



Republic of the Philippines  
**DEPARTMENT OF ENERGY**  
(Kagawaran ng Enerhiya)

**MEMORANDUM**

**TO : POWER SECTOR STAKEHOLDERS**

**SUBJECT : ADVISORY ON THE MORATORIUM OF ENDORSEMENTS FOR GREENFIELD COAL-FIRED POWER PROJECTS IN LINE WITH IMPROVING THE SUSTAINABILITY OF THE PHILIPPINES' ELECTRIC POWER INDUSTRY**

**DATE : DEC 22 2020**

To support and effectively implement the policies issued by the Department of Energy (DOE) with the aim of improving energy sustainability, reliability, and flexibility by: (1) Increasing the Renewable Energy (RE) share in the energy mix; (2) Promoting new technologies; (3) Increasing system flexibility; and (4) Adhering to higher environmental standards, the DOE hereby issues the following advisory on the moratorium of endorsement of the application and development of new coal-fired power projects:

**To All Power Sector Stakeholders:**

1. The Department will not process applications for greenfield coal-fired power generation facility projects requesting for endorsements; and
2. Existing and operational coal-fired power generation facilities as well as any coal-fired power project considered in any of the following parameters will not be affected by this advisory:
  - a. Committed power projects;
  - b. Existing power plant complexes which already have firm expansion plans and existing land site provision; and
  - c. Indicative power projects with substantial accomplishments, specifically the following:
    - i. With signed and notarized acquisition of land or Lease Agreement for the project; and
    - ii. With approved permits or Resolutions from LGUs (city/municipality, province) and the Regional Development Council where the power plants will be located.

This will be in effect in all grid systems starting 27 October 2020. For details, all Power Sector Stakeholders are advised to see the attached advisory notes.

Rest assured that this will be regularly assessed and we will keep you informed of further developments on this matter.

For everyone's guidance. Thank you.

  
**ALFONSO G. CUSI**  
Secretary



## **Advisory Notes**

### **Background**

#### **1. Power Situation and Supply Mix**

- a. Looking at the capacity additions for the past ten (10) years, from 2010 to 2019, the total installed capacity that was added into the grid was 9,431 MW. Coal plants account for 66% of the total additional capacity at 6,194 MW. This is followed by solar power plants at 10% (920 MW), diesel plants at 7% (657 MW), natural gas plants at 6% (582 MW), wind plants at 4% (394 MW), and the remaining 7% (684 MW) are shared by biomass, hydro, and geothermal power plants. Most of the new renewable energy (RE) plants, particularly variable RE (VRE), came in starting 2014 after the issuances on and related to the Feed-in-Tariff mechanism.
- b. The level of capacity per fuel or resource in each of the grids will also give us an idea of the resulting generation mix. Each of the grid has its own dominant resources but a common factor among them is the major share of coal generation in the mix.
- c. The generation of coal-fired power plants (CFPPs) in Luzon has been steadily increasing for the past ten (10) years. In 2019, the current percent share of coal is at 53.2%. The next dominant resource in the region is natural gas at 29.3% which is powering around 3,200 MW of gas power plants located in the province of Batangas. Cumulative percentage of RE plants in Luzon is currently at 14% and the remaining 3.5% comes from diesel power plants.
- d. In Visayas, the current percent share of coal is at 49.6%. This is followed by geothermal power plants (GPPs) at 39.1% given the abundance of this resource in the islands of Leyte and Negros. The cumulative 8.0% share from other RE resources comes from solar, wind, biomass, and hydro power plants. The remaining 3.3% share is from the diesel power plants in the region.
- e. Due to the large capacities of coal-fired power plants that entered the grid starting 2015, the dominant resource in Mindanao shifted from hydro to coal. From coal only, with a 20% share in the generation mix back in 2015, it grew now to 68.2%. This is followed by hydro at 20.9%, geothermal at 5.5%, diesel at 4%, biomass at 0.7%, and solar having 0.6% share.

#### **2. Impact of COVID-19 Pandemic in the Power Sector**

- a. The Power Sector experienced an abrupt change in electricity consumption patterns, due to the COVID-19 pandemic and the implementation of community quarantine, which hampered the momentum of the country in terms of electricity demand growth. This

also posed challenges in the operation of the power system with the sudden electricity demand reduction and the affected sustained operation of baseload power plants.

- b. There is a need to shift to a more flexible power supply mix to have a more sustainable power system that will be resilient in any structural changes in demand and will be flexible enough to accommodate entry of new and cleaner technologies.
3. This period will serve as a driver for the power sector to move towards an energy transition that is envisioned to be a more reliable, flexible, and sustainable power system in the Philippines.

## **Objectives**

### **1. Reliability**

- a. The DOE recognizes the need to improve grid reliability to ensure delivery of electric power to satisfy consumer demand and enhance the capability of the power system to respond to disturbances without any adverse effects to the same, while maintaining optimal operation of the grid.
- b. The power sector stakeholders need to take advantage of this opportunity to improve system operations and the operation of its existing generating fleet in order to increase the reliability of the system. Improved power plant operations and system dispatch will help reduce unplanned outages and maintain adequate level of supply necessary to meet the country's increasing electricity demand.

### **2. Flexibility**

- a. The DOE recognizes the role of RE technologies in the country's current and future energy mix. Variable RE penetration at higher levels will require a more flexible system to cope with its variability. There are various means and mechanisms on improving the system's flexibility, one of which is recognizing the need for fast acting power plants that will provide either additional supply or ancillary services to the grid.

### **3. Improved sustainability**

- a. The DOE recognizes the need for a more sustainable power system by promoting the utilization of indigenous and new and renewable energy resources in order to reduce the country's dependence on imported fuel. The existing generating facilities that we have in the country should also contribute to this goal by adhering to higher environmental standards.

#### 4. Promote new technologies

- a. The DOE recognizes the need for the power system to respond to changes in demand and supply and allow integration of new and emerging technologies to the grid. This direction will complement the recent issuances of the Department related to natural gas, energy storage systems, and smart grid. Also, this will contribute with the ongoing study of utilizing nuclear power for power generation in the Philippines.

#### 5. Optimal energy mix

- a. The DOE recognizes that achieving the optimal energy mix is a challenge that will always have to be addressed in an evolving system. It is important to determine the demand needed to be served, the available resources that we have, the market innovations present, and the regulations that are up to date before finding that optimal solution appropriate to a particular area.

### **Sustainable Energy Mix**

#### 1. Decarbonization

- a. In support of the DOE's agenda of a low carbon future and as contemplated in the Philippines Energy Plan of pursuing a Clean Energy Scenario, the country's power sector needs to undergo an energy transition. It has already been recognized that the country has a huge potential for RE development and utilization. In order to realize these goals, there is a need to support and fully implement existing RE policies such as the Renewable Portfolio Standards, Green Energy Option Program, and Green Energy Auction Program to name a few.

#### 2. Democratization / Decentralization

- a. As envisioned by the DOE, this energy transition will also open new opportunities for the power sector that will make electricity more accessible to everyone. DOE intends to formulate policies that will enable the active deployment of Distributed Energy Resources and Microgrids which will serve as viable options for electrification. This will help the country to achieve greater energy equity and access in the long run.