5 percent. All customers that are not eligible for Lifeline Rate Discount shall bear the lifeline rate subsidy of PhP 0.1004/kWh.

For BANELCO, residential customers with consumption of 15 kWh and below shall be given a Lifeline rate discount of 20 percent while those consuming 16-20 kWh shall be extended a discount 0f 15 percent. All customers that are not eligible for discount shall bear the Lifeline Rate Subsidy of PhP0.0751/kWh.

Pursuant to the EPIRA, the lifeline rate shall be implemented for a period of ten years, unless extended by law.

IV. COMPETITION

This Section provides an update on key areas of competition to include the operation of the wholesale electricity spot market, preparation for open access and retail competition and monitoring of compliance to Section 45 of the EPIRA. The WESM report covers major highlights for the report period were the reforms instituted in the overall operation of the spot market, improvement in the governance and regulatory approvals that affected its operations. On open access and retail competition, pending compliance to the pre-conditions under Section 31, the DOE closely monitored developments in the ERC preparations. In terms of compliance to the market share, the DOE provides an analysis and some observations on the ERC issuance and methodology.

A. Wholesale Electricity Spot Market (WESM) Implementation

At the 46 months of WESM commercial operations in Luzon, 27 registered trading teams from 18 generating companies are directly participating in the WESM. Of these, two (2) are from NPC, three (3) from PSALM, two (2) from First Gen Hydro, two (2) from Aboitiz-controlled AP Renewables, while the rest are from other independent generating companies. These companies trade about 11,743 MW of capacity from 32 registered generating plants of different fuel resources. As for customers, there are 14 registered members composed of ten (10) ECs, three (3) PDUs and one (1) industrial/commercial customer. There are five (5) registered suppliers and are mostly affiliates of registered generators. To date, six (6) ECs are indirect WESM members while nine (9) ECs are applying for participation.

1. Highlights of Luzon Commercial Operations

For the period covering the November 2009 to April 2010 billing months, peak demand was recorded at 7,296 MW in 23 April 2101. Average demand for the same 6-month period was highest in March 2010 at 5,683 MW. The demand for the billing month of January 2010 was relatively low at an average of 4,902 MW, the lowest during the covered period. During the month, the Luzon region experienced cold fronts, northeast monsoon and several low pressure areas which brought a drop in temperatures. However, the demand levels increased by February 2010 as the effects of the El Niño phenomenon started manifesting.

Average energy offers submitted by the WESM-registered generators were highest in November 2009 at 6,912 MW. November 2009 also posted the lowest average capacity on outage for the 6-month covered period at 1,024 MW. Average

Table 21 - Summary of Market Results

Billing Month	Peak Demand (MW)	Coincident Energy Offers (MW)	Average Demand (MW)	Average Energy Offers (MW)	Average Capacity on Outage (MW)
Nov 2009	6585	7474	5141	6912	1024
Dec 2009	6564	7195	5070	6720	1176
Jan 2010	6391	6266	4902	5813	2071
Feb 2010	6877	6783	5435	5592	1730
Mar 2010	7037	6347	5683	5864	1106
Apr 2010	7296	7169	5574	6079	1243

Source: PEMC

energy offers were lowest in February 2010 with 5,592 MW. During this month, forced and planned outages were coupled with de-activated shutdowns. Fuel constraints were also experienced by coal and natural gas plants, while hydro-electric plants had limited generation capability as water elevations in dams were very low.

The effects of the El Niño phenomenon were evident in the decreasing percentage of energy share from the hydro-electric plants which contributed 11.4 percent in November 2009 down to 4.5 percent in April 2010. On the other hand, the

maintenance shutdown of Malampaya offshore platform gas supply affected energy contribution from natural gas plants that generated 32.7 percent, 28.7 percent and 37.7 percent in **February** 2010, March 2010, and April 2010 respectively.

Table 22 - Metered Quantities: Energy Mix (in Percent) Billing Natural Diesel/ Hydro Geothermal Coal Wind Month Gas Oil Nov 2009 11.4 30.1 46.8 0.19 8.8 2.6 Dec 2009 48.5 9.8 8.9 30.8 0.24 1.8 Jan 2010 9.6 9.8 30.5 45.9 4.0 0.28 Feb 2010 32.7 8.2 8.0 42.7 8.3 0.10 Mar 2010 28.7 9.3 0.08 6.4 8.6 46.9 4.5 7.5 37.7 Apr 2010 43.1 7.0 0.15

Source: PEMC

While the hydro and natural gas plants decreased percentages in the energy mix, shares from coal and diesel/oil-based plants have increased. Coal plants generated over 40 percent of the total energy requirements in February 2010 up to April 2010, up from normally 30 percent share. Meanwhile, contribution from diesel/oil-based plants also increased and was highest in March 2010 at 9.3 percent. Most of the diesel/oil-based plants contribution was mainly due to dispatch by SO-NGCP as mustrun unit to augment the reserve requirements. Energy consumption during the period was highest in April 2010 at 3,786 GWh.

Luzon energy quantity that has been sourced in the spot market posted an average of 14 percent during the covered period and was highest in February 2010 at 18 percent. Transactions which were covered by bilateral contract quantities (or BCQ) and settled outside the spot market posted an average of 86 percent and ranged from 82 to 87 percent.

Buying Prices of spot market quantities in the WESM have been on an uptrend since the start of the covered billing months and ranged from a minimum of

Effective

Customer

PhP2,287.51/MWh in November 2009 to a maximum of

Metered Spot Bilateral Billing Quantity **Ouantity** Percent **Ouantity** Percent Month (MWh) (MWh) (MWh) Nov 2009 3,575,986.76 474,059.82 13 3,101,926.94 87 3,381,576.00 447,970.83 Dec 2009 13 2,933,605.16 87 2,926,722.32 Jan 2010 3,391,691.08 464,968.76 14 86 Feb 2010 3,709,258.54 678,908.20 18 3,030,350.34 82 3,496,870.27 479,469.01 3,017,401.26 Mar 2010 14 86

16

3,198,093.17

587,784.31

Table 23 - Metered Quantities: Energy Consumption

Apr 2010 3
Source: PEMC

PhP13,383.73/MWh in March 2010. After returning 100 percent of the Net Settlement Surplus to market participants the buying prices were brought down to

3,785,877.48

84

equivalent Effective Selling Prices that ranged from PhP2,089.83/MWh in November 2009 to a high of PhP12,253.53/MWh in March 2010.

Notably, increasing prices particularly during in February and March 2010 were experienced with high prices coupled with tight supply condition. Impacts of congestion prices were mitigated with the implementation of the Price Substitution Mechanism for congestion, which lowered the prices on relevant trading intervals. Monthly effective settlement prices are presented in Table 24.

Table 24 - Effective Settlement Prices (PhP/Mwh)

Billing Month	Buying Price (w/ Surplus),	Selling Price (w/o Surplus),	
Nov 2009	2,287.51	2,089.83	
Dec 2009	3,656.20	3,304.74	
Jan 2010	4,559.03	4,425.10	
Feb 2010	11,286.94	10,999.48	
Mar 2010	13,383.73	12,253.53	
Apr 2010	8,873.98	8,725.72	

2. Visayas WESM

In anticipation for the launching of WESM in the Visayas, the DOE provided a policy for the implementation of the Visayas Supply Augmentation Auction (VSAA) as an interim measure to support in the problematic electric power supply in the Visayas grid while awaiting the full operation of new generation plants and also to further preparations for the eventual commencement of the commercial operation of the WESM in the area. However, the ERC decision on the application filed by PEMC for the approval of the Pricing and Cost Recovery Methodology and the Structure Level of Administration Fees for the VSAA was different from what was originally applied by PEMC. The ERC required the use of WESM Market Dispatch Optimization Model (MDOM) which is based on fundamentally different rules and procedures. The ERC decision likewise made the VSAA program a mechanism for procurement by the NPC of power supply to serve its transition supply contracts as well as the deficit caused by other generators or independent power producers.

To immediately address this concern, PEMC on 01 October 2009, filed a motion for reconsideration with ERC seeking for approval of the methodology as originally applied for. While waiting for the approval of the motion, PEMC have continued its internal readiness activities and coordination with the Visayas System Operator in preparation for the implementation of the VSAA.

With the introduction of the VSAA, there have been some discussions on the possibility of extending or implementing the same program in the Mindanao given also the scarcity of power supply in the region. Currently, however, this is still being discussed and further conceptualization can be done depending on the results of the implementation of the VSAA.

Meanwhile, the DOE jointly with the PEMC conducted a series of meetings with the Visayas' electric power industry participants in Cebu City on March 10-12, 2010. The objective of the said meetings was to determine the stakeholders' readiness and WESM compliance covering network and metering service providers, distribution utilities/electric cooperatives and power generators. The group presented the WESM-Visayas requirement checklist, questionnaire and work plan to all participants for their compliance. To date, the DOE and PEMC are continuously consolidating and

monitoring the submission and compliance of the various participants to the incoming commercial operation of WESM in the Visayas grid.

3. Reserve Market

Section 30 of the EPIRA provides for the implementation of the WESM Reserve Market and the formulation and approval of the pricing and cost recovery methodology for reserves in the WESM. PEMC has formulated the pricing and cost recovery methodology to be applied for the trading of reserves in the WESM. Application for approval of the methodology was filed for approval by and is currently pending consideration by the ERC. Public hearings have been completed and ERC has required submission of additional requirements.

With the additional requirements which will take time and resources to implement, PEMC filed a motion with the ERC to allow phased-in implementation of the operations of the trading of reserves. This is still pending resolution by the ERC. In July and August 2009, PEMC conducted Reserve Market trainings for trading participants as part of the Phased-in implementation plan.

4. Approval of the level of the market fees for the WESM

The market transaction fees are assessed on generators trading in the WESM to defray the costs of operating and administering the WESM. PEMC formulated and submitted an application with the ERC for approval the WESM Market Fee Setting Rules. Pursuant to the ERC Order, the PEMC implemented the increased market fee rate of PhP0.0169/kWh to cover the 2009 program for the MMS Migration. However, on 10 March 2010, the ERC issued an Order approving an interim market fee rate of PhP0.0084/kWh for 2010. Accordingly, as it may impact the entire WESM operations, PEMC, on 16 April 2010, filed an urgent ex-parte motion to hold in abeyance the effectivity of the said Order. In its motion, PEMC asserted that the reduced market fees will cause them failure to pay on its TransCo loan obligations, termination of the preparatory activities for the WESM Visayas commercial operations and paralyze its operations resulting to an even serious failure to fulfill its mandates under the EPIRA. As of the report period, PEMC is still waiting for ERC action on the said petition.

5. WESM Governance

Following its reconstitution in June 2009, Philippine Electricity Market Corporation (PEMC) Board of Directors of (PEM Board) focused its efforts in improving the market operations through review of the functions and composition of the various governance committees and units, and the conduct of operational, technical and legal audit by independent officers. In this regard, the PEM Board has likewise created the necessary support committees in addition to the regular committees to assist them in undertaking the review of various issues which has to be addressed prior to the tender to an independent market operator and the launching of WESM in the Visayas. Particularly for the improvement of the various PEM Committees, the PEM Board

created the Board Selection Committee (BSC) to assist it in the selection of qualified members of the PEM Committees and other Board Committees.

One of the significant developments in the WESM governance was the conduct of Independent Operational Audit of the Systems and Procedures on Market Operations. The audit, which was conducted under the supervision of the DOE, aims to review and assess the processes of the market management systems, market models, software, billing and settlement system, emanating from the submission of generation offers/bids up to the dispatching, and publication of market information under the WESM Rules for the period June 2007 – July 2009.

The said audit was conducted by an independent auditor, Deloitte Australia, a member of Deloitte Touche Tohmatsu, servicing clients in the areas of audit, assurance and advisory, taxation, corporate finance and consulting. Deloitte worked with its local partner Deloitte Philippines-Manabat Delgado Amper and Co., and Intelligent Energy Systems Pty Ltd (IES), an Australian company that provides advisory services and software solutions to organization in energy markets.

Part of the audit's objectives is to comply with the requirements of the ERC in relation to the audits of the Price Substitution Methodology (PSM) as per ERC Order dated 10 August 2009, and the Net Settlement Surplus (NSS) systems and processes as per ERC Rules for the Distribution of NSS dated 23 February 2009. In compliance to the ERC requirements, the final audit report on PSM and NSS was directly provided to the ERC by Deloitte Touche Tohmatsu/Intelligent Energy Systems, as directed by the PAC, per its letter of endorsement dated 14 April 2010. Particularly, the submitted audit report covers the compliance assessment and software certification for the NSS and PSM.

The final report on the overall result of the market operations audit will be finalized within the 2nd quarter of 2010. The audit report will cover the compliance assessment, software certification and broad identification of areas to achieve better international practice.

Furthermore, on 15 January 2010, the chairman of the PEM Board created a technical working group (TWG) composed of the DOE and PEMC officials to assist the PEM Board in the conduct of study on the matters relating to Market Management System (MMS). The TWG is currently studying on the MMS migration and enhancement as well as negotiating vendors for the MMS project.

Likewise, the DOE jointly with PEMC facilitates technical assistance project on formulation of the structure and mechanism for the selection and appointment of the Independent Market Operator (IMO). The said project would assist DOE and PEMC to undertake necessary tasks for the selection and appointment of the IMO in 2010.

6. Electric Cooperative's Participation in the WESM

To date, there are 10 ECs who are direct WESM members, 7 indirect members, while 7 are intending to be members. Among the 43 ECs in Luzon, 19 are non-WESM members.

The ECs inability to provide for the prudential requirements remains to be one of the major factors that prevent their participation in the WESM. In view that the Default Wholesale Supply Arrangement will be terminated by the DOE, the PEMC and the Local Government Unit Guarantee Corporation (LGUGC) are discussing for a possible agreement with LGUGC providing guarantee arrangements to support the prudential requirements of ECs in the WESM. The LGUGC is a private financial credit guarantee institution with primary goal to make private financial resources available to creditworthy local government units (LGUs) through its credit guarantee. LGUGC's credit enhancement facilitates the entry of LGUs with infrastructure development projects in the capital market. LGUGC extended its guarantee services to water districts, ECs, state universities and colleges, and renewable energy technology projects. Draft guidelines with regards to the PEMC and LGUGC agreements have already been formulated and are currently undergoing review by both parties.

B. Open Access and Retail Competition

As of April 2010, the government was able to comply with the fourth pre-condition for the implementation of open access and retail competition, i.e., privatization of 70 percent of NPC generating assets in Luzon and Visayas, which is now at 91.8 percent as discussed in Section II-A. The fifth and last pre-condition is also expected to be completed soon.

Meanwhile, the DOE is continuously monitoring the petition on the interim open access filed by the Philippine Independent Power Producers Association (PIPPA) before the ERC due to some policy concerns. Following are the updates on the said petition:

November 2008 and Order dated 14 November 2009 on ERC Case No. 2008-026 RC have long become final and executionary and may no longer be disturbed. The said Order was in response to the Sem-Calaca Power Corporation's (SCPC) "Petition for Intervention" filed 5 February 2010, seeking permission to intervene in the proceedings in the said case and praying for a one (1)-year extension in the implementation of the Power Supply Option Program (PSOP). The ERC denied SCPC's petition for lack of merit. In the said Order, the ERC invoked Section 2 of the ERC's Rules of Practice and Procedures where it permits the filing of petitions for intervention not less than five (5) days prior to the time the proceeding is called for hearing or for good cause shown. In the case of SCPC petition, the period to intervene had long lapsed therefore, any intervention was no longer legally permissible.

- On 25 January 2010, the ERC issued Resolution No. 1, Series of 2010 to adopt the Rules for the PSOP. The main objectives of the rules are to provide the regulatory framework for the implementation of the PSOP; and to ensure that the effective implementation of the PSOP will provide additional choice of supply to qualified customers. The said rules will apply to the following:
 - 1. Power Supply Option Program Customers;
 - 2. Retail Electricity Suppliers;
 - 3. Eligible Distribution Utilities;
 - 4. Generation Companies or Affiliates;
 - 5. National Grid Corporation of the Philippines;
 - 6. Independent Power Producers (IPP) Administrators;
 - 7. Market Operator; and
 - 8. Other relevant industry participants.

C. Market Power Monitoring

Monitoring of market power in the electric power industry is pursuant primarily to Section 45 (a)

of the EPIRA which provides that no company or related group can own, operate or control not more than 30 percent of the installed generating capacity of a grid and/or 25 percent of national the installed generating The implementing capacity. guidelines for this provision embodied in the ERC Resolution No. 26, series of 2005, entitled Guidelines for the Determination of Installed Generating Capacity in a Grid and the National Installed Generating Capacity and Enforcement of the Limits on Concentration of Ownership,

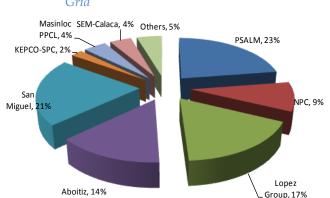
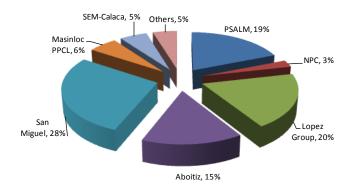


Figure 1 - Market Share of Generating Companies, National Grid

Operation or Control of Installed Generating Capacity under the EPIRA. As provided under Section 3 of the said guidelines, the ERC shall adjust the installed generating capacity per grid, the national installed generating capacity, and the market share limitations every 15th day of March of the succeeding year and/or as often as may be necessary based on the maximum

Figure 2 - Market Share of Generating Companies, Luzon



capacity of the power plants as submitted by the generation companies and other entities that are required by the ERC to submit reports.

Pursuant to the abovementioned guidelines, the ERC issued Resolution No. 4, Series of 2010 issued on 10 March 2010 and which provides for the capacity limitations that will effective until March 2011. In the said Resolution, the ERC ruled that no generation company, nor any other entity has violated the market share limitations per Grid and National Grid for the year 2010.

Significant changes in the ownership of generating capacity in country were noted during the period in review as brought by the success in the privatization efforts. A new player in the power industry, San Miguel Energy Corporation (SMEC), now has largest capacity portfolio to include the 620-MW Limay Combined Cycle Power Plant, and the administration for the contract for energy output of the 1,000-MW Sual coal-fired power plant, 345-MW San Roque multi-purpose hydro plant and the 1,294 MW Ilijan natural gas power plant. For the Luzon grid, SMEC now holds 28.1 percent while for the national grid, its share is estimated to be around 21.4 percent.

Another significant group of players are the Lopez group of companies with its subsidiaries/affiliates' acquisition of 112 MW Pantabangan-Masiway hydro power plants in Luzon and the 305 MW Palinpinon-Tongonan geothermal power plants in the Visayas. Based on the control of the power plants, the Lopez group's share are 20 percent in Luzon and 21 percent in the Visayas. However, a major concern is the case of Unified Leyte geothermal power plants owned by the Energy Development Corporation (EDC), a Lopez group subsidiary, which are under contracts with NPC. In terms of market share, the capacity of such plants are credited to NPC, pursuant to the ERC guidelines which says that in the case of NPC and its Independent Power Producers (IPPs), it is the control and

not the ownership of the power plants which determines who should be credited with the total capacity under contract. Thus, as **NPC** controls actually quantity (dispatch level) generated from the subject power plants and the price of electricity offered to the market, NPC will the contracted credited capacity while the remaining capacity not under contract will be credited to the owner of the

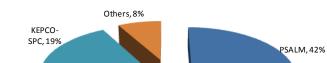
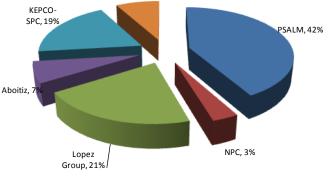


Figure 3 - Market Share of Generating Companies, Visayas



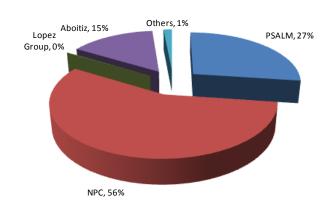
plant or the entity exercising control over such remaining capacity. However, with EDC being both the operator and steam supplier for the Unified Leyte plants, it has an inherent and prominent control of the said power plants. Although the ability to set prices lies with NPC, with WESM not yet in placed in the Visayas, NPC has no ability to set the prices for these power plants. It should be noted that NPC to date remains heavily regulated.

Aboitiz group likewise gained competitive edge in the three grids with its acquisition of the 747-MW Tiwi-Makban geothermal plants, 360-MW Magat and 175-MW Ambuklao-Binga hydro plants, 100-MW PB 117 and 100-MW PB 118 and the administration of NPC contract in the 764-MW Pagbilao coal-fired power plant. With this portfolio, Aboitiz group's market share is estimated to be 15 percent in Luzon, 7 percent in the Visayas, 15 percent in Mindanao and 14 percent for the national grid.

In the Visayas, Salcon group of companies increased its share to 17.6 percent with its acquisition of the Panay and Bohol Diesel Power Plants

In the light of recent developments in privatization, the DOE noted that the crediting of capacities pursuant to ERC Resolution 4 Series of 2010 need to be updated to wit:

- Capacity not covered by NPC contract for Bakun, Casecnan, San Roque, Pagbilao and Sual are credited to NPC-IPP. Note that the turn-over of the control and management of these contracts are earlier than the ERC issuance of Resolution 4;
- Capacity of 620-MW Limay credited to NPC-IPP but was already turned-over to SMEC last 18 January 2010;
 Figure 4 - Market Share of Generating Companies, Mindanao
- Palinpinon-Tongonan power plants are credited to NPC but are already owned by GreenCore Energy, a whollyowned subsidiary of First Luzon Geothermal Energy Corporation, which is wholly owned by the EDC. Turn-over date was 23 October 2009; and
- Naga Land based gas turbine credited to NPC but are now owned by SPC and was turned over last 29 January 2010.



The determination of market share should not be confined only to control but should consider operation and ownership as provided under Section 45 (a) of the EPIRA. Further, how control of the plants' installed capacity credited to an entity should be further examined given the unique arrangement of some of the plants, as cited above in the case of Unified Leyte.

The market share is a measure whether the industry is dominated by a few large firms which are now the case in the Philippine electric power industry although EPIRA-set limitations have not been breached to date pursuant to ERC Resolution 4. However, a more concentrated ownership structure is likely to be susceptible to the exercise of market power hence, the need to strengthen the competition policy, if any, and put in place dynamic competition guidelines to avert possible exercise of market power and ensure consumer welfare and protection.

V. POWER SUPPLY SECURITY AND RELIABILITY

This section presents the country's power supply and demand situation for the year 2009 providing information on the available capacity, actual electricity generation and sales, and status of power generation, transmission and distribution projects. A major highlight is a section on the government's effort to address supply deficit experienced in the latter part of 2009 and the first trimester of 2010 with the onset of the El Niño phenomenon which affected particularly the Luzon and Mindanao grids.

A. Capacity

The country's installed capacity in 2009 totaled 15,610 MW. Coal-fired power plants remain the dominant source with a share of 27.4 percent, closely followed by hydro with

a share of 21.1 percent. The capacity of oil-fired power plant was reduced to 3,193 MW from 3,353 MW in 2008 due to the expiration of contract with NPC of the 15 MW Panitan Modular Genset in Capiz and the 116 MW Subic Diesel plant in Olongapo, Zambales. Other fuels, such as natural gas, geothermal and new RE have a share of 18.1 percent, 12.5 percent and 0.41 percent, respectively.

The installed capacity of new RE has increased due the commissioning of the 1 MW Methane Land Fill Gas in Luzon, the 21 MW First Farmers Biomass Cogeneration and the 8.3 MW San Carlos Bioenergy in Visayas.

Total dependable capacity was 13,319 MW, which is 85.3 percent of the total installed capacity. The changes of the dependable capacity in three major grids were due to derating of some power plant units. Annex 5 shows data on the installed and dependable capacity by source and per grid.

The data for the dependable capacity of each power plant was based on the Monthly Operations Report submitted to the DOE and was counter checked with the Daily Operation Report of the NGCP. In July 2008, the DOE conducted a survey to gather data on power plant capacity in accordance with internationally accepted definition for the purpose of harmonizing data being used for power planning, policy development and implementation.

B. Electric Power Generation

Gross generation in 2009 reached 61,934 Gwh, 1.8 percent higher than 60,821 GWh in 2008. Generation from fossil fuels (oil, coal and natural gas) went up by 3.9 percent from 40,193 GWh in 2008 to 41,744 GWh in 2009. On the other hand, generation from renewable energy went down by 2.1 percent due to the decreased production from hydro and geothermal energy by 0.6 percent and 3.7 percent, respectively. Energy production from wind recorded an increase of 5.0 percent while solar declined by 4.0 percent.

In 2009, biomass contributed a total of 13.7 GWh from the newly built Biomass power plant, such as, the 1 MW Land Fill Gas directly supplying MERALCO, the distribution utility in Luzon; the 21 MW First Farmers Biomass Cogeneration, and the 8.3 MW San Carlos Bioenergy both located in Negros grid. Table Annex 6 shows the total Philippines 2009 and 2008 comparative generation by plant type.

Natural gas-fired remains the dominant producers of electricity in Luzon grid, accounting for 44.2 percent of the total generation in 2009, a slight increase of 1.6 percent compared to 2008 level. The natural gas limitation imposed from 16 February to 12 March 2009 due to the leak encountered in one of the inlet gas heater of the Malampaya onshore gas plant affected the generation of the natural gas-fired plants during the period. However, this does not affect the standing of natural gas to have the biggest share in generation since 2005. Generation from coal-fired power plant increased by 4.4 percent to 14,091 GWh compared to 2008 generation. This can be attributed to decreased generation from geothermal power plant.

The share of geothermal power generation in Luzon grid declined by 5.7 percent compared to 2008 generation. The reduction was attributed to the following: 1) shutdown of Bacman plant (150 MW) since May 2009; 2) Tiwi geothermal plant Unit 1 (59 MW) was out on the month of January 2009 due to low steam feed supply and some force outages on the last quarter of 2009, 3 Tiwi geothermal plant Unit 2 (59 MW) was on outages from September to December 2009 due to cooling tower repairs, and 4) Makban geothermal plant Unit 4 (63.2 MW) was on annual overhauling from June to August 2009

Hydroelectric energy contributed 5,549 GWh or 12.3 percent share of the mix.

In Visayas grid, gross generation from geothermal energy was recorded at 6,199 GWh, a decreased of 3.5 percent from the 2008 level. This was due to the outages of Leyte Geothermal Power Plant (LGPP) Unit 1 (37.5 MW) on 25 February to 31 March 2009 and May to August 2009. LGPP Unit 3 (37.5 MW) experienced derated capacity due to limited steam supply from March to April 2009. Oil-based plant compensated the declined of generation from geothermal plant which resulted to an increase of 12.0 percent, to 1,864, GWh in 2009.

Generation from hydroelectric plant in Mindanao declined by 4.7 percent, to 4,196, GWh in 2009. The sustained fault in Abaga-Agus 2 138 KV line isolated the Agus 1 (80 MW) and Agus 2 Unit 1 (60 MW) to the grid on the month of January 2009. Also, some units of hydroelectric plant experienced forced outages, such as, Agus 5 Unit 4 (53.7 MW) from July to August 2009, Pulangi 4 Unit 1 (85 MW) and Unit 3 (85 MW) in May 2009 and November 2009, respectively. Generation from Oil-based plants compensated the decrease generation from hydro with energy production recorded at 4,196 GWh or 20.1 percent of the mix.

Gross generation of NPC and NPC-IPP plants declined in 2009 compared to its 2008 level. With the turned-over of NPC plants 747.5 MW Tiwi-Makban to AP Renewables last June 2009, 168.5 MW Panay Diesel and Bohol Diesel to SPC Power Corporation, 0.8 MW Amlan HEP to ICS Renewables and the 305 MW Palinpinon-Tongonan geothermal power plants to Green Core Geothermal Inc., the generation from NPC plants declined by 23.5 percent from 12,743 GWh in 2008 to 9,745 GWh in 2009. Likewise, the transfer of administration of NPC-IPP plants, such as the 1,294 MW Sual Coal-fired plant to SMEC in October 2009 and the 764 MW Pagbilao Coal-fired plant to Therma Luzon Inc. in November 2009 resulted to the declined of NPC-IPP generation by 2.1 percent. This development in privatization in turn increased the shares of Non-NPC plants, from 32.3 percent in 2008 to 39.3 percent in 2009.

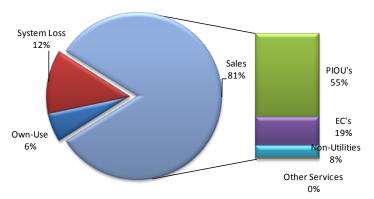
C. Electricity Sales and Consumption

The total electricity sales all over the country posted a slight increase of 3.4 percent from 49,206 GWh in 2008 to 50,868 GWh in 2009. These comprised sales from PDUs, at 33,853 GWh or 66.6 percent and sales from ECs, Non-utilities and Other Services at 11,768 GWh or 23.14 percent, 4,935 GWh or 9.7 percent and 311 GWh or 0.61 percent, respectively. Total sales accounted for 50,868 GWh or 82.1 percent of total consumption. "Own-use" of power plants and DUs was pegged at 3,524 GWh or 5.69 percent, while

losses from generator, transmission and distribution accounted for 7,542 GWh or 12.18 percent of the total consumption Figure 5.

On a per grid basis, Visayas recorded the highest growth in electricity sales at 6.3 percent, Luzon at 3.40 percent and Mindanao at 1.1 percent.

Figure 5 - Electricity Sales by Type of Utility



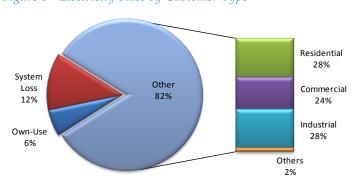
1. Industrial Sector

Electricity sales to the industrial sector comprise 33.6 percent or 17,084

GWh to total electricity sales, a measly 0.31 percent higher than 17,031 GWh in 2008. Electricity sold to the industrial sector in Luzon registered a low growth of 1.93 percent, while significant increase was observed in the Visayas grid with 6.0 percent. On the other hand, Mindanao grid which was affected by the recent economic crisis plunged to negative 10.2 percent.

Reflecting the impact of external shocks on economic growth, a negligible increase in the electricity sales were attributed immensely to the substantial weakening of the manufacturing and beverages industries. The effect of the global financial affected the performance of electrical equipment manufacturing, such indicators industrial as

Figure 6 - Electricity Sales by Customer Type



output growth rate fell substantially. Likewise, for new products, output growth is declining and import as well as export volume plummeted. Most of the manufacturing company industries did not expand. This may be attributed to business losses which were increasing industry wide and declining profit margins. In addition, majority of the industry have reduced their loads which resulted in repressed electricity sales, although 2009 posted minimal increment in the latter part as compared to 2008 data Figure 6.

2. Residential Sector

Electricity sales to the residential sector resulted to 17,504 GWh or 34.4 percent of the total electricity sales. Such sales increased by 5.16 percent from 16,644 GWh in 2008. Specifically, Luzon grid posted 4.6 percent increase, from 12,236 GWh in 2008 to 12,801 GWh in 2009.

Meanwhile, the twin devastation brought by typhoons Ondoy and Pepeng in the country during the last quarter of the year also decelerated the growth of electricity sales in the Capital and Central part of the Luzon grid. Significant increases in electricity sales were observed in the Visayas and Mindanao grid with 4.82 and 7.34 percent growth, respectively. With the effect of global financial crisis to the industrial sector, electricity sales to residential customers are again the top consumer of electricity in total Philippines compared to year 2007 and 2008 were the industrial sector leads in terms of electricity consumption.

The main drag for the growth observed in the residential sector was attributed to the slight increased utilization of electricity for household activities such as food preparation, recreation and use of cooling system during summer months.

Meanwhile, on the expenditure side, the insipid growth in Personal Consumption Expenditure (PCE) as consumer spending accelerated slightly in the fourth quarter of 2009 can also be correlated to the conservative expansion of the electricity sales in the residential sector.

Notwithstanding the severe impact of the global economic contraction and global financial uncertainties on the domestic economy, the demand for services of our OFWs continued to increase as their deployment growth contributed to the huge growth of Net Factor Income from Abroad (NFIA). The continued inflow of remittances of the country's OFWs in 2009 were drastically contributed to the consumer spending power on basic commodities and necessities such as electricity, water, food, clothing, transport and communication.

3. Commercial Sector

Commercial sector posted an increase of 4.4 percent. For the past six years, average annual growth rate of electricity sales to the commercial sector recorded at 4.9 percent as compared to residential and industrial sectors at 2.3 percent and 2.00 percent, respectively. Electricity sales to the commercial sector in 2009 increased by 3.76 percent in Luzon, 4.82 percent in Visayas and 11.36 percent in Mindanao compared to the previous year. Commercial sector accelerated slightly since the services sector still the lead contributor to Gross Domestic Product (GDP).

One of the major contributors to the sector's growth was private services and recreational services, which include laundry services, spas, beauty parlors and other related services; medical and health services; hotels and restaurants; and educational services. The continuing demand for such services justified the constant increases of electricity sales to the commercial sector. This can be correlated to the expansion of small-scale trade and retail establishments, particularly shopping malls throughout the country.

4. Own Use and System Loss

Total percentage share of system losses continued to decline as it posted a 1.8 percent drop from 7,680 GWh in 2008 to 7,542 GWh in 2009. Meanwhile, utilities' own-use for office and housing remained on a downtrend, registering a double-digit drop at 10.4 percent from 3,935 GWh in 2008 to 3,524 GWh in 2009.

The generated figures implies substantial improvement in the performance of the utilities, partly as a result of the efforts in recent years to reduce the system losses which includes DUs' losses and transmission losses such as substation used, transformation and other unaccounted losses. In addition, the innovative ideas concerning the system development and the significant strides made in managing the Utilities' own-use were considered to be efficient enough to sustain such operation.

D. System Peak Demand

Peak demand in Luzon was recorded in 26 May at 6,928 MW brought about by hot weather condition with a temperature reaching 36°C. This was 3.8 percent higher compared to the 2008 level of 6,674 MW. MERALCO, which comprised 70 percent of the total demand in Luzon grid, posted an increase of 2.5 percent, from 4,790 MW in 2008 to 4,910 in 2009.

The high demand in Luzon was also due to the expansion in the operation of the existing customers in Subic Enerzone Development Corporation, i.e. Hanjin Heavy Industries, and the entry of Texas Instrument in Clark. Likewise, the demand coming from customers classified under the Cement, Chemical, Steels and other Metals industries posted positive growths.

Table 25 - Comparative Demand by Grid

CRID	2009 (MW)	2008 (MW)	Difference	
GRID			MW	Percent
Luzon	6,928	6,674	254	3.8
Visayas	1,204	1,112	92	8.3
Mindanao	1,220	1,190	30	2.5
Total Philippines	9,352	8,976	376	4.18

Note: Non-coincident peak demand

Source: DOE

Coincidental peak demand in Visayas grid was recorded at 1,241 MW, an increase of 5.5 percent compared to the 2008 level in spite of the power supply problem being experienced particularly in Negros and Panay. The entry of Balamban Enerzone Corporation in January 2009 with an average demand of 26.5 MW and the increased in the demand of Carmen Copper Corporation both located in Cebu contributes to the positive growth of the region. In sub-grid level, Cebu as the load center in the Visayas has the highest demand of 559 MW in 2009.

Electricity demand in Mindanao grid rebound this year at 1,303 MW, posting a significant increased of 8.3 percent from 2008 level, compared to the 3.0 percent contraction in 2008 vs. 2007. Demand from most of the DUs in Mindanao have positive growth in 2009, particularly demand coming from Davao Light and Power Company, Davao Norte Electric Cooperative, Cotabato Electric Cooperative and South Cotobato II Electric Cooperative.

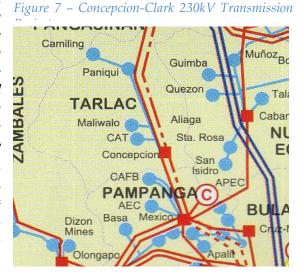
E. Status of Private Sector Initiated Power Generation Projects

As of the report period, a total of 1,354 MW private sector initiated projects were committed and already has secured financing. Of this amount, 600 MW are expected in Luzon, 671 MW in the Visayas and 100.5 MW in Mindanao. Projects which are considered indicative, meaning in the different stages of prior to financial closure are expected to provide around 4,193 MW. Details and status of these committed and indicative projects are shown in Annexes 7 to 9.

F. Status of Transmission Projects

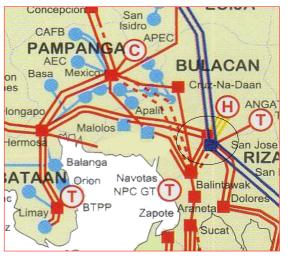
In Luzon, The Concepcion-Clark 230 kV Transmission Project is a project endorsed by

Office of the President, through Executive Order 666 "Directing All Heads Of Department, Bureaus, Offices, Agencies And Instrumentalities Of The Government To Support The Power Infrastructure Requirements Of Clark Freeport Zone And Support The Investment Of *Texas* Instrument In Clark Texas Instruments Special Economic Zone And Baguio City Economic Zone", issued September 25, 2007, in support of President GMA's vision to transform Clark into a competitive international service and logistic center in the South Pacific Region. This project was energized last December 2009.



The San Jose Substation, located in San Jose Del Monte (Bulacan), is considered a major energy interchange facility in Luzon Grid. This substation is designed to handle 2,400

Figure 8 - Replacement Program for San Jose S/S 500 kV Power Transformer



Mega-Volt Ampere (MVA). The substation delivers electric power to consumers in the Meralco franchise area (approximately 40 percent of Metro Manila power needs). The Replacement Program for San Substation 500 kV Power Transformer will replace existing 4-600 MVA transformer banks with 4-750 MVA transformer banks plus 1-250 MVA as spare. As of April 2010, transformer MVA banks temporary (T05) and one permanent (T02)) has increased the substation capacity of San Jose from 2400 MVA to 3300MVA.

In the Visayas, civil works, testing and commissioning, and correction works are on-going with regard to the Northern Panay

Backbone Project. This project is part of the Panay Power Transmission Backbone

Project which is divided into northern and southern Panay. The Northern Panay Transmission Project involves the installation/construction of a total of 107 kilometers of 138 kV and 69 kV overhead transmission line utilizing steel tower structures and aims to: (1) accommodate load growth and address the low voltage problem; (2) improve the sytem reliability and operational flexibility; and (3) extend service to previously unelectrified areas. This project of 96.2 percent completed overall.

In the Mindanao Grid, the Maramag (Pulangui) – Bunawan 230 kV T/L is approximately 97 percent completed overall. Civil works, correction work, and signing and compilation of test and commissioning plan are on-going. The proposed project is the extension of the Abaga-Kirahon 230 kV Transmission Line Project and part of the proposed Mindanao 230 kV Transmission Backbone aimed to strengthen the existing transmission system, thereby ensuring the stability, reliability and efficiency in transmission of power in the entire Mindanao grid. The proposed 230 kV transmission network, which will be initially energized at 138 kV level, will serve as the transmission corridor from northern to

southern Mindanao where the ouput of the Agus Hydroelectric Power Complex and Maramag IV Hydroelectric Plant can be transmitted. Project components Bunawan S/S Expansion and the Tagoloan S/S Expansion were energized September 13, 2009 and October 25, 2009 respectively.

The Mindanao Substation Expansion-2005 is also a project under the construction stage. This project involves the installation of additional transformers at several substations in order to meet load growth. The additional transformers would also provide N-1 capability to other substation to mitigate supply interruption during planned and unplanned outages of transformers.

Figure 9 - Northern Panay Transmission Backbone Project

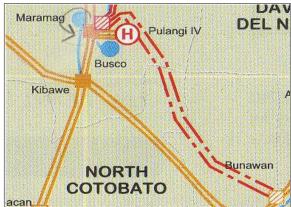


This project is approximately 74 percent completed overall.

G. ERC-Approved Capital Expenditure Projects – Within The Period Under Review

The ERC has approved seven (7) Capital Expenditure (CAPEX) projects amounting to PhP459.77 Million pesos for the period November 2009 – April 2010, applied by namely Nueva Ecija II Electric ECs. Cooperative, Inc. AREA 1 (NEECO II -**AREA** 1), Maguindanao Electric Inc. (MAGELCO), Cooperative, Pangasinan I Electric Cooperative, Inc. (PANELCO I), Zamboanga del Sur I Electric Cooperative, Inc. (ZAMSURECO I), Tarlac Electric Cooperative, Inc. (TEI),

Figure 10 – Maramag-Bunawan Transmission



Romblon Electric Cooperative, Inc. (ROMELCO) and Aklan Electric Cooperative, Inc. (AKELCO).

These projects are expected to provide adequate, safe, efficient and reliable electric service in accordance with the provisions of the Philippine Grid Code (PGC); improve power reliability and address load growth; reduce interruption frequency and systems loss; promote better consumer service; address the insufficient line capacity of the existing submarine cable; address increasing demand of municipalities; and provide standard protection of equipment due to overloading and short circuits. Annex 8 shows the project description, cost and rationale of each project.

H. Initiative to Ensure Supply Security and Reliability

In the latter part of 2009 and for the first four months of 2010, the power situation has been critical with interruptions experienced in the Visayas, Luzon and significantly in the Mindanao grid. A major concern at that time was not only the power reliability for the long-term but also during the conduct of the National and Local Elections in May 2010. In view that the power sector is now dominated by the private entities, the DOE, as mandated under the EPIRA, to monitor private sector activities in order to attain the goals of the restructuring, privatization and modernization of the electric power sector, have issued Department Circular 2010-03-0003, on 26 February 2010, directing all power generation companies, the transmission service provider and all DUs to ensure adequate and reliable electric power supply in the country. The said DC emphasized the responsibilities of power sector utilities' particularly their compliance to the technical, operating and financial standards established for the purpose of ensuring supply security and reliability. It mainly includes the monitoring and enforcement processes for the strict implementation of the EPIRA, EPIRA-IRR and the WESM Rules and covers necessary short-term, medium-term and long-term contingency plans to ensure reliable power supply in the country.

The DOE spearheaded the conduct of stakeholders meetings to solicit cooperation and commitments by concerned stakeholders particularly by private generators, distribution utilities and customers in identifying possible solution in the power crisis being experienced by the country. More so, the meetings provided a venue for the DOE to communicate with stakeholders the extent of the supply problem and the current limitations faced by the government in view of its inability to build and/or contract additional capacities which is already prohibited by EPIRA.

A total of five (5) meetings were held, one (1) in Luzon on 04 February 2010; two (2) in Visayas (Iloilo - 22 February 2010 and Cebu - 23 February 2010; and two (2) in Mindanao (Zamboanga -17 February 2010 and Davao - 18 February 2010) which culminated to the signing of covenant among the participants containing their commitments towards mitigating power supply problems. Actual status and definite timetable of private sector-initiated generation projects were provided by the proponents while the local government units present were encouraged to give their utmost assistance to ensure that these projects will be completed as scheduled. In addition, the DOE emphasized the need for the DUs to consider supply options other than NPC in view of its continuing privatization and the prohibition provided for in the EPIRA. Meanwhile, DUs and customers with embedded generators were identified in view of possibly

implementing a program on how they will be compensated in case they infuse additional power to the grid.

For the short-term, the efforts were focused to provide power support in the conduct of the first automated elections in the country while for the long-term, the DOE requested for private sector commitments to ensure that committed projects will be pursued as planned. The Mindanao grid was given particular attention since the grid was already experiencing red alerts due to low water elevation which significantly reduced the capability of Agus and Pulangui hydro plants to as low 590 MW from the normal dependable capacity of 953 MW.

VI. TOTAL ELECTRIFICATION

The total electrification program is one of the mechanisms to support the Government's efforts to alleviate poverty and rural development. Towards this end, the DOE launched a massive and focused action to increase and accelerate access to electricity services by the country's unenergized communities.

In order to fast track the electrification efforts, the DOE continuously developed innovative and sustained policies and strategies that encourage greater private sector

participation consistent with power sector reforms embodied in the EPIRA, which led to the development Expanded the Rural Electrification Program (ER Program) was established. The ER Program serves as the centrepiece program towards percent attainment of 100 barangays electrification by 2009 and 90 percent household electrification by 2017.

As 30 April 2010, the DOE and its partners were able to attain 99.76 percent barangay electrification level for the country reducing the number of unelectrified barangays to 99. On a grid basis, Visayas has the highest electrification rate of 99.97 percent with

Table 26 - Barangay Electrification Status as of 30 April 2010

Table 20 - Ba	Potential	Electrified	Unelectrified	Electrification
Region	Barangays	Barangays	Barangays	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	3,100	2	99.94
IV-A	4,010	3,958	52	98.70
IV-B	1,458	1,448	10	99.31
V	3,469	3,468	1	99.97
NCR	1,695	1,695	-	100.0
SUB-TOTAL LUZON	20,486	20,421	65	99.68
VI	4,050	4,050	0	100.00
VII	3,003	3,003	-	100.00
VIII	4,389	4,386	3	99.93
SUB-TOTAL VISAYAS	11,442	11,439	3	99.97
IX	1,904	1,904	0	100.00
X	2,020	2,015	5	99.75
XI	1,160	1,160	0	100.00
XII	1,194	1,193	1	99.92
ARMM	2,459	2,435	24	99.92
CARAGA	1,310	1,309	1	99.02
SUB-TOTAL MINDANAO	10,047	10,016	31	99.69
TOTAL PHILIPPINES	41,975	41,876	99	99.76

Source: DOE

only three remaining barangays to be electrified, one (1) located in Leyte and the other two (2), in Western Samar. In Luzon, there remains 65 barangays to be electrified with majority situated in the provinces of Quezon (32 barangays) and Laguna (20 barangays).

The unenergized barangays in Mindanao are located mostly in provinces with peace and order problem such as Maguindanao (12 barangays), Lanao del Sur (7 barangays) and Lanao del Norte (4 barangays).

VII. HARMONIZING EPIRA AND THE RENEWABLE ENERGY ACT

With the passage of the Renewable Energy Act or R. A. 9153 on 16 December 2008, the DOE saw the need to harmonize the implementation of some of its provision in the reform process that is being undertaken in the power sector pursuant to EPIRA. In particular, the mandate for the establishment of the Renewable Energy Market and the imposition of Renewable Portfolio Standards will affect the WESM operations. Thus, in order to facilitate harmonization of EPIRA and RE Law, in January 2010, the DOE issued Department Circular No. 2010-02-001 creating the Steering Committee on the Establishment of Renewable Energy Market (REM). The committee will be headed by the DOE with members, PEMC, PSALM, NEA, NPC, NCGP and TransCo. The Steering Committee shall perform the following functions:

- 1. Formulate and establish the framework that will govern the operation of the REM;
- 2. Devise timelines, actions plans and target implementation schedule of the establishment of the REM;
- 3. Prepare rules and other necessary documents which will incorporate changes in the WESM Rules including the creation of the Renewable Energy Registrar;
- 4. Assess and evaluate all issues pertinent to the operationalization of the REM; and
- 5. Coordinate activities of various entities and stakeholders involved in the establishment of REM.

Each member agency was given responsibilities to assist the Committee in the performance of its duties as follows:

- 1. Prepare and implement action plans and undertake activities for the operationalization of the REM in accordance with the policy direction of the DOE;
- 2. Regularly provide the Committee updates and reports on key items, issues/concerns identified attendant on the establishment of the REM and corresponding recommended options/actions; and
- 3. Ensure the mutual cooperation by and among the entities involved and allow the Committee access to information on relevant matters.

The PEMC, as a member of the New and Renewable Energy Board (NREB), is tasked to develop the REM and will coordinate with various NREB Technical working groups all activities relevant to its undertakings. Part of its mandates is the following:

- 1. Formulate rules specific to the operation of REM and incorporate the changes in the WESM Rules;
- 2. Establish the Renewable Energy Registrar and devise the appropriate manual which will govern the functions and responsibilities of the RE Registrar; and
- 3. Develop the market fee rates which will be charged to eligible RE facilities registered under the REM.

Annex 1 – List of Privatized Generating/Operating Plants

Name of Plant	Rated Capacity (MW)	Location	Bid Date	Winning Bidder	Winning Bid Price (Million US\$)
Talomo	3.5	Davao	25 March 2004	Hydro Electric Development Corp.	1.37
Agusan	1.6	Agusan	04 June 2004	First Generation Holdings Corp.	1.53
Barit	1.8	Camarines Sur	25 June 2004	People's Energy Services Inc.	0.48
Cawayan	0.4	Sorsogon	30 September 2004	Sorsogon II Electric Cooperative, Inc.	0.41
Loboc	1.2	Bohol	10 November 2004	Santa Clara International Corp.	1.43
Pantabangan-Masiway	112	Nueva Ecija	06 September 2006	First Generation Hydro Corp.	129.00
Magat	360	Isabela	14 December 2006	SN Aboitiz Power	530.00
Masinloc	600	Zambales	26 July 2007	Masinloc Power Partners Ltd.	930.00
Ambuklao-Binga	175	Benguet	28 November 2007	SNAP Hydro	325.00
Tiwi-Makban 747.53		Albay, Laguna/Batangas	30 July 2008	AP Renewables	446.89
Panay and Bohol *	168.5	Iloilo, Bohol	12 November 2008	SPC Power Corporation	5.86
Amlan	0.8	Negros Oriental	10 December 2008	ICS Renewables Inc.	0.23
Calaca Coal-Fired Thermal Power Plant	600.0	Batangas	08 July 2009	DMCI Holdings Inc.	361.71
PB 117*	100	Campostela Valley	31 July 2009	Therma Marine	14.00
PB 118*	100	Agusan Del Norte	31 July 2009	Therma Marine	16.00
Limay*	620	Limay, Bataan	26 August 2009	San Miguel Energy Corporation	13.50
Palinpinon-Tongonan Geothermal Power Plants	305.0	Negros Oriental, Leyte	02 September 2009	Green Core Geothermal Inc.	220.00
Naga LGBT*	55	Panay	16 October 2009	SPC Power Corporation	1.01
Angat Hydro	218.0	Norzagaray, Bulacan	28 April 2010	Korean Water Resources Development Corp.	440.88
BacMan	150	Albay/Sorsogon	05 May 2010	Bac-Man Geothermal Inc.	28.25
	•	TOTAL PHILIPPINES	4,348.33		\$3,422.15
		Total Luzon Visayas	3,468.23		\$3,419.25
	TOT	AL MW to be privatized	3,778.23		
Level	of Privatizatio	on in Luzon and Visayas	91.80%		

*Turned-over IPPs Source: PSALM

Annex 2 – Status of NPC/PSALM DAA Applications

			Amount Applied		Amount
Case No.	Test Period	Date of Filing	PhP/kWh	Status	Approved
					PhP/kWh
			Luzon - 0.0133	Final Approval on	L-0.5611
Case No. 2008-031 RC	July to December	June 3, 2008	Visayas - 0.0599	December 15, 2008	V – 0.0599
9 th GRAM	2006	June 3, 2006	Mindanao- 0.4077	(Existing rate for	M - 0.4007
				Vis/Min)	
C N- 2000 022 DC	Internal Description		L - (0.1820) V - 0.0279	Final Approval on December 15, 2008	L - (0.1820) V - 0.0279
Case No. 2008-032 RC 8 th ICERA	July to December 2006	June 3, 2008	M - (0.0042)	(Existing rate for	M - (0.0042)
o ICERA	2000		WI - (0.0042)	Vis/Min)	W1 - (0.0042)
G N 2000 012 DG	7 2007		L - (0.1921)	PA on December 15,	L - (0.2358)*
Case No. 2008-042 RC 10 th GRAM	January 2007 to	July 29, 2008	V - 0.4849	2008	,
10 GRAM	April 2008	-	M - 0.0801	(For Luzon grid only)	
Case No. 2008-043 RC	January 2007 to		L - (0.3689)	PA on December 15,	L - (0.3242)**
9 th ICERA	April 2008	July 29, 2008	V - 0.0522	2008	
,			M - (0.0461)	(For Luzon grid only)	
Case No. 2008-053RC	M 2000	September 25,	L – 0.4487 V – 0.3763	PA on December 15, 2008	
11 th GRAM	May to June 2008	2008	W - (0.0975)	(For Luzon grid only)	
			L -(0.4772)	PA on December 15,	
Case No. 2008-054 RC	May to June 2008	September 25,	V - 0.1270	2008	
10 th ICERA		2008	M - (0.0424)	(For Luzon grid only)	
			L - 0.7456	PA, January 19, 2009	L - (0.3132)
Case No. 2008-063 RC	July to September	December 16,	V - 0.8114	(Luzon Grid Only -	
12 th GRAM	2008	2008	M - 0.1590	existing rate for	
	2000	2000		Luzon)	
			L - (0.1722)	For final resolution PA, January 19, 2009	L(0.0490)
			V - 0.0023	(Luzon Grid Only –	L(0.0490)
Case No. 2008-064 RC	July to September	December 16, 2008	M - 0.0403	existing rate for	
11 th ICERA	2008		1/1 0.0.00	Luzon)	
				For final resolution	
Case No. 2009-032 RC	October to		L - 0.1967		
13 th GRAM	December 2008	May 25, 2009	V - 0.4120	For resolution	
15 GRIN	Beccinicer 2000		M -(0.0371)		
Case No. 2009-031 RC	October to	M 25 2000	L - (1.9954)	F 1.0	
12 th ICERA	December 2008	May 25, 2009	V - 0.0272 M - (0.0639)	For resolution	
			L - 1.3203		
Case No. 2008-056 RC	January to March	July 29, 2009	V - 1.3136	Hearing on going	
14 th GRAM	2009	2007 27, 2007	M - (0.0625)		
Case No. 2008-055RC	January to March		L - 0.18558		
13 th ICERA	2009	July 29, 2009	V - 0.0246	Hearing on going	
15 ICEM1	2007		M - (0.0327)		
Case No. 2020-003 RC	A 11. T 2000	7 7 2010	L - 0.5608		
15 th GRAM	April to June 2009	January 5, 2010	V - 0.1506 M 0.1130	For hearing	
			M - 0.1130 L - 1.1425		
Case No. 2010-002RC	April to June 2009	January 5, 2010	V - 1.2039	For hearing	
14 th ICERA	7 1pm to sume 2009	January 5, 2010	M - 0.1124	1 of ficulting	
Source: PSALM	1	l		ı.	1

^{*}PA for 10th and 11th GRAM
**PA for 9th and 10th ICERA

$Annex \ 3-Grouping \ for \ PDUs \ under \ PBR$

Group	Entrant	Regulatory Period
A	Manila Electric Company (MERALCO)	July 1, 2007
	Dagupan Electric Corporation (DECORP)	to
	Cagayan Electric Power & Light Company, Inc. (CEPALCO)	June 30, 2011
В	Cotabato Light & Power Company (CLPC)	April 1, 2009
	Iligan Light & Power (ILPI)	to
	Mactan Electric Company (MECO)	March 30, 2013
C	Cabanatuan Electric Corporation (CELCOR)	July 1, 2010
	La Union Electric Company (LUECO)	to
	Tarlac Electric Incorporated (TEI)	June 30, 2014
	Visayan Electric Company (VECO)	
	Ibaan Electric Engineering Corporation (IEEC)	
	Davao Light & Power Company (DLPC)	
D	Angeles Electric Corporation (AEC)	October 1, 2011
	Bohol Light Company, Inc. (BLCI)	to
	Panay Electric Company, Inc. (PECO)	September 30,
	Subic Enerzone Corporation (SEZ)	2015
	San Fernando Electric Light and Power Company	
	(SFELAPCO)	
	Clark Electric Distribution Corporation (CEDC)	

Annex 4 – Status of PDUs Rate Filings under PBR

Group/	Status of PDUs Rate F	
Regulatory Period	Entrant	Status of Rate Filing Under PBR
A July 1, 2007 to June 30, 2011	Manila Electric Company (MERALCO)	 Filed its application (ERC Case No. 2009-057 RC) on August 7, 2009 for the 3rd Maximum Annual Price CAP for Regulatory Year 2010 and the Translation of the MAP (into rates) for RY 2010 On Dec. 14, 2009, the ERC approved its 2010 maximum average price at PhP1.9406, which when capped based on the side constraint provision of the RDWR, can only be set up to PhP1.4917/kWh. On 01 February 2010, the ERC approved its motion for the voluntary deferment for the said approval based on the motion for reconsideration filed on behalf of industrial customers who alleged are being prejudiced in favor of residential customers and asked for a revision of the rate structures.
	Dagupan Electric Corporation (DECORP)	 Granted Provisional Authority on June 1, 2009 for the 3rd Maximum Annual Price Cap for Regulatory Year 2010 and the Translation of the MAP (into Rates) for RY 2010. On March 24, 2010, the revised rate structure for the Regulatory Year 2010 was made permanent.
	Cagayan Electric Power & Light Company, Inc. (CEPALCO)	 The 3rd Maximum Annual Price Cap for regulatory Year 2010 and the Rate Translation of the MAP (into rates) for RY 2010 was granted on June 1, 2009. Said rate was made permanent by ERC on March 24, 2010.
B April 1, 2009 to March 30, 2013	Cotabato Light & Power Company (CLPC)	• On February 10, 2010, ERC has decided on its application for approval of (a) the revised x factor smoothed maximum Average Price (MAP) and performance Incentive Scheme (PIS) for the second regulatory period; (b) recalculated MAP for the regulatory year 2011; and (c) the translation into distribution related rates of different customer classes.
	Iligan Light & Power (ILPI)	• On March 10, 2010, ERC has decided on its application for approval of (a) the revised x factor smoothed maximum Average Price (MAP) and Performance Incentive Scheme (PIS) for the second regulatory period; (b) recalculated MAP for the regulatory year 2011; and (c) the translation into distribution related rates of different customer classes.
	Mactan Electric Company (MECO)	 On February 15, 2010, ERC has decided on its application for approval of (a) the revised x factor smoothed maximum Average Price (MAP) and Performance Incentive Scheme (PIS) for the second regulatory period; (b) recalculated MAP for the regulatory year 2011; and (c) the translation into distribution related rates of different customer classes.
C July 1, 2010 to June 30, 2014	 Cabanatuan Electric Corporation (CELCOR) La Union Electric Company (LUECO) Tarlac Electric Incorporated (TEI) Visayan Electric Company (VECO) Ibaan Electric Engineering Corporation (IEEC) Davao Light & Power Company (DLPC) Bohol Light Company, Inc. (BLCI) Panay Electric Company, Inc. (PECO) Subic Enerzone Corporation (SEZ) San Fernando Electric Light and Power Company (SFELAPCO) Clark Electric Distribution Corporation (CEDC) 	 Filed in various dates in June 2009 its application for approval of its Annual Revenue Requirement (ARR) and Performance Incentive Scheme (PIS) for the Second Regulatory Period commencing on July 1, 2010 and terminating on June 30, 2014 in accordance with the provisions of the Rules for Setting Distribution Wheeling Rates(RDWR). On November 19, 2009, ERC has approved the Draft Determination for the 6 PUs. It was posted in the ERC website on November 25, 2009 for comments. The deadline for the submission of comments was on January 8, 2010. Public consultations were conducted on various dates of January and February of 2010. ERC granted the final decision on all six PUs application for the Annual Revenue Requirement (ARR) and PIS for the regulatory years 2011 to 2014. The Final Determination of said group was posted in the ERC website last March 19, 2010.

Annex 5- Capacity Mix by Grid

PLANT TYPE		eity (MW)	Percent	Share (%)
	Installed	Dependable	Installed	Dependable
Luzon	11,863	10,230	100.00	100.00
Coal	3,849	3,450	32.45	33.72
Oil Based	1,984	1,617	16.72	15.80
Natural Gas	2,831	2,700	23.86	26.39
Geothermal	886	431	7.47	4.21
Hydro	2,280	1,999	19.22	19.54
Wind	33	33	0.28	0.32
Biomass	1	1	0.01	0.01
Visayas	1,818	1,392	100.00	100.00
Coal	196	153	10.76	10.99
Oil Based	615	426	33.85	30.59
Geothermal	964	792	53.05	56.86
Hydro	13	13	0.73	0.94
Biomass	29	9	1.61	0.62
Mindanao	1,929	1,697	100.00	100.00
Coal	232	210	12.03	12.38
Oil Based	594	485	30.81	28.61
Geothermal	103	98	5.35	5.79
Hydro	998	902	51.76	53.16
Solar	1	1	0.05	0.06
Philippines	15,610	13,319	100.00	100.00
Coal	4,277	3,813	27.40	28.63
Oil Based	3,193	2,528	20.46	18.98
Natural Gas	2,831	2,700	18.14	20.27
Geothermal	1,953	1,321	12.51	9.92
Hydro	3,291	2,914	21.09	21.88
Wind	33	33	0.21	0.25
Solar	1	1	0.01	0.01
Biomass	30	10	0.19	0.07

Source: DOE

Annex 6 – Philippines Comparative Generation by Resource, 2008 vs. 2009

		009	1	008	Differe	ence
Plant Type	GWh	Percent Share	GWh	Percent Share	GWh	Percent
Philippines	61,934,432		60,820,985		1,113,447	1.83
Coal	16,476,136	26.60	15,748,794	25.89	727,341	4.62
Oil-based	5,380,666	8.69	4,868,333	8.00	512,333	10.52
Natural Gas	19,886,827	32.11	19,575,855	32.19	310,972	1.59
Geothermal	10,323,847	16.67	10,722,780	17.63	(398,933)	(3.72)
Hydro	9,787,567	15.80	9,842,534	16.18	(54,967)	(0.56)
New RE	64,428	0.10	61,386	0.10	3,042	4.96
Luzon	44,974,855		44,199,534		775,321	1.75
Coal	14,091,376	31.33	13,503,727	30.55	587,649	4.35
Oil-based	1,864,281	4.15	1,928,244	4.36	(63,962)	(3.32)
Natural Gas	19,886,827	44.22	19,575,855	44.29	310,972	1.59
Geothermal	3,515,964	7.82	3,729,921	8.44	(213,956)	(5.74)
Hydro	5,549,227	12.34	5,400,402	12.22	148,825	2.76
Wind	64,428	0.14	61,386	0.14	3,042	4.96
Biomass	2,752	0.01			2,752	n/a
Visayas	8,724,298		8,649,694		74,604	0.86
Coal	822,007	9.42	745,686	8.62	76,321	10.23
Oil-based	1,863,970	21.37	1,664,802	19.25	199,169	11.96
Geothermal	5,984,957	68.60	6,199,159	71.67	(214,202)	(3.46)
Hydro	42,406	0.49	40,047	0.46	2,359	5.89
Biomass	10,957	0.13			10,957	n/a
Mindanao	8,235,278		7,971,756		263,522	3.31
Coal	1,562,753	18.98	1,499,380	18.81	63,372	4.23
Oil-based	1,652,415	20.07	1,275,288	16.00	377,127	29.57
Geothermal	822,926	9.99	793,700	9.96	29,226	3.68
Hydro	4,195,934	50.95	4,402,084	55.22	(206,150)	(4.68)
Solar	1,252	0.02	1,304	0.02	(53)	(4.03)

Source: DOE

Annex 7 – Status of Private Sector-Initiated Projects - Luzon

			Pre	oject						
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/Concerns	Project Status As Of	(C)ommitted/ (I)ndicative
1	CFB Coal-Fired Power Plant, Phase II	Mabalacat, Pampanga	50	Coal	Asia Pacific Energy Corporation	Obtained the DOE Endorsement; awaiting for release of Environmental Compliance Certificate (E CC); Grid Impact Studies completed on November 2003	2010	PEZA approval to be able to sell excess power outside the TECO- SEZ complex	2/20/2008	I
2	Burgos Wind Power Project Unit I - (1 X 6 MW) Unit II - (1 X 40 MW) Unit III - (1 X 40 MW)	Saoit, Burgos, Ilocos Norte	86	Wind	Energy Development Corporation (EDC)	 Financing options are currently being explored Resource validation to be undertaken Bidding activities are ongoing Project estimated cost is US\$ 2.4 Million per MW 	Unit I - 2009 Unit II - 2010 Unit III - 2011		9/16/2009	I
3	Wind Farm Power Project	Gen. Nakar, Quezon Province	50	Wind	Energy World International Ltd	 Already identified proposed site for installing monitoring equipment on going coordination with the DOE-REMB and LGU officials for the setting up of the monitoring equipment 	Mid 2011		9/11/2009	I
4	Liquefied Natural Gas and Combined Cycle Gas Turbine	Pagbilao, Quezon	300	LNG	Energy World International Ltd	 Lease of property for use of the project has been signed with Malory Properties Inc. Initial site investigation and preparation are ongoing Information dissemination on going with LGUs and others for social acceptance 	End 2011		9/11/2009	I
5	2 X 17.5 MW Nueva Ecija Biomass Power Project	San Leonardo, Nueva Ecija	35	Biomass	Green Power Nueva Ecija Philippines, Inc.	 ESA under negotiations with off-takers Land purchased 5.7 Hectares for the power plant and biomass storage area Prelim & Intermediate design of plant finished Biomass supply contract done ECC issued 13 March 2009 SEC Registration 29 Sept 2008 BOI Registration 19 June 2009 	Unit I - 2012 Unit II - N/A		2/2/2010	I

${\bf Annex~7-Status~of~Private~Sector\text{-}Initiated~Projects~-~Luzon}$

			Pro	oject						
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/Concerns	Project Status As Of	(C)ommitted/ (I)ndicative
6	2 X 17.5 MW Pangasinan Biomass Power Project	Pangasinan	35	Biomass	Green Power Pangasinan Philippines, Inc.	 ESA under negotiations with off-takers Land acquisition under negotiation Prelim & Intermediate design of plant finished Biomass supply contract done SEC registration 29 November 2007 (amended 6 October 2008) BOI registration 25 May 2009 ECC - for preparation of Initial Environmental Examination Application of Grid Impact Study submitted to NGCP 	Unit I - 2013 Unit II - N/A		2/2/2010	I
7	30 MW NorthWind Pamplona Project	Pamplona, Cagayan Valley	30	Wind	Northeast Wind Systems - (NEWS)- (NorthWind Power Development Corporation)	Wind measurement activity is still ongoing. Three years of wind measurement has been performed. Awaiting data from PAGASA for year 2009 in order to assess long-term wind regime Entered MOA with Cagelco I and II for a joint cooperation for the development of the project Secured endorsement from the Sangguniang Panlalawigan of the Province of Cagayan Secured endorsement from the Sangguniang Bayan of the Municipality of Pamplona Secured endorsements from the officials of the soon-to-be host barangays of Bidduang, Allasitan and Nagattatan Conducting initial survey of the applied area Submitted documentation of local CENRO office for project evaluation, issuance of ECC, and foreshore lease agreement Estimated cost of project is \$ 75 M	2011		1/6/2010	I
8	40 MW NorthWind Aparri Project	Aparri, Cagayan Valley	40	Wind	Northwind Group of Companies	 Conducting feasibility study Estimated cost of project is \$100 M 	2011		1/6/2010	I

${\bf Annex~7-Status~of~Private~Sector\text{-}Initiated~Projects~-~Luzon}$

			Pre	oject						
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/Concerns	Project Status As Of	(C)ommitted/ (I)ndicative
9	2 X 300 MW Coal-Fired Power Plant	Meriveles, Bataan	600	Coal	GN Power	 Earth moving and civil works at the Site commenced December 7, 2009 and have continued uninterrupted works resulting in the excavation of over 500,000 cubic meters of soil BSP approval of loans was received December 9, 2009 Equity investment documents were signed December 10, 2009 The Connection Asset Construction and Maintenance Agreement (CACMA) and Connection Agreement (CA) were signed January 11, 2010 Signing of loan documents is scheduled for January 18, 2010 Closing and funding of the transaction is scheduled for January 22, 2010 pending receipt of an opinion from the Department of Justice on various issues related to the CACMA Granted ECC by the DENR (April 2007) EPC contract signed (Feb 2009) Signed contracts with 13 DUs and some capacity with contestable markets Contracted 75% of the plant capacity Purchased Land Site (Sept '07) 	4th Qtr. of 2012		6/9/2010	C
10	Tanawon Geothermal Project	Bacman Geothermal Field, Sorsogon	40	Geothermal	EDC	 Geothermal resource is being assessed while discussions with potential EPC contractors and initial civil works are ongoing Project estimated cost is US\$ 4 Million per MW 	2012		9/16/2009	I
11	2 X 150MW Coal-Fired Power Plant	Sitio Naglatore, Cawag, Subic	300	Coal	Redondo Peninsula Energy Inc.	 Received an Environmental Compliance Certificate (ECC) from SBMA Received ECC from DENR last Dec. 2008 EPC under negotiation. Land Lease Agreement w/ SBMA under negotiation. Financing under negotiation. 	DEFERRED Construction	> Deferred construction due to global economic crisis > Commissioning date will be moved to a much later date	12/28/2009	I

${\bf Annex~7-Status~of~Private~Sector\text{-}Initiated~Projects~-~Luzon}$

			Pr	oject						
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/Concerns	Project Status As Of	(C)ommitted/ (I)ndicative
12	17.5 MW Mindoro Biomass Power Project	Mindoro	17.5	Biomass	Green Power Mindoro Philippines, Inc.	 SEC Registration 29 November 2007 Biomass Supply Assessment done Appropriate site under consideration For preparation of Initial Environmental Examination and Registration with the BOI Owners Engineer and EPC Contractor to be selected Application for Grid Impact Study to be prepared 	2017		2/2/2010	I
13	Kanan B1 Hydro Power Project	Gen. Nakar, Quezon Province	145	Hydro	Energy World International Ltd	 Information dissemination on going for social acceptance Payment of water rights annual fee being paid by Energy World Int'l. Close coordination with Gov. Rafael P. Nantes and Mayor Leovigildo Ruzol re: acceptance of the project 	Phase I - End 2012 Phase II - End 2013		9/11/2009	I
14	San Gabriel Power Plant	Sta Rita, Batangas City	550	Natural gas	First Gen Holdings Corp and BG Consolidated Corp.	Obtained the DOE Endorsement and Environmental Compliance Certificate Grid Impact Studies completed on 24 May 2007	2013	> Target of completion was moved from 2011 to 2013 due to global economic crisis	1/4/2010	I
15	2 X 135 MW Coal Fired Power Plant	Brgy. Puting Bato West, Calaca, Batangas	270	Coal	Trans Asia Oil and Energy Development Corporation (TAOil)	 Feasibility Study Stage Initially, only 1 X 135 MW will be installed; however, provisions shall be made for ease of installation of a 2nd 1 X 135 MW unit in the future; In close negotiations with a Chinese equipment supplier for the EPC contract for the construction of the plant; Environmental Compliance Certificate (ECC) applied; Public Scoping completed last July 2009; Formal Environmental Impact Statement (EIS) has been prepared for submission to the Environmental Management Bureau (EMB) of the DENR. 	2013		1/4/2010	I
16	Kalayaan Pumped Storage Power Plant III (CBK Expansion)	Lumban, Laguna	360	Hydro	J Power and Sumitomo Corp.	Grid Impact Studies completed by TRANSCO ECC acquired April 3, 2009	2014		1/4/2010	I
17	Mauban Wind Farm Project	Mauban, Quezon	12	Wind	Quezon Power Phils.	Gathering of registration requirements	2014		1/22/2010	I
18	Quezon Power Expansion Project	Mauban, Quezon	500	Coal	Quezon Power Phils.	Development stage	2016		1/22/2010	I

Annex 7 – Status of Private Sector-Initiated Projects - Luzon

			Pr	oject						
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/Concerns	Project Status As Of	(C)ommitted/ (I)ndicative
19	Rangas Geothermal Project	Bacman Geothermal Field, Sorsogon	40	Geothermal	EDC	 Ongoing pre-feasibility activities Project estimated cost is US\$ 4 Million per MW 	September 2015		9/16/2009	I
20	Balintingon River Multi- Purpose Project	General Tinio, Nueva Ecija	30	Hydro	National Irrigation Administration	 MOU for the conduct of study and submission of proposal between NIA and Green Square Properties Corporation and Korea Water Resources Corporation Concord Pacific Investment Holdings Limited, Inc. (Concord PIHLI) submitted a draft MOA to undertake the feasibility study last 18 November 2009 	2015		1/6/2010	Ĭ
21	Manito-Kayabon Geothermal Project	Bacman Geothermal Field, Sorsogon	40	Geothermal	EDC	 Ongoing pre-feasibility activities Project estimated cost is US\$ 4 Million per MW 	February 2016		9/16/2009	I
22	Pagbilao Expansion	Pagbilao, Quezon	400	Coal	Team Energy Corporation	 Conducting further studies in view of current events, including the bidding that will be conducted by PSALM for the IPP Administrator for the 700 MW contracted capacity of the Pagbilao Power Substation, and the world-wide financial crisis; Continue constant discussion w/ local Gov't. Officials for possible settlement of real property tax issue. Therma Luzon, Inc. (TLI) appointed as the IPP Administrator 	N/A		12/28/2009	I
23	Pantabangan Expansion	Pantabangan, Nueva Ecija	78	Hydro	First Gen Hydro Power Corp.		N/A		2/20/2008	I
24	Pagudpud Wind Power Project	Pagudpud, Ilocos Norte	40	Wind	EDC	Awaiting DOE's approval of the Pre-Commercial Contract (PCC)	N/A		9/16/2009	I

Total Committed Rated Capacity 600.00

Total Indicative Rated Capacity 3,448.50

Total Rated Capacity 4,048.50

			Pr	oject					Project	
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/ Concerns	Status As Of To Date	(C)ommitted/ (I)ndicative
1	3 X 82 MW CFB Power Plant Expansion Project Unit I - (1 X 82 MW) Unit II - (1 X 82 MW) Unit III - (1 X 82 MW)	Brgy. Daanlungsod, Toledo City, Cebu	246	Coal	Cebu Energy Development Corporation (Global Business Power Corp)	 Groundbreaking on January 2008 Engineering Procurement & Construction contract signed January 2008 ECC for the 138 KV Double Circuit Transmission Line Project granted July 10, 2009 Overall site construction progress is 88.5% UNIT 1 synchronization to grid is June 9, 2010, start of reliablility run is from May 26 - June 25, 2010 UNIT 2 reliability run from May 26 - June 25, 2010 UNIT 3 accomplishment is 55%, sychronization date is Jan. 2011 	Unit I - March 2010 Unit II - June 2010 Unit III - Jan 2011		6/11/2010	С
2	Cebu Coal-Fired Power Plant, Phils Unit I - (1 X 100 MW) Unit II - (1 X 100 MW)	Naga, Cebu	206	Coal	KEPCO SPC Power Corporation (KSPC)	 Start of construction December 2007 Total accomplishment as of March 2010 is 85.41% from 81.35% as of January 2010 ERC approved the PSCs for the following off-takers: NORECO 1 & 2, CENECO, NOCECO and VRESCO Awaiting for final approval from ERC for CEBECO 1 & 2, and MECO Plant construction is currently proceeding, with Doosan Heavy Industries as EPC Contractor Signed PSC with an aggregator (iN2) Contracted 171 MW out of the 200 MW installed capacity 	Unit 1 - Feb. 2011 Unit 2 - May 2011		3/18/2010	С
3	2 X 17.5 MW Panay Biomass Power Project	Brgy. Cabalabaguan, Mina, Iloilo	35	Biomass	Green Power Panay Philippines, Inc.	 BOI registration 19 June 2009 ESAs with local cooperatives ILECO 1 & ILECO II signed; preparation for ERC presentation on-going Land acquisition under negotiation Stakeholders' consultation completed ECC issued 6 July 2009 Preliminary & Intermediate design of plant finished Biomass supply contract done SEC registration 19 June 2009 Capitalization Cost Php 193M Application for Grid Impact Study submitted to NGCP 	Unit I - 2011 Unit II - 2012		2/2/2010	С

No.	Name of the Project	Location	Rated Capacity (MW)	roject Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/ Concerns	Project Status As Of To Date	(C)ommitted/ (I)ndicative
4	Nasulo Geothermal	Nasuji, Valencia, Negros Oriental	20	Geothermal	Energy Development Corporation (EDC)	 Ongoing discussions on power plant facilities and technical consultancy contracts Project estimated cost is US\$ 3 Million per MW 	2011		9/16/2009	С
5	2 X 82 MW CFB Power Plant Unit I - (1 X 82 MW) Unit II - (1 X 82 MW)	Brgy. Ingore, La Paz, Iloilo	164	Coal	Panay Energy Development Corporation (Global Business Power Corp)	 Land acquired on August 2008 Land conversion approved by Department of Agriculture on July 2009 ECC acquired August 2008 Test Pile started June 1, 2009 Piling and other civil works currently ongoing The project will be embedded to PECO but will also sell to other DUs PEDC will finance its connection to TL as agreed with NGCP 	Unit I - Sept 2010 Unit II - Dec 2010		8/27/2009	С
6	Aklan Hydropower Project	Libacao, Aklan	41	Hydropower	CalEnergy International Ltd.	 Signed MOU with Provincial Governor of Aklan To conduct project feasibility study 	July 2012	> To enter PPA with seven DUs in Panay	1/13/2009	I
7	17.5 MW Negros Biomass Power Project Phase 2	Negros	17.5	Biomass	Green Power Negros Philippines, Inc.	 SEC Registration 14 January 2010 Biomass Supply Assessment done Appropriate site under consideration For preparation of Initial Environmental Examination and Registration with the BOI Owners Engineer and EPC Contractor to be selected Application for Grid Impact Study to be prepared 	2014		2/2/2010	I
8	Villasiga HEP	Sibalom, Antique	8	Hydropower	SUNWEST Water & Electric Co., Inc.	 Permit to cut trees and Road Right of Way for the local roads were approved last November 27, 2009 by Sec. Atienza 25.55 Km. Access Road is 68.28% completed Additional requirements for quarry permit are already on process thru coordination with the DENR Ongoing construction of facilities Ongoing construction of access road Ongoing hauling of heavy equipment to project site 	Dec. 2012		1/4/2010	I
9	Dauin Geothermal	Dauin, Negros Oriental	40	Geothermal	EDC	Geothermal resource is being assessed and initial civil works are ongoing Project estimated cost is US\$ 4 Million per MW	Jan. 2014		9/16/2009	I

	Name of the Project		Pr	oject	Proponent				Project	
No.		Location	Rated Capacity (MW)	Fuel/ Energy Source		Project Status	Target Completion	Issues/ Concerns	Status As Of To Date	(C)ommitted/ (I)ndicative
10	Southern Leyte Geothermal Project (formerly Cabalian Geothermal Project)	Southern Leyte	40	Geothermal	EDC	For validation of resource assessment	2019		9/16/2009	I
11	17.5 MW Samar Biomass Power Project	Samar	17.5	Biomass	Global Green Power PLC	 SEC Registration 29 November 2007 (amended 10 October 2008 Biomass Supply Assessment done Appropriate site under consideration For preparation of Initial Environmental Examination and Registration with the BOI Owners Engineer and EPC Contractor to be selected Application for Grid Impact Study to be prepared 	2015		2/2/2010	I

Total Committed Rated Capacity
Total Indicative Rated Capacity
Total Rated Capacity
835.00

Annex 8 – Status of Private Sector-Initiated Projects - Mindanao

			Pr	oject					D	
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/ Concerns	Project Status As Of To Date	(C)ommitted / (I)ndicative
1	Sibulan Hydroelectric Power (Unit 1 - 16.5 MW) (Unit 2 - 26 MW)	Sta. Cruz, Davao del Sur	42.5	Hydro	Hedcor Sibulan, Inc.	 As of January 7, 2010, the project is 83% complete since it started construction on June 25, 2007 12 MW already online providing power to Davao Light Transmission Service Agreement with the NGCP signed as of 2008 	Unit 1 - April 2010 Unit 2 - July 2010	> Certificate of Compliance to be obtained from the ERC	6/11/2010	С
2	Bunker Fired Power Plant		20	Oil	Mindanao Energy Systems, Inc. (MINERGY)	No actions yet on this project, still waiting for the approval by the ERC on the Power Supply Agreement (PSA)	4Q of 2010		1/4/2010	I
3	27.5 MW Tamugan Hydropower Project (20 MW Tamugan Plant & 7.5 MW Panigan Plant)	Baguio District, Davao City	27.5	Hydropowe r	HEDCOR	 Obtained certificate of endorsement from the DOE Registered as a pioneer project with the BOI Completed Grid Impact Study by the TransCo Signed a MOA with the Indigeneous People Issued a Free and Prior Informed Consent (FPIC) by the National Commission of Indigenous Peoples (NCIP) December 2005 Ready for construction Negotiated with the landowners affected by the hydropower development Signed MOAs with barangays, Wines, Tawan-Tawan, Tambobong, Tamugan Proper, Carmen, Cadalian, Tamayong Secured ECC from DENR last March 2009 Favorable decision from National Water Resources Board (NWRB) last July 2009 	July 2011		1/7/2010	I
4	Agus 3 Hydroelectric Plant	Lanao del Norte	225	Hydropowe r	Lanao Hydropower Development Corporation	Udated feasibility study; secured ECC; signed Joint Sales agreement with NPC	2011	Legal issue on whether NPC can enter into Sales Agreement with the proponent.	2/20/2008	I
5	2 X 100 MW Southern Mindanao Coal Fired Power Station	Maasim, Sarangani	200	Coal	Conal Holdings Corp.	Construction of Phase I (100MW) starts at the end of the first quarter of 2010 Construction of Phase II (100MW) will start within 18 to 24 months after the commencement of construction of Phase I Project Cost is \$450 M ECC issued last April 2009	Phase I - 2012 Phase II - 2014		11/19/2009	I

Annex 8 – Status of Private Sector-Initiated Projects - Mindanao

			Pr	oject					ъ	
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/ Concerns	Project Status As Of To Date	(C)ommitted / (I)ndicative
6	Cabulig Mini- Hydro Power Plant	Plaridel, Jasaan, Misamis Oriental	8	Hydro	Mindanao Energy Systems, Inc. (MINERGY)	 RE Service Contract was already secured from the DOE Civil work construction started in November 2009 Supply of electro-mechanical equipment for awarding (due diligence to prospective supplier already conducted); target awaiting date is January 2010 	June 2011		1/4/2010	С
7	17.5 MW Cagayan de Oro Biomass Power Project	Cagayan de Oro	17.5	Biomass	Green Power Cagayan de Oro Philippines, Inc.	 SEC Registration 14 January 2010 Biomass Supply Assessment done Appropriate site under consideration For preparation of Initial Environmental Examination and Registration with the BOI Owners Engineer and EPC Contractor to be selected Application for Grid Impact Study to be prepared 	2013		2/2/2010	I
8	Tagoloan Hydropower	Bukidnon	68	Hydro	Luzon Hydro Corp.	Completed feasibility study	2012		2/20/2008	I
9	17.5 MW Davao Biomass Power Project	Davao	17.5	Biomass	Global Green Power PLC	 SEC Registration 14 January 2010 Biomass Supply Assessment done Appropriate site under consideration For preparation of Initial Environmental Examination and Registration with the BOI Owners Engineer and EPC Contractor to be selected Application for Grid Impact Study to be prepared 	2017		2/2/2010	I
10	Mindanao 3 Geothermal	Kidapawan, North Cotabato	50	Geothermal	EDC	 Project schedule (Dec. 2011) was moved due to the financial crisis and operational priorities Ongoing resource assessment Project estimated cost is US\$ 4 Million per MW 	July 2014		9/16/2009	С
11	5 MW Camiguin Island Wind Power	Camiguin	5	Wind	EDC	In the pre-feasibility stage	N/A		9/16/2009	I

Total Committed Rated Capacity

100.50

Annex 8 – Status of Private Sector-Initiated Projects - Mindanao

			Project						Project	
No.	Name of the Project	Location	Rated Capacity (MW)	Fuel/ Energy Source	Proponent	Project Status	Target Completion	Issues/ Concerns	Project Status As Of To Date	(C)ommitted / (I)ndicative

Total Indicative Rated Capacity

580.50

Total Rated Capacity 681.00

Annex 9 - ERC-Approved Capital Expenditure Projects (November 2008 - April 2009)

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (Million PhP)	DATE APPROVED
Nueva Ecija II Electric Cooperative, Inc. AREA 1 (NEECO II - AREA 1)	Construction of One (1) Unit of 5 MVA Substation at Aliaga, Nueva Ecija	Construction of one (1) unit of 5 MVA substation with a three hundred (300) meter 69 kV distribution tapping line including accessories and equipment	To improve power reliability and address load growth	19.40	3-Nov-09
Maguindanao Electric Cooperative, Inc. (MAGELCO)	Repair and Restoration of 5 MVA Transformer	Repair and restoration of a 5 MVA Transformer at the Salbu Substation including the rewinding, reconditioning and commissioning of 5 MVA power transformer, upgrading of feeder protection, improvement of grounding system, rehabilitation of main bus structures, and compliance with the requirement of the National Grid Corporation of the Philippines (NGCP)	To restore electric power in the eleven (11) municipalities affected To provide safe, efficient and reliable electric service	8.38	3-Nov-09
	Acquisition and Installation of Sulfur Hexaflouride (SF6 Circuit Breakers	Acquisition and installation of SF6 Circuit Breaker for the Bani and Tara Substations replacing a currently installed power fuse	To improve power reliability and comply with the provisions of the Philippine Grid Code (PGC)	5.59	
Pangasinan I Electric Cooperative, Inc. (PANELCO I)	Acquisition of a 69 kV Sub- transmission Line	Acquisition of the 43.51 km. Labrador-Bani 69 kV subtransmission line	To maintain network service delivery not directly dictated by demand growth To address load growth and higher power voltage demands	5.93	7-Dec-09
	Construction of 10 MVA Power Transformer and Equipment including a 69 kV Sub-transmission Line	Construction and Installation of a 10 MVA power transformer and equipment, double circuit line, 69 kV subtransmission line from Palamis, Alaminos City to a proposed substation at Dasol, Pangasinan	To address load growth and higher power voltage demands	93.05	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (Million PhP)	DATE APPROVED
	Acquisition and Installation of Vacuum Circuit Breakers	Acquisition and installation of vacuum circuit breakers for the Bani Substation feeders	To provide standard protection of equipment due to overloading and short circuits To reduce interruption frequency	4.40	
	Replacement of an Existing Distribution Transformer by a New Transformer- Phase 1	Replacement of an existing distribution transformer by a new transformer-phase 1	To reduce system loss	18.13	
Zamboanga del Sur I Electric Cooperative, Inc. (ZAMSURECO I)	Construction of a New 10 MVA San Jose Substation	Design, supply, delivery, construction, installation and commissioning of a 10 MVA 69/13.2 kV outdoor type with on-load tap changer substation including ancillary equipment to be installed at Barangay San Jose, Pagadian City, Zamboanga del Sur	To accommodate the increasing demand for electricity service, particularly for large commercial/industrial customers that have already established commercial operations at Area II in Pagadian City To provide reliable, efficient, quality and sufficient supply of electric service in its fast growing customer base	23.03	16-Nov-09
Tarlac Electric Incorporated (TEI)	Rehabilitation and Extension of 69 kV Line	The rehabilitation and extension of the 69 kV line consist of two sub-projects, namely: 1) rehabilitation of the existing 69 kV line from Luisita Industrial Park (LIP) Substation to Avantex; and 2) line extension from Avantex to Luzon Corporation (LuzCor) stretching approximately 1.85 kilometers (kms.) using a single circuit #795 MCM Aluminum Carbide Steel Reinforced (ACSR) conductor with an overhead ground line protection	To improve the overall system reliability, voltage regulation, and reduction of system loss	5.10	18-Feb-10

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (Million PhP)	DATE APPROVED
	Installation of two (2) 69 kV Feeder Breakers	Installation of tow (2) 69 kV power circuit breakers for the LIP additional feeder breakers with current rating of 1200 amperes (amps.). Each breaker has installed accessories of six (6) bushing Current Transformers (CTs) for monitoring and protection	To comply with the provisions of the Philippine Grid Code (PGC)	8.83	
	Construction of a new 13.8 kV Primary Line Feeder	Construction of a new 13.8 kV primary line feeder from San Rafael substation to San Roque Shoemart (SM) Mall, Tarlac using a three (3) phase line of 1-336.4 MCM ACSR conductor two (2) kms. long	To address load growth	1.51	
	Rehabilitation and Restoration of Damaged Distribution Lines	Rehabilitation and restoration of damaged distribution lines	To provide adequate, safe, efficient and reliable electric service	6.66	
	Expansion and Extension of Primary Lines	The expansion/extension of primary lines included the construction of new lateral lines, installation of service dropwires and kilowatthour (kWh) billing meters	To extend electric services to existing and potential consumers	0.56	
Romblon Electric Cooperative, Inc.					15-Feb-10
(ROMELCO)	Rehabilitation and Upgrading of Distribution Lines	Rehabilitation and upgrading of distribution lines, conversion of lines from single phase to three (3) phase circuits, reconductoring, replacement of meters and meter clustering and acquisition and installation of additional distribution transformers	To reduce primary line losses and voltage drop to improve feeder load balancing	30.46	
	Installation of Service Dropwires and Kilowatthour (kWh) Meters (Add- on Projects)	Installation of service dropwires and Kilowatthour (kWh) meters	To extend electric services to existing and potential consumers	18.97	

APPLICANT	PROJECT	DESCRIPTION	RATIONALE	PROJECT COST (Million PhP)	DATE APPROVED
	Procurement of Logistical Support Equipment	Procurement of necessary tools, vehicles and communication equipment	To improve process and analysis of technical data and mobility To promote reliability and efficiency	14.43	
	Construction of Main and Sub- Offices	Construction of Main and Sub-Offices in the Islands of Romblon and Sibuyan, respectively	To promote better customer service	9.60	
	The Construction of a 30 MVA Substation	Construction of a 30 MVA Substation in Sitio Tambisan, Manoc-Manoc, Boracay Island	To address the increasing demand in the Municipality of Malay, Aklan and Boracay Island	47.92	
Aklan Electric Cooperative, Inc. (AKELCO)	The Construction of the 69 kV Overhead Transmission Line and Tapping Point Switchyard	Construction of a 69 kV Overhead Transmission Line and Tapping Point Switchyard for Connection to Caticlan Cable Terminal Station (CTS)	To address the increasing demand in the Municipality of Malay, Aklan and Boracay Island	9.18	20-Apr-10
(AKEECO)	The Construction of the New 13.2 kV Distribution Line	Construction of a new 13.2 kV distribution line using 69 kV materials from TRANSCO	Reduction of system loss and improvement of voltage variation	20.47	
	The Acquisition of a 69 kV Submarine Cable	Acquisition of TRANSCO's 69 kV submarine cable including the connection facilities and real properties	To address the insufficient line capacity of the existing submarine cable	108.17	
			TOTAL	459.77	