



LEGISLATIVE RESEARCH SERVICE

QUICK NOTES

Second Regular Session, 19th Congress

Public Hearing of the Senate Committee on Energy

Chairperson: Sen. Raffy T. Tulfo

14 May 2024, Tuesday, 11 AM, Sen. Padilla Room, Senate

Re: Inquiry on the Alarming Declaration of Red and Yellow Alerts in Luzon, Visayas, and Mindanao Grids

- **P. S. Res. No. 556—Sen. Joel Villanueva**
- **P. S. Res. No. 1018—Sen. Win Gatchalian**

Background

- In historical context, the warmer months have consistently revealed challenges of insufficient and inefficient power distribution alongside heightened demand. It is pertinent to underscore that power disruptions, irrespective of seasons, exhibit a persistent and enduring presence within the country.
- In April 2024, the situation became critical due to the El Niño phenomenon causing above-normal temperatures, resulting in heatwaves. This, combined with a decrease in power supply and increased demand, led the National Grid Corporation of the Philippines (NGCP) to issue yellow and red alerts across the Luzon, Visayas, and Mindanao grids."
- Color-coded alerts signify grid health, and prepare stakeholders (distribution utilities, power plants, and the public) in managing the demand and supply of power whenever there are thin reserves.¹ Red Alerts are issued when regulating reserves fall below 4% of demand and all parties have to be alerted. Yellow alerts, on the other hand, are issued when reserves fall below the supply provided by the single largest power plant in the grid. This contingent reserve is intended to ensure that, should the largest power plant go offline for any reason, there are sufficient reserves to make up for the shortfall.²

¹ <https://www.doe.gov.ph/press-releases/opening-statement-secretary-raphael-pm-lotilla-during-press-conference-red-and-yellow>

² *Ibid.*

- While it has been appreciated that the NGCP issued alerts early on, the yellow and red alerts indicate inadequacy in power supply. Moreover, the yellow and red alerts are a common occurrence during hot months through the years. This means that the Department of Energy (DOE) has never really come up with a long-term solution to address the inadequate and inefficient power supply.
- Senate Resolution No. 556 and Proposed Senate Resolution No. 1018 intend to come up with comprehensive long-term solutions to address the recurring problem of insufficient electricity supply in the country.

Highlights of P. S. Res. Nos. 556 and 1018

P. S. Res. No. 556

- In P. S. Res. No. 556, submitted in March 2023, the NGCP warned about tight power supply resulting from increased demand. Despite this, the DOE provided assurance that while rotational blackouts were not anticipated during the hot months of 2023, there would be thin power reserves available.
- The Resolution inquires on the programs, activities, projects and other initiatives of the DOE and other government agencies to ensure continuous supply of electricity throughout the year, especially during peak seasons, and during unforeseen extreme weather events and similar calamities.

P. S. Res. No. 1018

- The Resolution inquires on the issuance of alert warnings by the National Grid Corporation of the Philippines causing power interruptions nationwide, and the current status and power supply outlook of the country, with the end view of ensuring: (a) reliable and continuous electric power supply in the Philippines; (b) electric power industry participants who are remiss in their duties and obligations are held accountable; (c) that generation companies comply with the highest standards, practices, methods and procedures generally followed or approved in the electric power industries around the world including ERC's reliability index; (d) that policies and plans affecting the country's power supply, including the Philippine Energy Plan and Power Development Program, are crafted with accurate data and input from all relevant persons and agencies, and timely issued; (e) that Republic Act No. 11258 or the Energy Efficiency and Conservation Act, which includes demand side management, is effectively implemented; and (f) that all existing rules and regulations aimed at ensuring quality, reliability, and security of electric power are strictly enforced

Possible Points for Discussion

1. *Current State of the Country's Power Supply and Expectations for the Future:* How do the Philippines' policies and plans, such as the Philippine Development Plan 2023-2028, the Philippine Energy Plan and Power Development Program, and the Energy Efficiency and Conservation Act, impact the nation's electricity provision?

2. *The Color-Coded Alert Warnings:* These codes, which are typically issued during hot months, only scratch the surface of the country's electricity supply inefficiency. A broader perspective involves considering extreme weather events and the necessity of proactively addressing potential power shortages. This includes identifying both short-term and long-term strategies and accelerating climate-resilient solutions to minimize power disruptions and expedite restoration processes in case of interruptions.
3. *Persistent Power Outages Affecting the Country Regardless of Season:* One recent example is the extensive power disruption in the Panay region, covering Iloilo, Capiz, Aklan (including Boracay), and Antique. What are the underlying causes behind the inadequate power supply? Is it solely a matter of insufficient power generation, or are there also issues with the maintenance and operation of facilities? Reports indicate that generation units often face outages due to operational issues such as equipment failures and interruptions to gas supply. It is crucial then to address the comprehensive picture of the country's power demand and supply dynamics, including the availability of contingency reserves.
4. *Improving Energy Efficiency in the Philippines:* The Philippines aims to enhance its energy efficiency through Republic Act No. 11285, also known as the Energy Efficiency and Conservation Act of 2019. This legislation institutionalizes policies focused on energy efficiency and conservation, ultimately striving to enhance energy efficiency across the nation. To provide an update, it is important to assess investments made in power-saving and energy-efficient technologies in alignment with the objectives of this law.
 - *Status of Energy Infrastructure Projects and Roadmaps:* What is the current status of transmission development projects, power plants, and renewable energy initiatives in the Philippines? Additionally, what progress has been made on the Department of Energy's roadmap, both nationally and regionally for Luzon, Visayas, and Mindanao?
 - *Addressing Challenges in the Energy Sector:* Does the energy sector require additional legislative support to tackle its challenges? What proposed solutions are being considered to address the issues plaguing the energy sector? Specifically related to power, why have the promises outlined in Republic Act No. 9136, or the Electric Power Industry Reform Act (EPIRA), remained largely unfulfilled even after 23 years? Is there a need to amend EPIRA to better address current challenges?
 - *Impacts of Power Supply Issues on the Economy and Households:* What are the economic and household implications of inefficient electricity supply, rotational brownouts, and color-coded alert warnings? Power interruptions not only affect households but also businesses, potentially leading to significant economic losses. Understanding these impacts is crucial for devising effective strategies to mitigate power supply disruptions.