LUZON POWER SITUATION



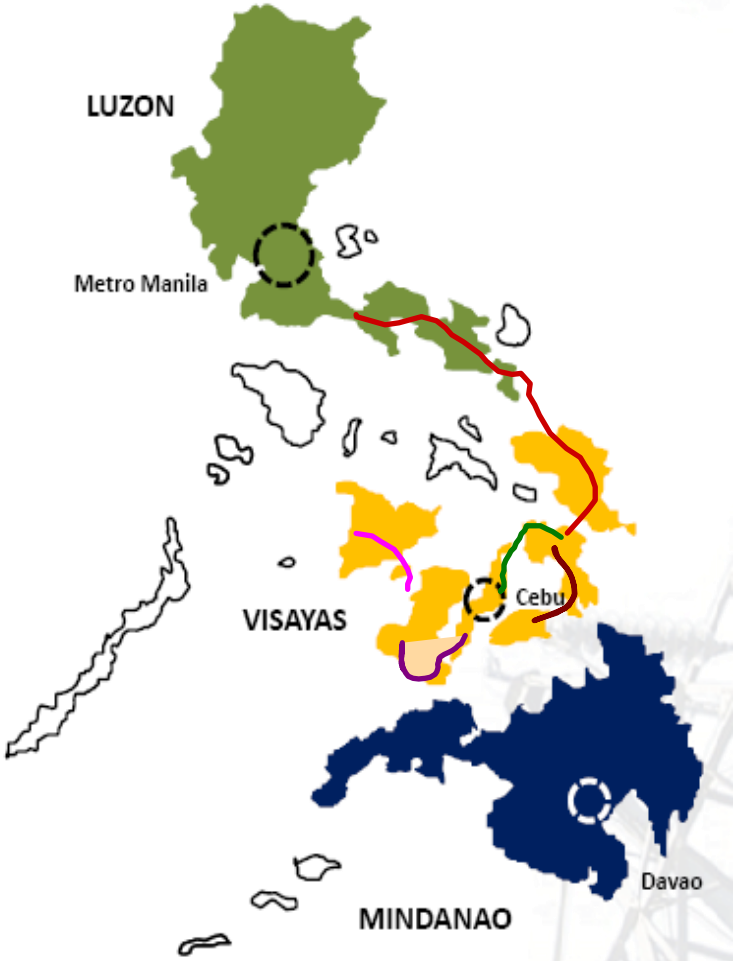

POWER SECTOR SITUATIONER

Transmission Line Interconnection

Mindanao is currently not yet connected with the Luzon-Visayas Grid

Interconnection Line Capacity

- **Leyte-Luzon (440 MW)**
- **Leyte-Cebu (400 MW)**
- **Cebu-Negros (200 MW)**
- **Negros – Panay (100 MW)**
- **Leyte-Bohol (100 MW)**



Note: Transparent islands in the above diagram are not covered by NGCP's network.

PHILIPPINE POWER SITUATIONER

Capacity and Demand

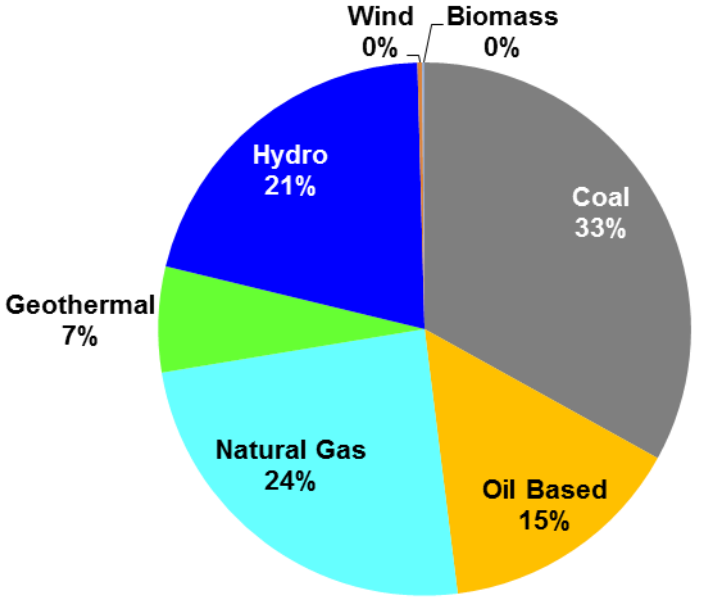
GRID	Installed Capacity	Dependable Capacity	Available Capacity at Peak	Peak Hours	Peak Demand	Actual Reserve at Peak	Required Reserve Margin
LUZON	11,739	10,824	8,944	2:00 PM	7,889	1,055	1,610
VISAYAS	2,402	2,037	1,918	7:00 PM	1,489	429	260
MINDANAO	2,022	1,616	1,332	7:00 PM	1,252	80	250
TOTAL	**16,162**	**14,477**	**12,194**				

Notes:

- **Installed and Dependable capacity as of April 2012**
- **Available Capacity at peak demand based on NGCP-Daily Operations Report**
- **Peak Demand as of September 2012**
- **Required Reserve Margin is 4 % of Peak Demand for Frequency Regulation and Largest Unit both for Contingency and Dispatchable Reserve**
  - 647 MW Largest Unit for Luzon
  - 100 MW Largest Unit for Visayas and Mindanao

Luzon Power Sector Situationer

Capacity and Demand 2012



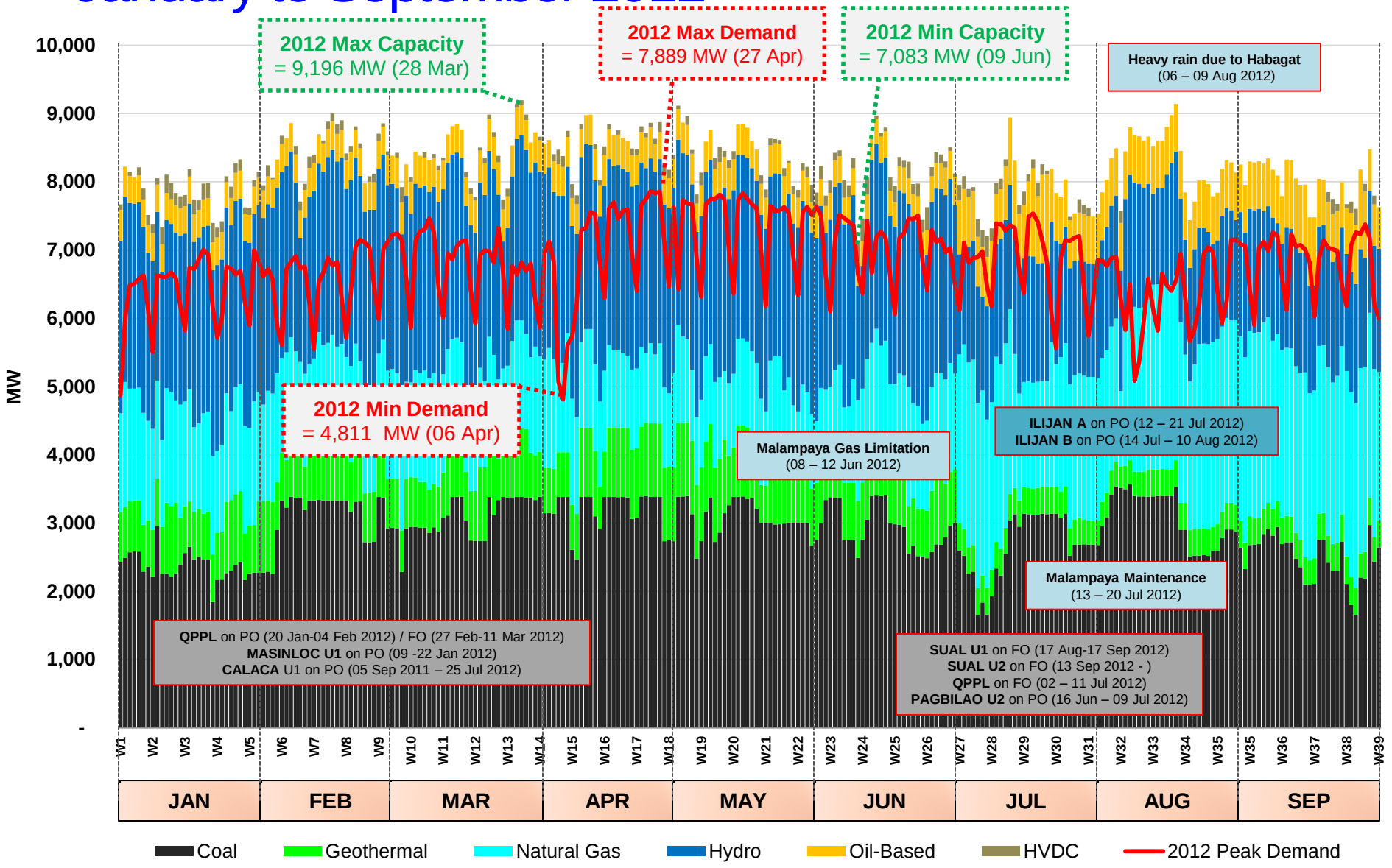
Installed Capacity = 11,739 MW

2012 Peak Demand (MW)		
LUZON	MERALCO	Meralco % Share to Luzon
7,889	5,340	67.68

*Peak demand as of August 2012

LUZON SUPPLY-DEMAND SITUATION

January to September 2012

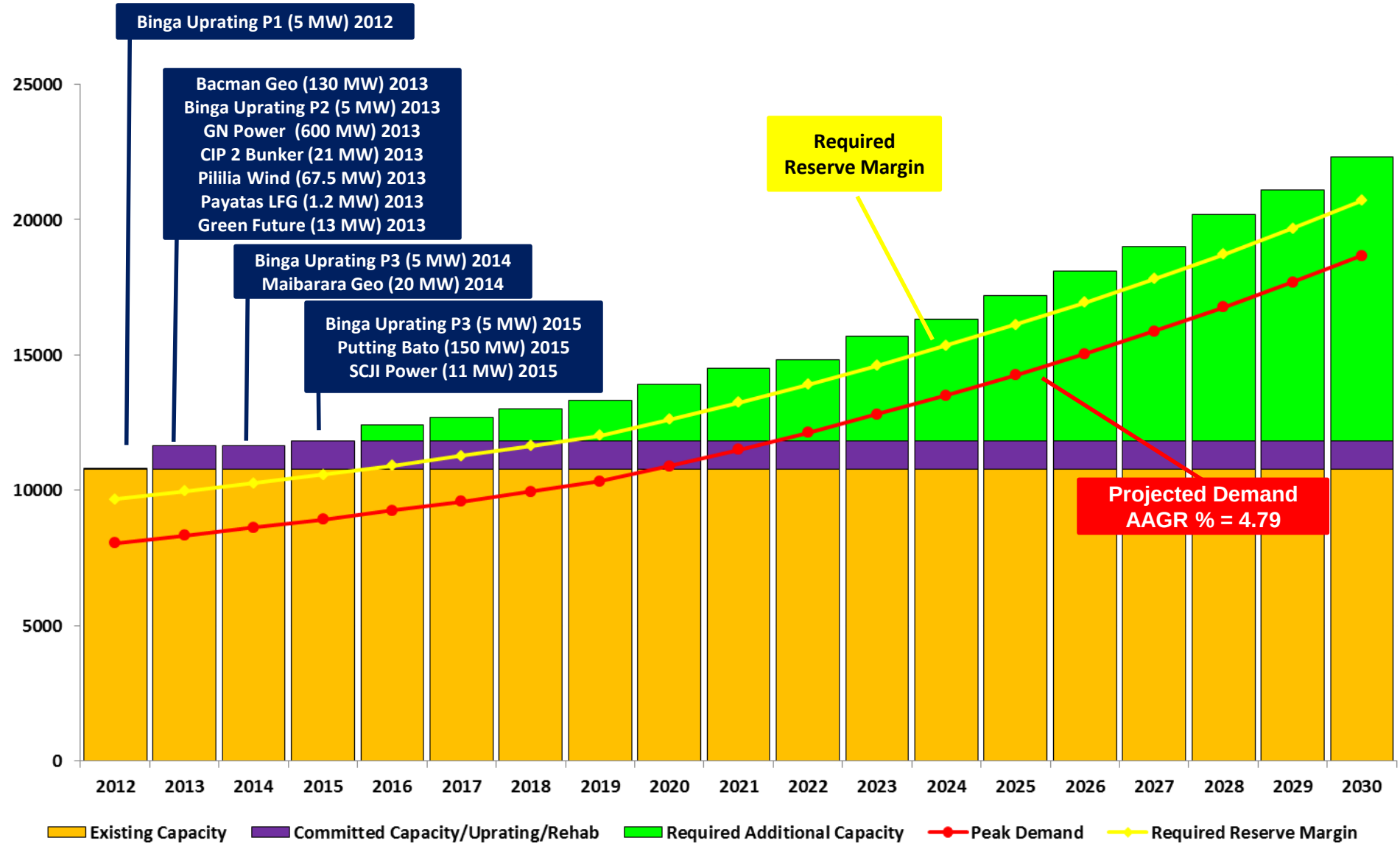


Source: NGCP Daily Operations Report (DOR)

LUZON SUPPLY-DEMAND

Draft 2012-2030 Outlook

Luzon Supply-Demand Outlook, 2012-2030



Luzon grid needs a total additional capacity of 10,500 MW onwards to 2030

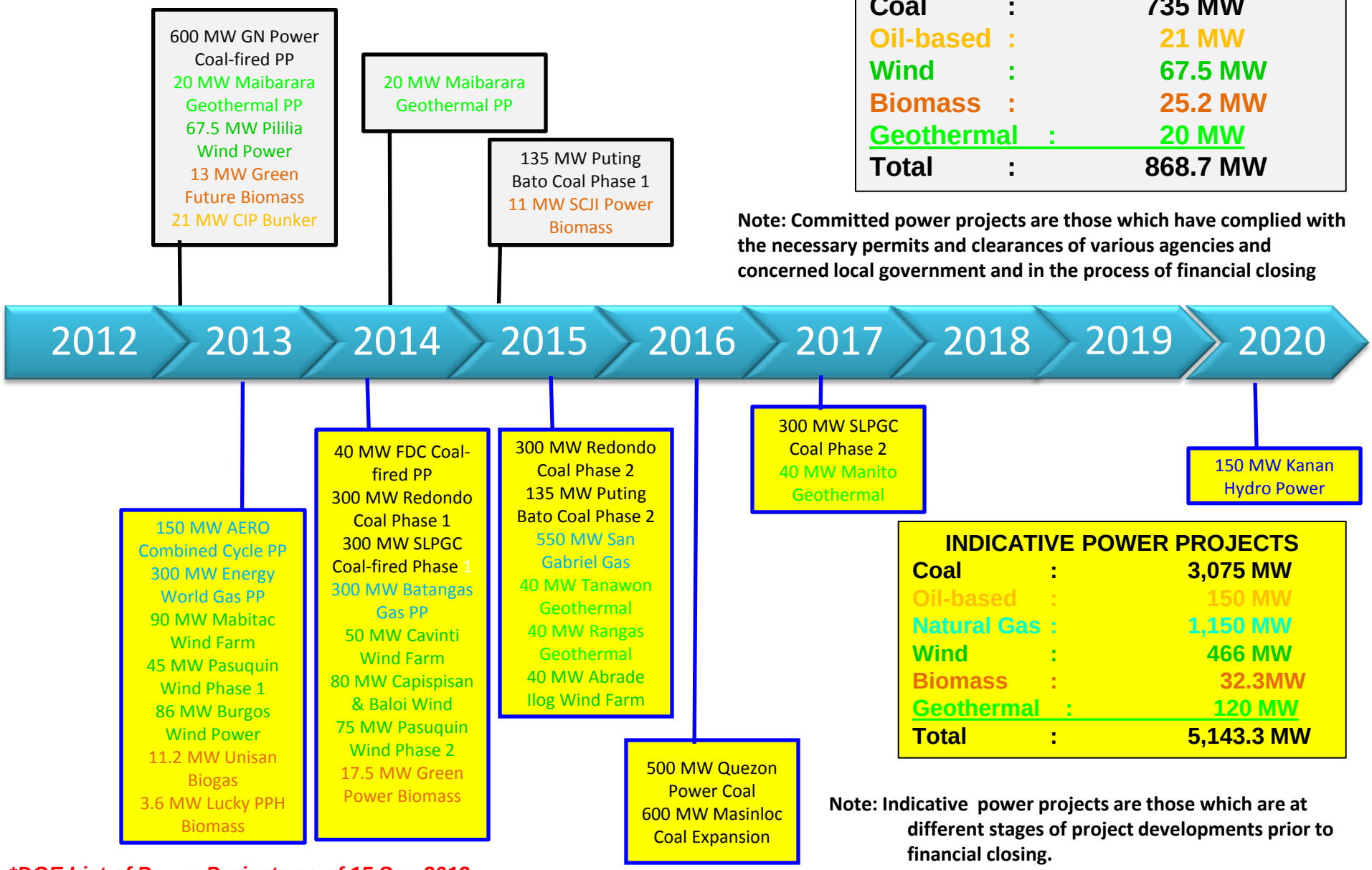
A 600 MW new capacity is needed starting 2016 to meet the demand and required reserve

Private Sector Initiated Power Projects

Luzon Grid, 2012-2030 PDP

COMMITTED POWER PROJECTS		
Coal	:	735 MW
Oil-based	:	21 MW
Wind	:	67.5 MW
Biomass	:	25.2 MW
Geothermal	:	20 MW
Total	:	868.7 MW

Note: Committed power projects are those which have complied with the necessary permits and clearances of various agencies and concerned local government and in the process of financial closing



INDICATIVE POWER PROJECTS		
Coal	:	3,075 MW
Oil-based	:	150 MW
Natural Gas	:	1,150 MW
Wind	:	466 MW
Biomass	:	32.3MW
Geothermal	:	120 MW
Total	:	5,143.3 MW

Note: Indicative power projects are those which are at different stages of project developments prior to financial closing.

DOE List of Power Projects as of 15 Sep 2012

RURAL ELECTRIFICATION

Increased Energy Access

Barangay Electrification (as of 31 August 2012)

Island Grid	No. of Brgys.	Energized	Unenergized	% Electrification
Luzon	20,486	20,486	-	100.00
Visayas	11,442	11,442	-	100.00
Mindanao	10,046	10,037	9	99.91
Total	**41,974**	**41,965**	**9**	**99.98**

BRIGHT NOW! DO RIGHT. BE BRIGHT.

Increased Energy Access

Household Electrification (as of 31 December 2011)

Island Grid	No. of HH (million)	Energized (million)	Unenergized (million)	% Electrification
Luzon	11.89	9.29	2.60	78.1
Visayas	3.95	2.64	1.31	66.9
Mindanao	4.70	2.49	2.21	52.9
Total	**20.54**	**14.42**	**6.12**	**70.2**

Increased Energy Access

Sitio Electrification (as of 30 June 2012)

Island Grid	No. of Sitios	Energized	Unenergized	% Electrification
Luzon	37,783	27,376	10,407	72.45
Visayas	37,610	29,562	8,048	78.60
Mindanao	39,699	24,798	14,901	62.46
Total	**115,092**	**81,736**	**33,356**	**71.01**

Note:

* *Source of data is NEA's Status of Energization as of 30 June 2012*

Increased Energy Access

Electrification Program

	2011	1H 2012
Households		
ER 1-94*	7,550	10,567
Household Electrification Program (HEP)	2,750	On-going**
Solar Photovoltaic (PV) Mainstreaming	2,000	
NEA	64,440	9,204
Total	**76,740**	**19,771**

Note:

* *ER 1-94 pertains to program on Benefits to Host Communities and is not provided with government appropriations*

** *Electrification of 3,450 households for completion by September 2012 (3,200 of which are solar and 250 are micro-hydro)*

BRIGHT NOW! DO RIGHT. BE BRIGHT.

Increased Energy Access

Electrification Program

	2011	1H 2012
Sitios		
ER 1-94*	302	464
Solar Photovoltaic (PV) Mainstreaming	66	
NEA	2,148	875
TOTAL	**2,516**	**1,339**

Note:

** ER 1-94 pertains to program on Benefits to Host Communities and is not provided with government appropriations*

BRIGHT NOW! DO RIGHT. BE BRIGHT.

Measurable Targets

Rural Electrification

YEAR	HOUSEHOLDS	SITIOS
2011	39,773	1,520
2012	142,110	4,487
2013	228,300	3,783
2014	612,100	12,114
2015	532,250	10,537
2016	5,400	
TOTAL	**1,559,833**	**32,441**

Note: Based on the targets of DOE's Household Electrification Program (HEP) using RE and NEA's Sitio Electrification Program (SEP)

Measurable Targets

NEA's Proposed Sitio/Puroks Electrification Projects for 2012

Luzon	Number of Sitios/Puroks
CAR	180
Region I	126
Region II	157
Region III	284
Region IV-A	211
Region IV-B	257
Region V	204
TOTAL	**1,419**

BRIGHT NOW! DO RIGHT. BE BRIGHT.

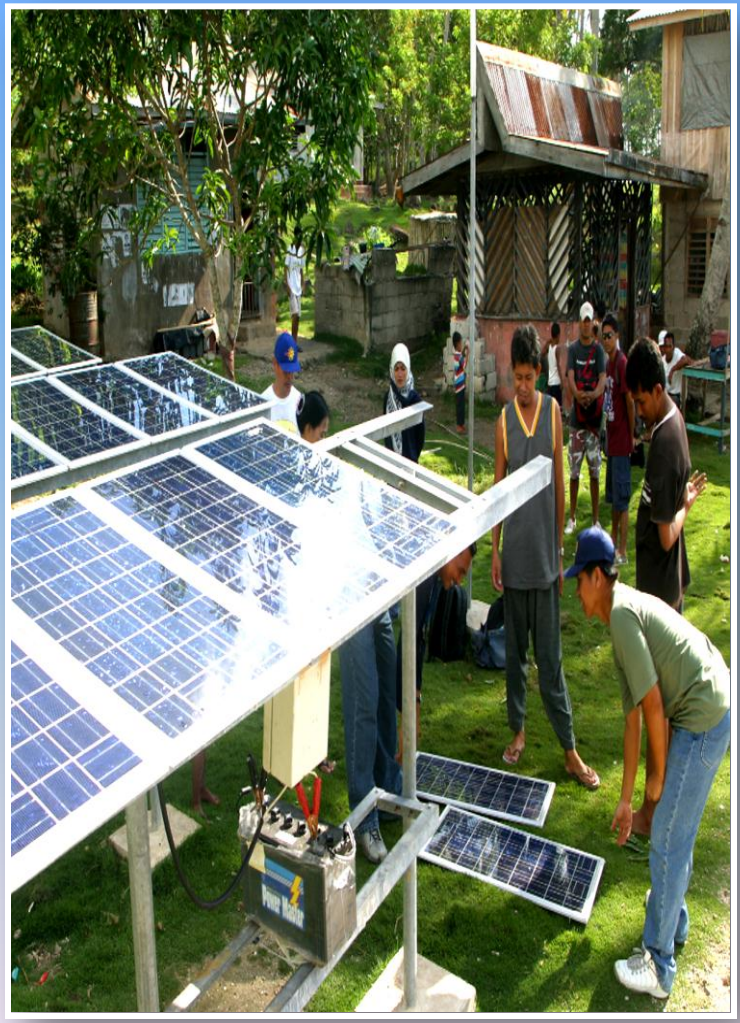
Measurable Targets

NEA's Proposed Sitio/Puroks Electrification Projects for 2012

Visayas	Number of Sitios/Puroks
Region VI	446
Region VII	354
Region VIII	284
TOTAL	**1,084**

Plans and Programs

Rural Electrification



- Achieve *90.0 percent* household electrification by *2017* and *100 percent* sitio electrification by *2015*
- Formulate Household Electrification Development Plan
- Pursue development and implementation of innovative service delivery mechanisms to increase household connections

BRIGHT NOW!
DO RIGHT. BE BRIGHT.

END OF PRESENTATION

LUZON POWER SITUATION