

## 2013 ACCOMPLISHMENT REPORT

The National Power Corporation, despite the challenge of limited financial resources and lack of borrowing authority manages to sustain its financial performance. In 2013, it posted a Net Operating Income (NOI) of P1.49 Billion. The NOI is inclusive of the approved National Government subsidy to fund the 2013 capital outlay and rehabilitation of the damaged facilities by super typhoon "Yolanda" in the aggregate amount of P988 Million, which is net of the P83 Million reimbursement of NPC advances for the preservation and maintenance of the Bataan Nuclear Power Plant for the periods CY 2011 and CY 2012. If the P988 Million National Government subsidy obtained in 2013 shall be excluded to make an equal comparison with 2012, the resulting net amount will be P505 Million. This is better than the previous 2012 NOI of P398 Million. The difference or increase of P107 Million was attributable to the combined positive impact of increase in revenue from the Universal Charge and the decrease in fuel cost and savings on manpower-related expenses, which have been partly offset by the effect of higher subsidy for the New Power Provider (NPP) because of the commercial operation in 2013 of DMCI-Palawan, Mindoro Grid Corporation, Eco Market Solutions and Calamian Island Power Corporation.

In 2013, the total cash collections from the power customers reached P2.1 Billion. The overall average collection efficiency in Luzon, Visayas and Mindanao outside the BASULTA areas (Basilan, Sulu, Tawi-tawi) was almost 97% or 10% better than the previous year. On the other hand, the collection efficiency if inclusive of the BASULTA customers rose by 7% from the 42% level in 2012. This was the outcome of the Management-initiated dialogue among NPC, Department of Energy (DOE), National Electrification Administration (NEA), BASULTA Electric Cooperatives and the local government units.

The improved financial performance and cash collections had alleviated the sourcing of working funds for the efficient operation and upkeep of the plants. As we propel forward, we are hopeful that we will continuously sustain the financial turn-around amidst challenges by fully executing our strategies for growth.

## **SMALL POWER UTILITIES GROUP**

The Small Power Utilities Group or SPUG, the missionary electrification arm of NPC, currently manages 298 plants in 231 service areas nationwide. SPUG's dependable capacity of 244 MW in 2013 serviced 39 electric cooperatives and 10 LGUs. NPC provided power to 3,128 barangays which translates to 755,862 households benefiting from the services of SPUG.

In 2013, NPC installed a total of 16,295 kW of new and augmentation capacities in 12 different power plants and areas. These included the following:

- 12 gensets with a total capacity of 7,200 kW were added to 7 existing power plants and barges.
- 3 new mini-grids in 3 different formerly un-electrified areas with a total capacity of 95 kW were installed.
- 2 new rental gensets with a total capacity of 9,000 kW were put on line in 2 existing plants experiencing deficient capability.

## **Capacity Addition in Existing Areas**

Of the 14 x 600 kW gensets programmed to be procured by NPC for various SPUG plants, a total 10 units (6,000 kW) were installed in 2013 as follows:

In Luzon, 6 units (3,600 kW) were installed in Basco, Casiguran and Lubang DPPs and PB 109. In Visayas, 3 units (1,800 kW) for PB 116 were added in Siquijor. While in Mindanao, 1 x 600 kW was installed in Kalamansig DPP.

Table 1

Plant Name	Location	Сар	acity Ac	ldition	Installation/Operation	
1 mil Name	Location	Qty.	kW	W Total	Date	
LUZON						
Basco DPP	Batanes	3	600	1,800	18 December 2013	
Casiguran DPP	Aurora	1	600	600	07 December 2013	
Lubang DPP	Occidental Mindoro	1	600	600	11 December 2013	
PB 109	Tablas	1	600	600	06 December 2013	
VISAYAS						
PB 116	Siquijor	3	600	1,800	23 December 2013	
MINDANAO						
Kalamansig DPP (PB 111)	Sultan Kudarat	1	600	600	01 December 2013	
Total		10		6 000	<u> </u>	

Total 10 6,000

#### New Mini-Grids

Construction of 3 new mini-grids with an aggregate capacity of 95 kW was completed in November 2013. The 3 mini-grid plant were ready for commercial operation but were put on hold pending availability of manpower to operate said plants. Also, the installation of distribution lines - which is the responsibility of the concerned electric cooperative in the area – was only completed in one (1) area by the end of 2013.

In Brgy. Toytoy, Palumbanes Island, Caramoran, Catanduanes, about 249 households are expected to benefit from its new 1 x 20 kW minigrid plant in the area. Construction of distribution lines and upgrading by FICELCO is ongoing. While in Brgy. Atulayan, Sagñay, Camarines Sur, about 147 households shall benefit from its new 1 x 15 kW minigrid plant in the area. Construction of distribution lines by CASURECO IV is likewise ongoing.

Table 2

Plant Name	Location	Capa	city	Installation Date	
2 24424 2 44422	20041011	Quantity kW			
LUZON					
Palumbanes DPP	Catanduanes	1	20	November 2013	
Atulayan DPP	Camarines Sur	1	15	November 2013	
VISAYAS					
Cabul-an DPP	Bohol	1	60	November 2013	

**Total** 3 95

In the Visayas - particularly in Brgy. West Cabul-an, Cabul-an Island, Buenavista, Bohol - about 753 households are set to enjoy electricity for the first time with its new 1 x 60 kW mini-grid plant in the island. The installation of distribution lines was completed by BOHECO II in 2013.

## Rental of Gensets as Replacement for the Dry-docking of Power Barges

In order to have reliable supply of electricity, the capacities of Power Barges (PBs) scheduled for dry-docking works have to be replaced. Two (2) of the PBs were scheduled to be dry-docked on the last quarter of the year, hence, the need to rent gensets to augment the capacities of the land-based plants in Occidental Mindoro and Basilan areas.

Table 3

		Сара	ncity	
Plant Name	Location	Quantity	kW	Start of Contract Period
LUZON				
San Jose S/S	Occ. Mindoro	1	4,000	05 December 2013
MINDANAO				
Basilan DPP	Basilan	1	5,000	04 September 2013

Total 2 9,000

## MILESTONES IN THE PRIVATIZATION OF SPUG OPERATIONS

## Private Sector Participation Program

On January 26, 2004, the DOE issued Department Circular No. 2004-01-001, "Prescribing the Rules and Procedures for Private Sector Participation in Existing NPC-SPUG Areas". The DOE issued the Circular to serve as a set of guidelines and procedures to guide and encourage the private sector to participate in existing NPC-SPUG areas. The Circular took effect on February 12, 2004.

As of December 31, 2013, 8 of the first 16 areas (14 First—Wave Areas plus Busuanga Island and Casiguran, Aurora) opened for Private Sector Participation (PSP) already have 14 New Power Providers (NPP) that are in operation commercially:

Table 4

Area	NPP	Installed Capacity
	Power One	9 MW Bunker
Oriental	Ormin Power	6.4 MW Bunker
Mindoro	Mindoro Grid Corp (MGC)	10 MW Diesel
	Linao Mini Hydro	2.1 MW Hydro
Mainland	Palawan Power Generation (PPGI)	19 MW Bunker
Palawan	Delta P	16 MW Bunker
	DMCI	29.3 MW Diesel
	Catanduanes Power Generation (CPGI)	3.6 MW Bunker
Catanduanes	Sunwest Water and Electric (SUWECO)	3.6 MW Hydro
Bantayan Island	Bantayan Island Power Corp. (BIPCOR)	8.3 MW Bunker
Masbate	DMCI	15.6 MW Bunker 5.6 MW Diesel
Busuanga Island	Calamian Island Power Corporation (CIPC)	Busuanga – 0.70 MW Diesel
Romblon	Cantingas Mini-Hydro	0.90 MW Hydro
Aurora	Eco Market Solutions, Inc. (EMS)	0.25 MW Biomass

Target commercial operation of CIPC's power station in Busuanga (0.70 MW) and Coron (7.26 MW) was originally set for May 26, 2014. However, due to the passage of typhoon "Yolanda", CIPC and the Busuanga Island Electric Cooperative, Inc. (BISELCO) agreed to commission the Busuanga Power Station and declared early commercial operation on December 13, 2013. The commercial operation of the 7.26 MW Coron Power Station will commence on May 26, 2014 (not included in Table 4).

On December 01, 2012, the Aurora Electric Cooperative, Inc. (AURELCO) entered into a Power Supply Agreement (PSA) with Eco Market Solutions, Inc. (EMS) for the supply of electricity in Dinalungan, Casiguran, Dilasag and Dinapigue (DiCaDiDi) areas in the province of Aurora thru the installation of biomass gasification power plant. The Biomass plant will use coconut shells and husks, corn cobs, rice husks, wood branches and twigs as fuel.

EMS Biomass plant has capacity of 0.25 MW (Phase I) and was commissioned in May 2013. The plant, however, was damaged by typhoon "Labuyo" in August 2013 and has not been operational until the present time.

The Tablas Island Electric Cooperative, Inc. (TIELCO) and the Province of Siquijor Electric Cooperative, Inc. (PROSIELCO) were the latest Distribution Utilities (DUs) that conducted Competitive Selection Process (CSP) for their respective NPPs. Activities for the takeover of SPUG's generation function in these islands are in different stages of completion. Also, Palawan Electric Cooperative, Inc. (PALECO) started conducting CSP for El Nido and Taytay areas but decided to put it on hold temporarily due to typhoon "Yolanda" which required PALECO to implement the rehabilitation of the damaged distribution lines. PALECO is expecting that El Nido and Taytay will be privatized by 2015.

The Marinduque Electric Cooperative, Inc. (MARELCO), Romblon Electric Cooperative, Inc. (ROMELCO), Tablas Island Electric Cooperative, Inc. (TIELCO) and Basilan Electric Cooperative, Inc. (BASELCO) conducted CSPs sometime in 2006 to 2008 and PSAs were signed. 3i Powergen (for Marinduque, Romblon and Tablas) and Coastal Power (for Basilan), however, failed to deliver contractual obligations.

As of the end of 2013, only three areas remain where there is no initiative on the part of electric cooperative to conduct a CSP for NPP. These are: Camotes, Tawi-Tawi and Sulu.

For areas with outstanding CSP/NPP issues and areas with no interested private power providers, SPUG will continue to pursue the power development program. This is on top of supplying the electricity requirements of the consumers delivered in the most efficient and reliable means possible despite SPUG's financial constraints.

## PSP Qualified Third Party (QTP) Program

On June 18, 2004, the DOE issued Department Circular No. 2004-06-006, "Prescribing the Qualification Criteria for the Qualified Third Party Pursuant to Section 59 of "The Electric Power Industry Reform Act of 2001," and its Implementing Rules and Regulations". The Circular was issued to promulgate the guidelines setting out the qualification criteria for the determination of QTPs that may be authorized to participate in missionary electrification in remote and unviable areas that the franchised DU is unable to service.

Table 5

Area	QTP	Installed Capacity		
Rio Tuba, Bataraza, Palawan	Powersource Phils., Inc.	3 x 350 kW Diesel		
Malapascua Island, Cebu	(PSPI)	2 x 350 kWDiesel		

The first ever QTP Service and Subsidy Contract (QSSC) were signed on July 18, 2008 by then NPC President, Cyril C. del Callar and PSPI CEO, Frederick E. LaCroix for the supply of electricity in Brgy. Rio Tuba in Bataraza, Palawan. PSPI provides 24-hour electricity service in Rio Tuba.

In Malapascua Island, PSPI provides electricity service using 2 x 350 kW diesel gensets where as early as 2009, it was already selected by the Cebu II Electric Cooperative, Inc. (CEBECO) to supply electricity in the area. PSPI filed their application for the approval of their QTP Service and Subsidy Agreement (QSSA) with NPC to the Energy Regulatory Commission (ERC) last December 27, 2013.

# Other SPUG-Related Developments: Status of Power Supply Agreements (PSAs)

In total, SPUG has to execute 49 PSAs with various ECs/LGUs nationwide. As of the end of 2013, 44 PSAs or 90% have been accomplished. The remaining 5 PSAs (FICELCO, CAGELCO II (LGU-Calayan), BATELEC II, ROMELCO, CASURECO IV) or 10% of the total are in different stages of completion. PSA with PROSIELCO was finally completed in 2013.

# 2014 Targets and Work Program

## **Capacity Generation Projects**

## **Summary**

A total of 15,825 kW or 15.825 MW of additional capacity is programmed for 2014 for existing power plants of SPUG nationwide. Capacity addition projects will account for 100% of new capacities in 2014 as plants in New Areas (2 x 300 kW Pangutaran DPP in Sulu and 2 x 200 kW Languyan DPP in Tawi-Tawi) are not expected to commercially operate until early 2015.

Table 6

Projects	Capacity (kW)	Targets
Capacity Addition		
A. 14 x 600 kW Project (remaining)	2,400	1st and 2nd Quarter 2014
B. 300 kW (and Below) Project	4,425	3 <sup>rd</sup> Quarter 2014
C. 10 x 600 kW Project	6,000	4 <sup>th</sup> Quarter 2014
D. Additional Capacity for Marinawa DPP	3,000	4 <sup>th</sup> Quarter 2014

15,825

# **Capacity Addition**

## A. 14 x 600 kW Project

While the first 10 x 600 kW units of this project were completed in 2013, the remaining:  $1 \times 600$  kW genset for Sitangkai DPP in Tawi-Tawi and  $2 \times 600$  kW genset for PB 113 in Siquijor is expected to be completed in the 1st quarter of 2014; and,  $1 \times 600$  kW Siasi DPP in Sulu is expected to be completed within the  $2^{nd}$  quarter of 2014.

Table 7

Plant Name	Location	Сара	city Addit	Completion of	
		Qty. kW	kW	Total	Installation
MINDANAO					
Sitangkai DPP	Tawi-Tawi	1	600	600	1 <sup>st</sup> Quarter 2014
PB 113	Siquijor	2	600	1,200	1st Quarter 2014
Siasi DPP	Sulu	1	600	600	2 <sup>nd</sup> Quarter 2014

Total 4 2,400

# B. 300 kW (and Below) Project

Table 8

Plant Name	Location	Сар	acity Ad	dition	Target	
1 min rume	Location	Qty.	kW	Total	Tunget	
LUZON						
Itbayat DPP	Batanes	2	100	200	3 <sup>rd</sup> Quarter 2014	
Sabtang DPP	Batanes	2	100	200	3 <sup>rd</sup> Quarter 2014	
CamSur Mini Grid – Quinasalag	Camarines Sur	2	50	100	3 <sup>rd</sup> Quarter 2014	
Camsur Mini Grid-Lahuy	Camarines Sur	1	75	75	3 <sup>rd</sup> Quarter 2014	
Rapu-Rapu DPP	Albay	2	300	600	3 <sup>rd</sup> Quarter 2014	
Batan DPP	Albay	1	300	300	3 <sup>rd</sup> Quarter 2014	
Cagayancillo DPP	Palawan	2	100	200	3 <sup>rd</sup> Quarter 2014	
J. P. Rizal DPP	Palawan	1	300	300	3 <sup>rd</sup> Quarter 2014	
Paluan DPP	Occ. Mindoro	1	300	300	3 <sup>rd</sup> Quarter 2014	
VISAYAS						
Almagro Mini Grid-Biasong	W. Samar	2	50	100	3 <sup>rd</sup> Quarter 2014	
Almagro Mini Grid-Lunang	W. Samar	1	50	50	3 <sup>rd</sup> Quarter 2014	
MINDANAO						
West Simunul DPP	Tawi-Tawi	1	300	300	3 <sup>rd</sup> Quarter 2014	
Sibutu DPP	Tawi-Tawi	2	300	600	3 <sup>rd</sup> Quarter 2014	
Manuk-Mankaw DPP	Tawi-Tawi	1	100	100	3 <sup>rd</sup> Quarter 2014	
Pangutaran DPP	Sulu	2	300	600	3 <sup>rd</sup> Quarter 2014	
Sacol DPP	Zamboanga	1	100	100	3 <sup>rd</sup> Quarter 2014	
Tandubas DPP	Tawi-Tawi	1	300	300	3 <sup>rd</sup> Quarter 2014	

Total 25 4,425

This project, which commenced in 2013, involves a total of 25 units of 50 kW, 75 kW, 100 kW and 300 kW gensets. Target completion of capacity addition in these areas is  $3^{\rm rd}$  quarter of 2014.

## C. 10 x 600 kW Gensets

This project consisting of additional 10 units of 600 kW gensets for existing power plants in Luzon and Mindanao is supposed to start in early in 2014 and expected to be completed in the  $4^{\rm th}$  quarter of the same year.

Table 9

Plant Name	Location	acity Ad	ldition	Target	
T lant Name	Location	Qty.	kW	Total	langet
LUZON					
El Nido DPP	Palawan	1	600	600	4 <sup>th</sup> Quarter 2014
Roxas DPP	Palawan	2	600	1,200	4 <sup>th</sup> Quarter 2014
Ticao DPP	Masbate	2	600	1,200	4 <sup>th</sup> Quarter 2014
MINDANAO					
Dinagat DPP	Dinagat Province	2	600	1,200	4 <sup>th</sup> Quarter 2014
Kalamansig DPP Sultan Kudarat		2	600	1,200	4 <sup>th</sup> Quarter 2014
Cag. De Tawi-Tawi DPP	Tawi-Tawi	1	600	600	4 <sup>th</sup> Quarter 2014

Total 10 6,000

# D. Additional Capacity for Marinawa DPP

Marinawa DPP was granted with 3 x 1000 kW generating units which are expected to be finished on the  $4^{\rm th}$  quarter of 2014.

## **Transmission Projects**

## **Transmission Lines**

Activities involving 128.23 km of transmission lines in Luzon areas have been programmed for 2014:

Table 10

PROJECT NAME	PROJECT	LENGTH	SCHEDULE	
	LOCATION	(KM)	Start	Finish
1. Rehab of Mobo-Aroroy "3" 69 kV T/L	Masbate	10.83	2013	2Q 2014
2. Rehab of Mobo-Aroroy "1" & "2" 69 kV T/L	Masbate	32.59	2014	4Q 2014
3. Mobo-Cataingan "1" & "2" 69 kV T/L	Masbate	76	2014	4Q 2014
4. Remaining works for Puerto Princesa-Roxas 138 kV T/L (Re Rerouted T/L)	Palawan	5	2014	4Q 2014
5. 138 kV Steel Tower and Steel Pole for Taguilan, Colonia and San Agustin River Crossing in Occidental Mindoro	Occidental Mindoro	3.81	2014	3Q 2014

**Total** 128.23

## RESOURCES MANAGEMENT SERVICES

The undisposed assets of PSALM consisting of the Pulangi and Agus complex in Mindanao, Angat Hydroelectric Power Plant in Bulacan, Power Barges 104 in Davao, PB 101-103 in Iloilio are stilled being manned and operated by NPC personnel.

Of these assets, Angat HEPP was bided out as early as 2010, the delays in the turn over of this power plant to the winning bidder K-Water Corporation is mainly due to legal matters still waiting to be resolved. Likewise, Power Barge 101, 102 and 103 were also bidded out but the turnover was delayed after the Power Barge 103 suffered damages during Typhoon Yolanda on November 8, 2013. PB-103 was later towed to the Keppel Facility in Subic, Zambales for dry docking and repair.

The Independent Power Producer (IPP) Contracts are still being implemented and managed by NPC including those power plants whose outputs have already been privatized under the IPP Administration Agreements being implemented by PSALM. The IPP Plants have a total rated capacity of 5,769.41 MW in 2013.

#### WATERSHED MANAGEMENT

Watershed rehabilitation and protection have been the two (2) main core programs of the Watershed Management Department (WMD) primarily aimed at sustaining the production of resources particularly water and steam for power generation including contribution to biodiversity and climate change mitigation.

For the year 2013, WMD strengthened activities on the rehabilitation and protection of watershed areas under its jurisdiction. Watershed rehabilitation which includes vegetative measures like reforestation, agroforestry, rubber, bamboo and tiger grass plantation remains the thrust of the WMD with the involvement of farmers as direct beneficiaries and laborers directly hired from the locality. Structural control measures like riprap and rubble masonry were implemented in Buhi-Barit and San Roque Watersheds to immediately arrest soil erosion. WMD was able to rehabilitate a total of 498 hectares through reforestation, agroforestry and Non-Timber Forest Resource Management (i.e. bamboo, rubber, etc.). Out of the said total, 298 hectares has been established in partnership with public and private groups/institutions such as the Philippine Army, DENR (through the National Greening Project), San Roque Power Corporation (SRPC), Philex Mining Corporation (PMC), National Grid Corporation of the Philippines (NGCP), Tan-Villaranza Law Firm, among others.

Intensification of watershed protection and law enforcement has been undertaken in the watershed reservations under NPC management through the "Bantay Gubat Patrol" Program. Patrol operations including manning of checkpoints have been conducted jointly with other agencies like the DENR, PNP/military, LGUs and other groups together with the Bantay Watershed Task Force (BWTF) volunteers of NPC to ensure proper enforcement of forestry laws and regulation. A total of 10,746.64 board feet of lumber/timber, 195 sacks of wood charcoal, 6 conveyances have been confiscated by the said joint operations of NPC, PNP/AFP, DENR, the LGUs and the BWTF volunteers (with 780 individuals from the 11 watersheds).

Equally important activities like Information and Education Campaign ( IEC) and community development were also implemented for the improvement of the social and economic condition of the people and enhance public awareness on the importance of the watershed, its resources including their protection, management and development. This includes launching of the Batang Kalikasan- Young Environmental Champions (BK-YEC) Program aimed at fostering interest and awareness to students within the Caliraya-Lumot Watershed Reservation (CLWR) on environmental conservation and protection. The said program is envisioned to be replicated in other NPC-managed watersheds.

Other accomplished community development activities include the dispersal of 150,000 seedlings (both forest and fruit bearing species) to various stakeholders, LGUs, academes and institutions and private organizations for their re-greening programs and dispersal of 527 gilts (swine) in the areas of Tiwi in Albay, Buhi in Camarines Norte and Bokod in Benguet and 3 heads of goat in Buhi, Camarines Sur. Animal dispersal is one of the activities of WMD aimed at uplifting the livelihood of local residents inside the watersheds.

WMD's sources of funds (i.e. the Universal Charge-Environmental Charge for its Job Order and CAPEX and the GAA for its Personnel Services and MOOE), financed WMD's programs and projects for CY 2013.

## **DAMS Management**

For 2013, the Dams Management Department (DMD) implemented activities in accordance with NPC Dam Safety Program (NPC-DSP) that mandates NPC to ensure the safe operations of all the seventeen (17) NPC operated and maintained dams. The NPC-DSP provides the framework for managing safety throughout the life of a dam. The primary purpose of the DSP is to ensure the safe operation of a dam so it can continue to function and that the downstream communities are protected against the consequences of dam failure.

DMD in cooperation with Dams, Reservoirs and Waterways Management Division (DRWMD) of MinGen undertook the 2013 updating of the existing NPC Dam Safety Program (NPC-DSP). The updates of NPC-DSP include recent development and standard practices in the international communities of dam ownership in terms of the primary concepts of structural safety, safety surveillance, operational safety and emergency preparedness.

DMD undertakes the regular water level monitoring of major multi-purpose reservoirs, i.e. Angat, San Roque and Caliraya, including Ambuklao and Binga, as DMD's function in reservoir water management, utilization and flood forecasting.

DMD also conducted eleven (11) dam safety inspections and assessments, which aim at determining that the dams and their appurtenant structures are functioning properly as designed. It also ensures the early detection and correction of any developing problem and the associated risk, if any; it may pose to the downstream areas.

DMD also completed the draft of the Emergency Action Plan (EAP) for Caliraya and Lumot Dams. The EAP is a document that guides response actions to a dam emergency conditions, these includes the following:

- 1. Identification of emergency conditions;
- 2. Procedures to be followed by the operations personnel in response to emergency;
- 3. Emergency command structure; and
- 4. Notification process to emergency management agencies responsible for the protection of downstream communities

## MINDANAO GENERATION

In 2013 the forecasted and updated generation for the whole of Mindanao was 9,060,859 MWh and 7,708,942 MWh respectively. This signifies a power supply shortage that led to the power curtailment of the Mindanao Grid System. In spite of this, NPC Mindanao Generation still provided 4,408,497 MWh or 57.11% contribution to the whole Mindanao Grid in 2013 as compared to 2012 which only accounted for 54.92% of the total energy generation mix. This is the combined total percentage contribution among the seven (7) hydro electric power plants while the remaining 42.89% is from the diesel, geothermal and coal plants not controlled by NPC. The 2013 actual generation mix in Mindanao shows hydro power at 57%, diesel at 12% geothermal at 10% and 21% for coal plants.