

# MINDANAO POWER SUPPLY and DEMAND OUTLOOK

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2014-2020

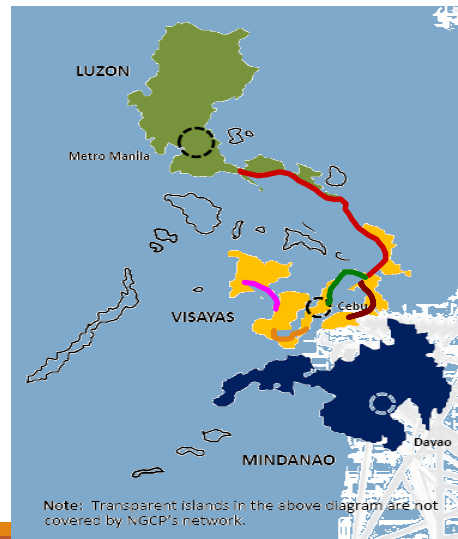


# POWER SITUATIONER

FUEL TYPE	LUZON		VISAYAS		MINDANAO		PHILIPPINES	
	MW	% Share	MW	% Share	MW	% Share	MW	% Share
Coal	4,531	36.16	806	32.91	232	11.32	5,568	32.71
Oil Based	1,778	14.19	670	27.39	625	30.50	3,074	18.05
Natural Gas	2,861	22.84	1	0.04			2,862	16.81
Geothermal	824	6.58	915	37.39	108	5.29	1,848	10.85
Hydro	2,462	19.66	11	0.47	1,047	51.09	3,521	20.68
Wind	33	0.26					33	0.19
Biomass	38	0.31	44	1.81	36	1.75	119	0.70
Solar					1	0.05	1	0.01
<b>TOTAL</b>	<b>12,528</b>		<b>2,448</b>		<b>2,049</b>		<b>17,025</b>	

## Interconnection Line Capacity

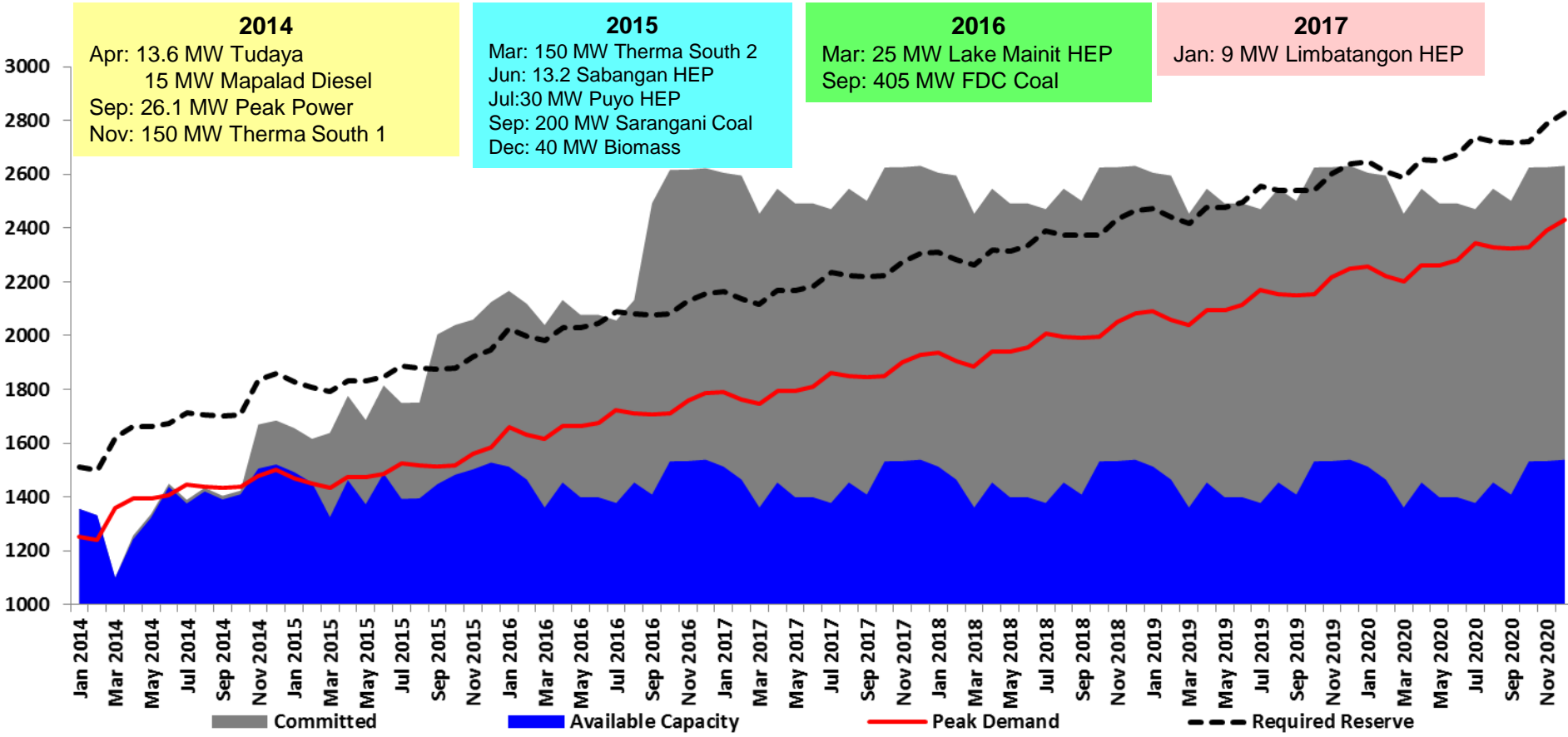
- Leyte-Luzon (440 MW)
- Leyte-Cebu (400 MW)
- Leyte-Bohol (100 MW)
- Cebu-Negros (200 MW)
- Negros-Panay (100 MW)



Source: DOE List of Existing Power Plants as of May 2013

- Includes embedded generators
- Excludes off-grid generator

# MINDANAO SUPPLY-DEMAND OUTLOOK 2014-2020



**Notes**

- a. Required Reserve Margin (RM) i.e. 4% regulating reserve and contingency and dispatchable reserve requirement
- b. 5.6 % peak demand growth rate resulted from observed 0.8 elasticity ratio of demand for electric power with national economic growth applied to 7 percent GDP growth rate (GR) target for 2014-2015.
- c. 12.8 % peak demand growth rate resulted from observed 1.6 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2016
- d. 8 % peak demand growth rate resulted from observed 1 elasticity ratio of demand for electric power with national economic growth applied to 8 percent GDP growth rate (GR) target for 2017-2020
- e. Assumed 3.3 percent average forced outage of the total dependable capacity



# COMMITTED POWER PROJECTS

## Mindanao Grid Committed Power Projects, 1,078.5 MW

Type	Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Project Cost (Php Billion)	Target Commissioning
HYDRO	<a href="#">Tudaya 1 Hydroelectric Power Project</a>	Hedcor Sibulan, Inc.	Aboitiz Power Corporation	Sta. Cruz, Davao del Sur	6.6		Apr 2014
HYDRO	<a href="#">Tudaya 2 Hydroelectric Power Project</a>	Hedcor Tudaya, Inc.	Aboitiz Power Corporation	Sta. Cruz, Davao del Sur	7		Apr 2014
OIL	<a href="#">15 MW Diesel Power Plant</a>	Mapalad Energy Generating Corporation	Mapalad Power Corporation	Mapalad, Dalipuga, Iligan City	15	0.38	Apr 2014
OIL	3x6.97 MW Bunker-Fired Power Plant	Peak Power Soccsargen, Inc. (PSI)	Peak Power Energy Inc. (subsidiary of A Brown)	National Highway, Brgy. Apopong, General Santos City	20.9	1.91	Sep 2014
OIL	1x5.2 MW Bunker-Fired Power Plant	Peak Power San Francisco (PSFI)	Peak Power Energy Inc. (subsidiary of A Brown)	ASELCO Compound, Brgy. San Isidro, San Francisco, Agusan del Sur	5.2	0.51	Sep 2014
COAL	<a href="#">2 X 150 MW Coal-Fired Therma South Energy Project</a>	Therma South Inc.	Aboitiz Power Corporation	Brgy. Binugao, Toril, Davao City and Brgy. Inawayan, Sta. Cruz, Davao Del Sur	300	24.00	Nov 2014
COAL	<a href="#">2 X 100 MW Southern Mindanao Coal Fired Power Station</a>	Sarangani Energy Corporation	Alsons Power Corporation	Brgy. Kamanga, Maasim, Sarangani	200	19.50	Feb 2015
HYDRO	Sabangan	Hedcor Sabangan, Inc.	Aboitiz Power Corporation	Davao City	13.2		Jun 2015
HYDRO	Puyo Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Jabonga, Agusan del Norte	30		Jul 2015



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BIOMASS	10 MW Kalilangan Bio-Energy Corporation Multi Feedstock Power Generating Facility	Kalilangan Bio-Energy Corporation	Kalilangan Bio-Energy Corporation	FIBECO, Anahawan, maramag, Bukidnon	10		Dec 2015
BIOMASS	10 MW Don Carlos Bio-Energy Corporation Multi Feedstock Power Generating Facility	Don Carlos Bio-Energy Corporation	Don Carlos Bio-Energy Corporation	FIBECO, Anahawan, maramag, Bukidnon	10		Dec 2015
BIOMASS	10 MW Malaybalay Bio-Energy Corporation Multi Feedstock Power Generating Facility	Malaybalay Bioenergy Corporation	Malaybalay Bioenergy Corporation	FIBECO, Anahawan, maramag, Bukidnon	10		Decr 2015
BIOMASS	15 MW LPC Biomass Power Plant Project	Lamsan Power Corporation	Lamsan Power Corporation	Maguindanao	10.00		Dec 2015
HYDRO	Lake Mainit	Agusan Power Corporation	Tranzen Group Inc.	Jabonga, Agusan del Norte	25.0		Mar 2016
COAL	<a href="#">3 X 135 MW FDC-Misamis Circulating Fluidized Bed (CFB) Coal-Fired Power Plant Project</a>	FDC Utilities, Inc.	FDC Utilities, Inc.	Phividec Industrial Estate, Villanueva, Misamis Oriental	405	30.00	Jun 2016
HYDRO	Limbatangon Hydroelectric Power Project	Turbines Resource & Development Corp.	Turbines Resources and Development Corp. (TRDC)	Cagayan de Oro City, Misamis Oriental	9		Jan 2017
<b>TOTAL</b>					<b>1,078.50</b>		



# INDICATIVE POWER PROJECTS

## Mindanao Grid Indicative Power Projects, 2,121.6 MW

Name of the Project	Project Proponent	Mother/ JV Company	Location	Rated Capacity (MW)	Target Commissioning
Davao del Norte 20 MW Circulating Fluidized Bed Biomass-Coal Fired Thermal Power Plant	FDC Utilities, Inc.	FDC Utilities, Inc.	Maco, Davao del Norte	20	March 2015
ZAM 100 MW Circulating Fluidized Bed (CFB) Coal-Fired Power Station	San Ramon Power Inc.	Mapalad Power Corporation	Sitio San Ramon, Bgry. Talisayan, Zamboanga City	100	December 2015
300 MW SMC Davao Power Plant Project Phase I	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	300	150 MW - Oct. 2015 150 MW - March 2016
Sibuguey Power Plant Project	Philippine National Oil Company (PNOC-EC)	Philippine National Oil Company (PNOC)	Sibugay, Zamboanga	100	September 2016
2x55 MW Balingasag Thermal Power Plant (Circulating Fluidized Bed Combustion (CFBC) Coal-Fired Power Plant)	Minergy Coal Corporation	Minergy	Brgy. Mandangoa, Balingasag, Misamis Oriental	110	January 2017
3x135 MW PsagCorp Coal-fired Power Plant	GN Power	GN Power	Kauswagan, Lanao del Norte	405	December 2017
300 MW SMC Davao Power Plant Project Phase II	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	300	December 2018
600 MW SMC Davao Power Plant Project Phase III	San Miguel Consolidated Power Corporation	San Miguel Consolidated Power Corporation	Brgy. Culaman, Malita, Davao del Sur	600	300 MW - Dec 2019 300 MW - Dec 2020
<b>TOTAL COAL</b>				<b>1,935.00</b>	
Mindanao 3 Geothermal	Energy Development Corporation	Energy Development Corporation	Kidapawan, North Cotabato	50	December 2017
<b>TOTAL GEO</b>				<b>50.00</b>	



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Tagoloan Hydropower	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Impasugong & Sumilao, Bukidnon	39	October 2015
Bubunawan Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Baungon and Libona, Bukidnon	23	October 2015
Cabadbaran Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Cabadbaran, Agusan del Norte	9.75	December 2015
Tumalaong Hydroelectric Power Project	First Gen Mindanao Hydropower Corp.	First Gen Power Corporation	Baungon, Bukidnon	9	October 2015
Pasonanca	Philcarbon, Inc.	Philcarbon, Inc.	Zamboanga City	0.1	March 2017
Culaman Hydroelectric Power Project	Oriental Energy and Power Generation Corporation	Oriental Energy and Power Generation Corporation	Manolo Fortich, Bukidnon	10	June 2018
<b>TOTAL HYDRO</b>				<b>90.80</b>	
Darong Solar Photovoltaic Power Project	PhilNew Energy Inc.	PhilNew Energy Inc.	Sta. Cruz, Davao del Sur	35	September 2015 (Subject to FIT)
<b>TOTAL SOLAR</b>				<b>35.00</b>	
12 MW Biomass Power Plant Project	Misamis Oriental Bio-Energy Corporations	Misamis Oriental Bio-Energy Corporations	Misamis Oriental	10.80	2015
<b>TOTAL BIOMASS</b>				<b>10.80</b>	

**Thank you!!**