



DEPARTMENT
OF ENERGY

Philippine Energy Plan and Luzon Power Outlook 2024

ELECTRIC POWER INDUSTRY MANAGEMENT BUREAU

MERALCO Power-Up Live Webinar
“Energy Outlook 2024: A Webinar on the Interruptible Load Program
and Power Supply Management”
19 April 2024

Philippine Energy Plan (PEP) Strategic Framework



AMBISYON Natin 2040

A STRONGLY-ROOTED,
COMFORTABLE AND SECURE
LIFE FOR ALL FILIPINOS



8-POINT SOCIO-ECONOMIC AGENDA

#1 PROTECT PURCHASING
POWER OF FAMILIES
#4 CREATE MORE JOBS

Reduce energy cost to families

Ensure energy security

ENERGY STRATEGIC FRAMEWORK

Access to
Affordable Energy

A

Reliability and
Resiliency

R

Clean and
Sustainable Energy

C

Short Term Goals (2023-2028)

- Ensure energy resiliency/quick restoration of energy services
- Address Non-Performing ECs
- Pursue Other Gas Exploration
- 100% Electrification
- NGCP Audit

Long-Term Power Outlook (2023-2050)

2023 – 2050 Power Outlook Scenarios

REFERENCE

- 35% RE share in power generation mix by 2030
- 50% RE by 2040-2050

CLEAN ENERGY 1

(High RE with low OSW
+ Nuclear + Coal Repurposing)

- 35% RE share by 2030, 50% RE by 2040, more than 50% by 2050
- Coal repurposing
- Nuclear capacity of 1,200 MW by 2032, 2,400 MW by 2035 and 4,800 MW by 2050
- 19 GW of OSW by 2050

CLEAN ENERGY 2

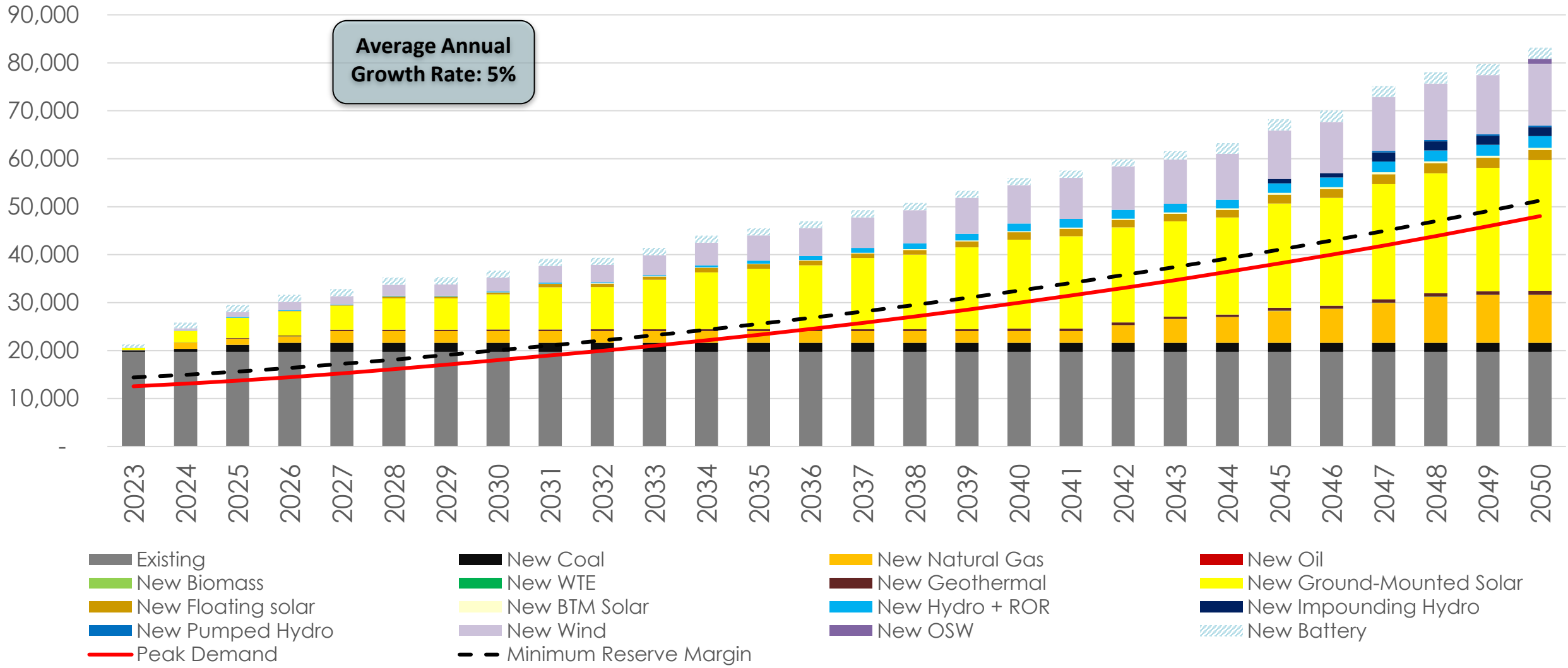
(High RE with high OSW
+ Nuclear + Coal Repurposing)

- 35% RE share by 2030, 50% RE by 2040, more than 50% by 2050
- Coal repurposing
- Nuclear capacity of 1,200 MW by 2032, 2,400 MW by 2035 and 4,800 MW by 2050
- 50 GW of OSW by 2050

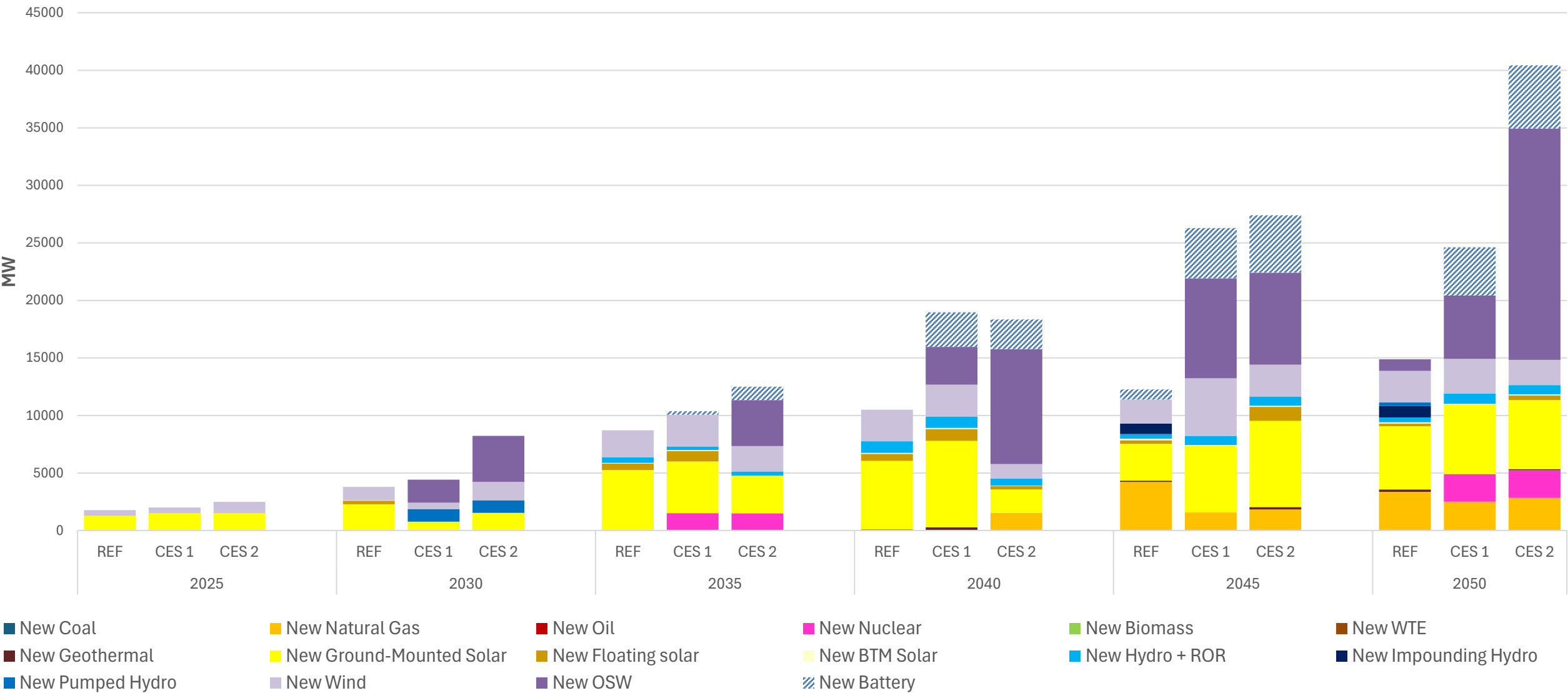
REFERENCE: Luzon Grid

Installed Capacity, MW

Average Annual
Growth Rate: 5%

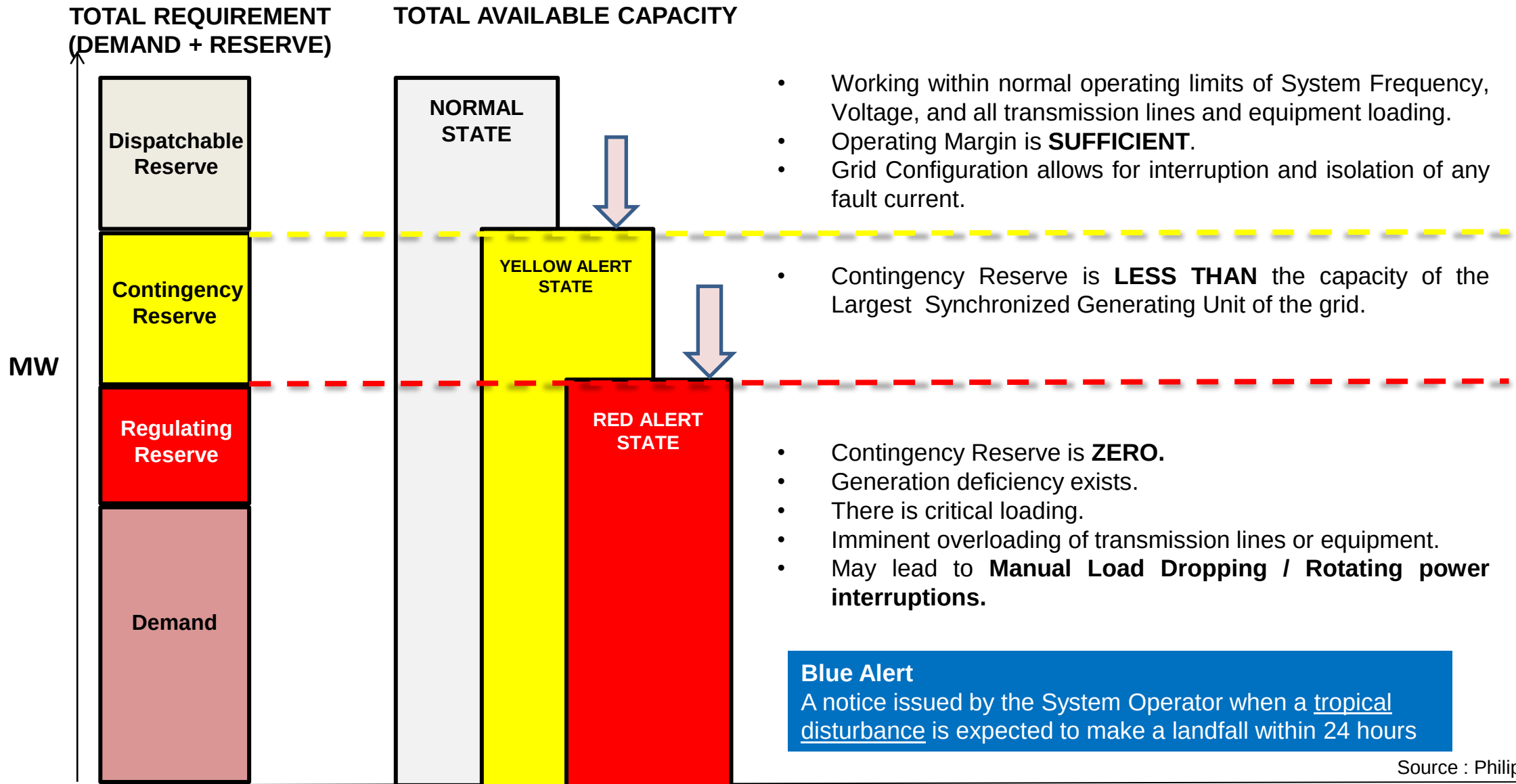


New Build Capacities: Luzon Grid



Short-Term Power Outlook (2024)

Alert Notices



Source : Philippine Grid Code (PGC)

Luzon Power Outlook 2024

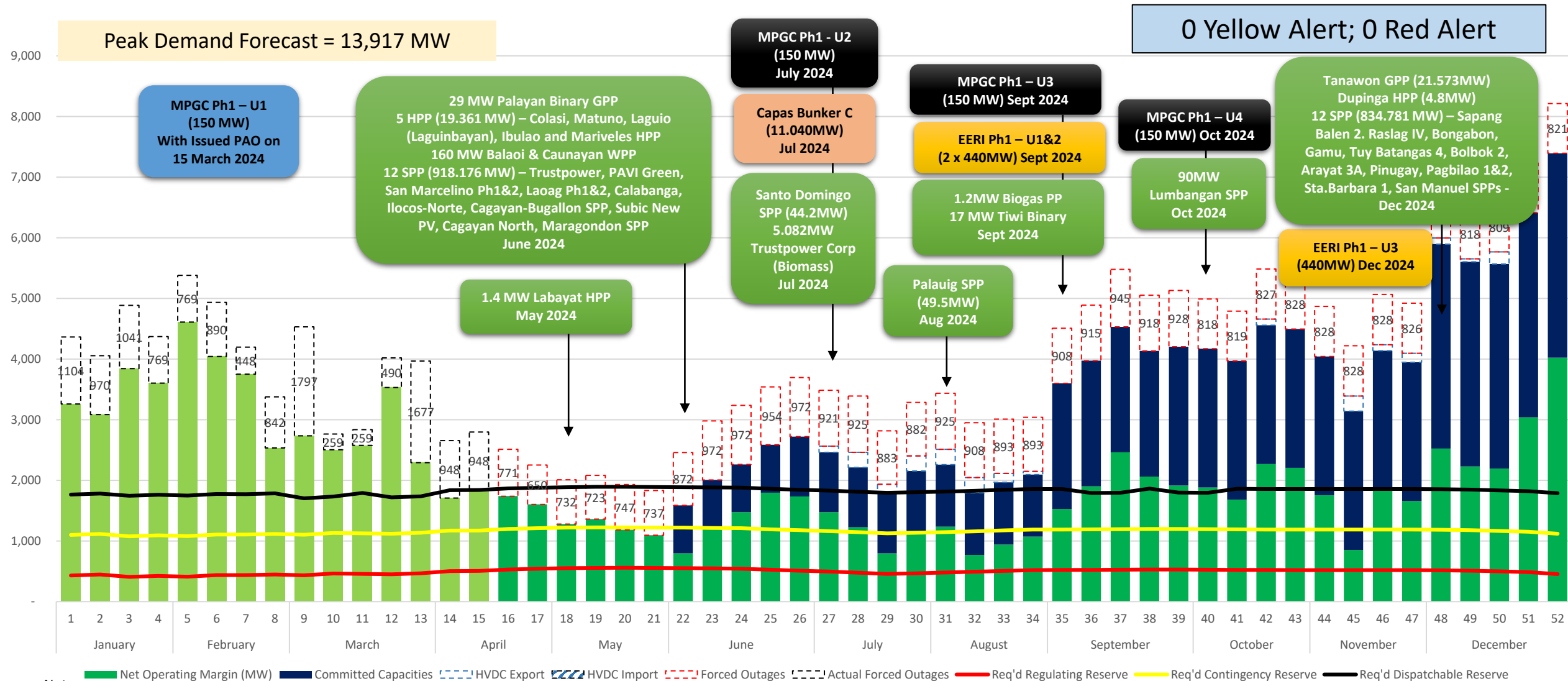
As of WEEK 15 (April 06 – 12, 2024)

SCENARIO	ASSUMPTIONS						RESULTS	
	GOMP	FORCED OUTAGES	COMMITTED PROJECTS	TRANSMISSION CONSTRAINTS	HVDC IMPORT/EXPORT	Hydro Capacity	RED ALERT	YELLOW ALERT
1	✓	650-927 MW	✓	None	✓	Derated by 70% up to Q2	0	0
2	✓	650-927 MW	✓	None	✓	Zero hydro capacity by Q2	4	3

1. GOMP (Grid Operating and Maintenance Program) - DOE-approved maintenance schedule of power generation and transmission facilities
2. Forced Outages – based on the average unplanned outages of power plants for 2019-2022 for the same week
3. Committed projects - power generation projects which are on-going construction or at least secured project financing

Luzon Grid Reserve Profile with Actual as of Week 15 2024

Assumptions: Approved GOMP; with Forced Outages and Committed Projects, with Hydro deration until Q2;
With HVDC Import/Export



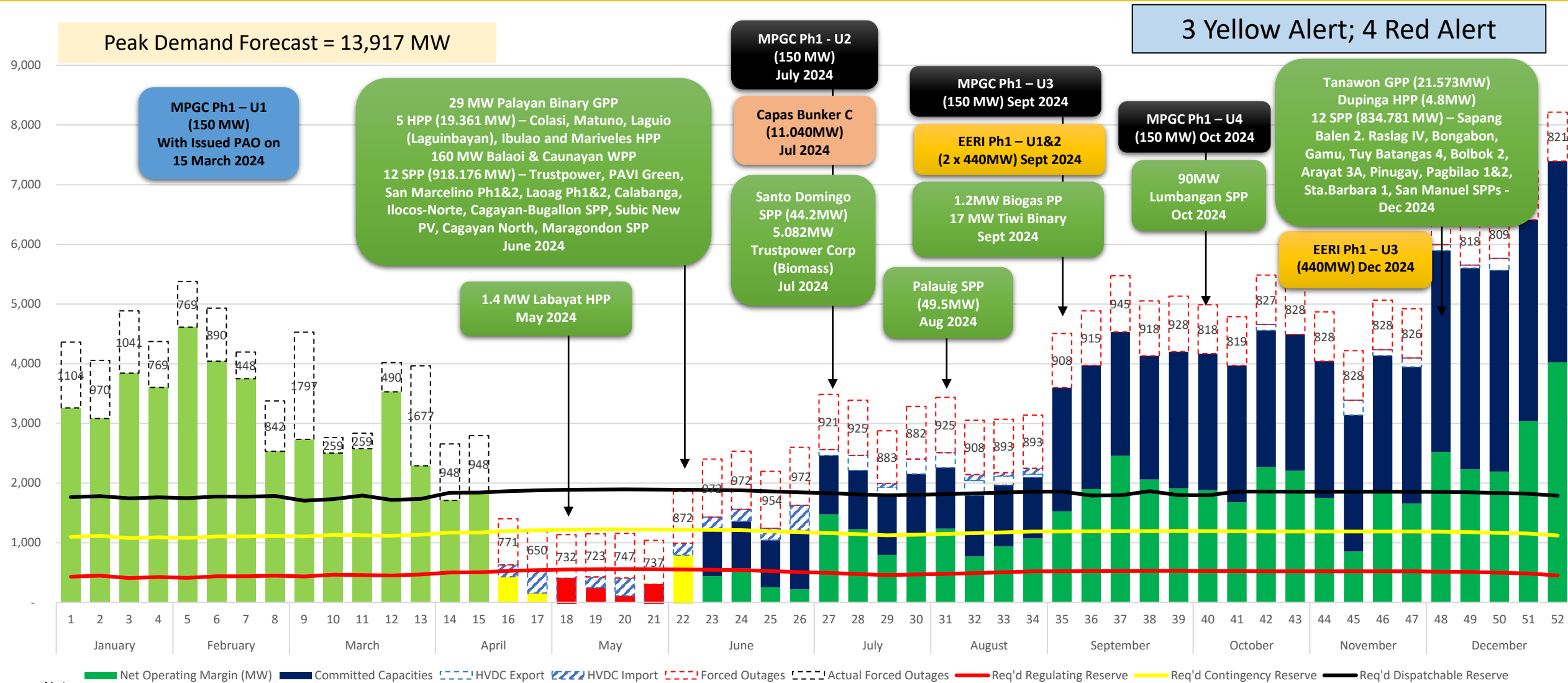
Notes:

1. Projected Operating Margin is based on DOE-approved GOMP 2024-2026 rev 0
2. Included Committed Power Projects Capacities as of February 2024 update
3. Forced outage rate assumptions are based on average weekly historical data from 2019-2022

4. Hydro capacities are derated by 70% for the first half of the year
5. Capacity additions for solar and wind (74% and 36% capacity credit @ peak of the day, respectively) are based on GOMP assumptions from NGCP

Luzon Grid Reserve Profile with Actual as of Week 15 2024

Assumptions: Approved GOMP; with Forced Outages and Committed Projects, Zero hydro capacity in Q2;
With HVDC Import/Export



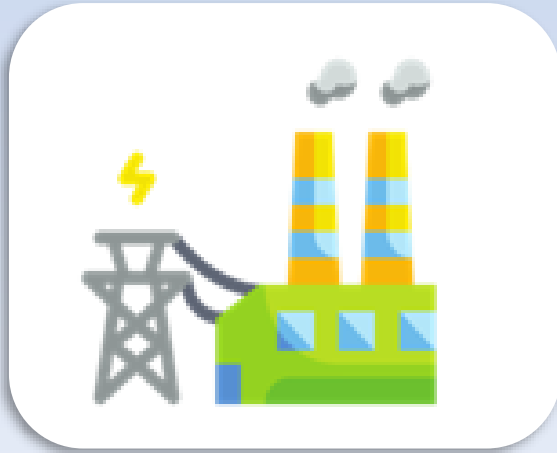
Notes:

1. Projected Operating Margin is based on DOE-approved GOMP 2024-2026 rev 0
2. Included Committed Power Projects Capacities as of February 2024 update
3. Forced outage rate assumptions are based on average weekly historical data from 2019-2022

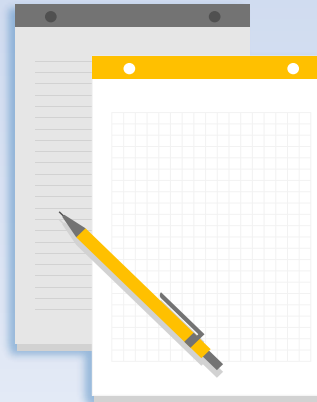
4. Zero capacity for hydro in the second quarter
5. Capacity additions for solar and wind (74% and 36% capacity credit @ peak of the day, respectively) are based on GOMP assumptions from NGCP

Contingency Measures to Address Short-Term Power Situation

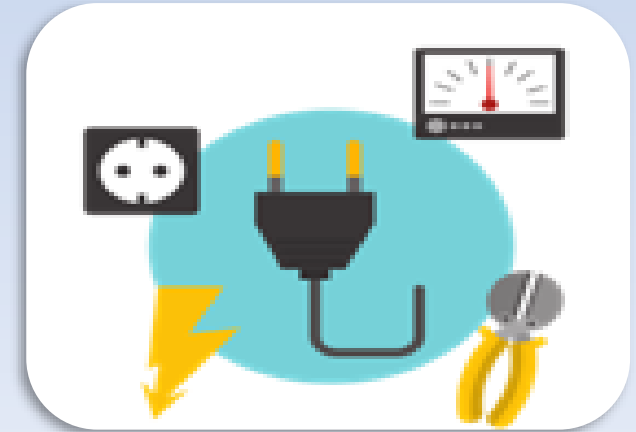
Actions Being Undertaken to Achieve the Outlook 2024



Continuous coordination with ERC, NGCP, and IEMOP for immediate action of the power generation projects in 2024 requiring their respective approvals to facilitate timely commercial operation



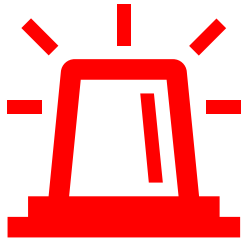
Issued Advisory on 4 April 2024 to remind the electric power industry participants of their responsibilities highlighting the El Nino scenario



Continuous promotion of Demand-side Management Programs to mitigate El Nino impact on Supply:

- Interruptible Load Program (ILP)
- Peak Off-Peak (POP) Program
- Energy Efficiency Programs/Measures for Electricity End-Users

Luzon Red and Yellow Alert Notices on 16 April 2024



The NGCP issued the following notice for the Luzon grid:

- Red alert for interval hours 1500H, 1600H, 1900H, 2000H, and 2100H
- Yellow alert for interval hours 1400H, 1700H, 1800H, 2200H, and 2300H

Alert notice was due to generation deficiency with a total plant outage of around 1,811 MW.

Despite this, MERALCO did not resort to any manual load dropping (MLD) or rotating power interruptions until 4:15PM. This is the effect of the activation of MERALCO's ILP with help of its large-load customers, which collectively de-loaded around 300 MW.





END OF PRESENTATION

LUZON POWER OUTLOOK 2024

as of Week 15 (06 – 12 April 2024)

ELECTRIC POWER INDUSTRY MANAGEMENT BUREAU

Energy Outlook 2024: A Webinar on the Interruptible Load Program
and Power Supply Management
19 April 2024



DEPARTMENT
OF ENERGY