



DEPARTMENT	CIRCULAR NO.	

FRAMEWORK FOR THE INTEGRATION OF NUCLEAR ENERGY IN THE COUNTRY'S GENERATION MIX TO IMPLEMENT THE CLEAN ENERGY SCENARIO UNDER THE PHILIPPINE ENERGY PLAN 2023-2050

WHEREAS, Republic Act (RA) No. 7638, otherwise known as the Department of Energy (DOE) Act of 1992, as amended, declares it as a policy of the State to ensure a continuous, adequate, and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the integrated and intensive exploration, production, management, and development of the country's indigenous energy resources, and through the judicious conservation, renewal and efficient utilization of energy to keep pace with the country's growth and economic development and taking into consideration the active participation of the private sector in the various areas of energy resource development; and (b) to rationalize, integrate, and coordinate the various programs of the Government towards self-sufficiency and enhanced productivity in power and energy without sacrificing ecological concerns;

WHEREAS, RA No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 or EPIRA, states that it is the policy of the State to, among others: (i) ensure the quality, reliability, security and affordability of the supply of electric power; (ii) protect the public interest as it is affected by the rates and services of electric utilities and other providers of electric power; (iii) To assure socially and environmentally compatible energy sources and infrastructure; (iv) To promote the utilization of indigenous and new and renewable energy resources in power generation in order to reduce dependence on imported energy;

WHEREAS, the EPIRA mandates the DOE to, among others: (ii) formulate policies for the planning and implementation of a comprehensive program for the efficient supply and economical use of energy consistent with the approved national economic plan and with the policies on environmental protection and conservation and maintenance of ecological balance, and provide a mechanism for the integration, rationalization, and coordination of the various energy programs of the Government; (ii) Develop and update annually the existing Philippine Energy Plan (PEP), which shall provide for an integrated and comprehensive exploration, development, utilization, distribution, and conservation of energy resources, with preferential bias for environment-friendly, indigenous, and low-cost sources of energy. The PEP shall include a policy direction towards the privatization of government agencies related to energy, deregulation of the power and energy industry, and reduction of dependency on oil-fired plants. The PEP shall be submitted to Congress not later than the fifteenth day of September and every year thereafter; and (iii) Prepare and update annually a Power Development Program (PDP) and integrate the same into the PEP. The PDP shall consider and integrate the individual or joint development plans of the transmission, generation, and distribution sectors of the electric power industry, which are submitted to the DOE;

WHEREAS, the Philippines as a Member State of the International Atomic Energy Agency (IAEA), is committed to ensure the peaceful use of nuclear technology in the country, adhering to the principles of safety security and safeguards;

WHEREAS, Executive Order (EO) No. 116, series of 2020, created the Nuclear Energy Program Inter-Agency Committee (NEP-IAC) to study the adoption of a National Position on a Nuclear Energy Program, in accordance with pertinent IAEA guidelines and relevant laws, rules and regulations;

WHEREAS, EO No. 164, series of 2022, entitled "Adopting a National Position for a Nuclear Energy Program, and for Other Purposes," provides that the State envisions nuclear power as a viable component to bridge the gap between rising energy demands and supply, taking into account learnings from the past, national, social and economic development pathways, as well as international legal and regulatory frameworks, and best practices;

WHEREAS, building on the foregoing national position, the DOE published the PEP 2023-2050, with a Clean Energy Scenario (CES), which envisions a more diverse energy mix, and includes a phased entry of nuclear energy in the country's power generation mix, beginning with a 1,200 MW of capacity, with operations targeted to commence by 2032, up to 2,600 MW by 2035 and 4,800 MW by 2050;

WHEREAS, the integration of nuclear energy into the power generation mix as a clean, and reliable energy source, is a strategic decision rooted in the country's developmental requirements for a secure energy supply in support of inclusive economic growth and societal advancement;

WHEREAS, the integration of nuclear energy into the power generation mix represents an innovative initiative, which is poised to stimulate local economies, create significant employment opportunities, attract investment, and lead to the creation of new economic opportunities and economic growth;

WHEREAS, the commercial development of the first or Pioneer nuclear power plant in the Philippines represents a significant milestone in the Philippine energy landscape, resulting in anticipated lowering of electricity costs, and a positive major environmental impact, making it a key player in the country's commitment to achieving a low-carbon economy; and,

WHEREAS, there is a need to establish a well-defined framework to instill potential investor interest for the first nuclear power generation facility in the Philippines, while at the same time ensuring a seamless and efficient integration of nuclear energy in the power generation mix.

NOW THEREFORE, in consideration of the foregoing premises, the DOE hereby issues, adopts, and promulgates the following policy framework for the integration of nuclear energy in the country's generation mix:

RULE I GENERAL PRINCIPLES

Section 1. *Title.* – This Circular shall be known and referred to as the "**POLICY FRAMEWORK FOR THE COMMERCIAL DEVELOPMENT OF A NUCLEAR POWER PLANT IN THE PHILIPPINES."**

- Section 2. Guiding Principles on the Integration of Nuclear Energy in the Power Generation Mix. The government shall endeavor to provide a conducive industry environment for the commercial development of a nuclear power plant in the country, guided by the following principles:
- 2.1.Energy Security. The commercial development and operation of a nuclear power plant (NPP) including Small Modular Reactors (SMRs), Microreactors and Floating NPP which provides a diversified energy source and a stable and predictable power source for distribution utilities, retail electricity suppliers and other bulk users, to supply their captive market.
- 2.2.Environmental Sustainability. The country's commercial development and operation of NPP is a step towards mitigating Greenhouse Gas (GHG) emissions and achieving the country's nationally determined contribution under the Paris Agreement, driven by policy studies and project proposals which incorporate full life cycle assessments to evaluate environmental impacts, including those from uranium mining, plant decommissioning, and radioactive waste management.
- 2.3. Grid Harmonization and Integration. The entry of nuclear energy in the power generation mix of the country will require the construction and enhancement, and advanced planning of the current transmission lines and facilities, and the procurement of appropriate ancillary services integrated into the Transmission Development Plan (TDP) and supported by grid impact studies to accommodate the power generation produced from these plants to achieve the PEP Targets and the objectives of this Circular.
- 2.4. Competitive Pricing. The commercial development and operation of an NPP, once optimally blended with the generation cost of a Distribution Utilities (DUs), can effectively lower electricity rates. Thus, DUs are mandated to ensure a ready market for available capacities from the first commercially developed NPP, which shall be exempt from the conduct of Competitive Selection Process (CSP): Provided, That DUs are compliant with the provisions of the EPIRA and this Circular. Further, DUs that meet either or all of these qualifications can apply for prioritization;
 - 1. Demonstrate the technical and financial capability to enter into long-term power purchase agreements with an NPP;
 - 2. Serve a sufficiently large consumer base; and
 - 3. Documented supply deficiencies that may be alleviated by new baseload generation.

Nothing in this Circular shall be interpreted to preclude other DUs from availing of NPP capacity once the prioritized allocations have been met.

RULE II POLICY FRAMEWORK FOR THE PIONEER NPP PROJECT

Section 1. *Pioneer NPP Project*. The first commercially developed and operated NPP in the Philippines shall be considered a *Pioneer project*, hence, must be provided with a conducive and competitive environment to stir further development in the Philippine energy landscape.

The Pioneer NPP shall be considered a baseload plant and shall be granted priority dispatch, in coordination with the DOE and the System Operator, regardless of the nuclear technology to be considered for development

Section 2. Role and Responsibilities of Government Agencies. To provide the most conducive environment for the first commercial development of NPP and lay the policy foundations for the succeeding NPPs, the following agencies and entities shall have the following roles and responsibilities:

- A. Department of Energy (DOE). Within ninety (90) days from the issuance of this Circular, the DOE shall:
 - 1. Explore alternatives for the role of the Government in the Pioneer NPP;
 - 2. Study the options for financing and funding, in coordination with the NEP-IAC, Department of Finance (DOF), Department of Economy, Planning, and Development (DEPDev), Maharlika Investment Corporation, and any other relevant government agencies;
 - 3. Plan, together with Transmission Network Provider (TNP) and System Operator (SO), to ensure the availability of the transmission capacity within the delivery date for the country's first commercial NPP;
 - 4. Design the appropriate mechanisms and arrangements to accommodate the integration of the Pioneer NPP and ensure that available capacities from such power plant are fully contracted or assured with an offtake to be financially viable for operation, including the possibility of auction, direct contracting or aggregation for own use [i.e. industrial parks]
 - Evaluate possible policies, together with ERC, for the integration of nuclear energy on the level of DUs and the National Electrification Administration (NEA);
 - Evaluate and formulate policies to enhance the benefits of host communities of the Pioneer NPP to allow opportunities in labor and livelihood as well as measures to lower consumer electricity costs;
 - 7. Identify measures and/or formulate further policy measures to address issues and concerns involving Nuclear Energy, including permitting and licensing procedures, and to achieve the objectives of this Circular;

- 8. Identify and propose fiscal and non-fiscal incentives for Pioneer NPP and succeeding NPP's considering the economic benefits, employment opportunities, and social impact of the project; and
- 9. Coordinate with all government agencies and concerned entities and stakeholders to pursue the policies set forth in this Circular.
- B. Energy Regulatory Commission (ERC). Within ninety (90) days from the issuance of this Circular, the ERC shall:
 - 1. Formulate the rules and guidelines for the determination and the appropriate price-setting methodology applicable for the operation of the Pioneer NPP. This includes, among others, setting of the reserved price or tariff range for nuclear, and grid enhancements to incorporate and harmonize generation from nuclear power, *i.e.*, amendments in the Philippine Grid Code, Philippine Distribution Code, and the Open Access Transmission Service.

To this effect, the ERC shall adopt a pricing regime similar to the Regulatory Asset Base (RAB) Model or a similar long-term capital recovery mechanism which considers the high upfront cost in the construction and initial phase of the Pioneer NPP and its long operational period, e.g., sixty (60) to eighty (80) years, depending on the technology and the license issued by the nuclear regulatory body.

In case of power supply contracts, the ERC shall adopt a policy for a minimum contract period of the Pioneer NPP of twenty-five (25) years which shall commence from the Project's commercial operation date, which may be extended for another twenty-five (25) years, or other periods that the ERC may assess based on the plant's estimated lifespan and the license issued by the nuclear regulatory body.

- 2. Set the necessary rules to incorporate costs for refurbishment and maintenance during its commercial operations, consistent with the principles of cost-of-service regulation, and subject to the license issued by the nuclear regulatory body;
- 3. Set the necessary rules and requirements for the issuance of Certificate of Compliance for nuclear energy facilities, and in coordination with relevant government agencies to ensure regulatory alignment and safe integration into the power system.
- 4. Conduct capacity building, in partnership with the Nuclear Energy Program Implementing Organization (NEPIO) and/or with other development partners, relative to nuclear energy; and
- 5. Provide other regulatory support necessary to achieve the objectives of this Circular.

- C. Transmission Network Provider (TNP) and System Operator (SO). The TNP and SO shall:
 - The TNP and SO must maintain close and regular communication with the Pioneer Nuclear Power Plant (NPP) developer from the start of the project through construction and transmission. This ensures they receive all important information about the plant's safety, security, and operations to keep the power system reliable and safe.
 - The DOE and its agencies, like the National Transmission Corporation (TransCo), should always be included in these communications to ensure policies are followed and the transmission system is properly managed.
 - 2. Build the necessary transmission infrastructure in time to support the effective integration and distribution of nuclear energy in the grid from the Pioneer NPP.

The transmission network must be able to accommodate the entry of a 1,200MW Nuclear Power Plant by 2032, or such capacity declared in the PEP;

- Issue the necessary System Impact Study within four (4) months from submission of complete application; and issue the succeeding Facility Study and Transmission Connection Agreement in a timely manner for the Pioneer NPP;
- 4. In the next Transmission Development Plan (TDP) after the issuance of this Circular, include nuclear energy in the expansion and enhancement of the national grid, with adoption of IAEA Standards for such projects:
- 5. Ensure the dispatch of generation by the Pioneer NPP as baseload and procure the necessary ancillary services (AS);
- Build manpower capacity within the TNP and SO for the entry and operation of the Pioneer NPP, in partnership with the NEPIO or with other development partners; and
- 7. Perform other acts necessary for the integration and harmonization of the Pioneer NPP in the grid.

Section 3. *Mandate of Other Concerned Unit(s).* – The NEPIO and the Nuclear Energy Division (NED), under the Energy Utilization Management Bureau (EUMB) of the DOE, or any subsequent or successor entities or bodies, in addition to their respective mandates under existing guidelines and regulations, shall have the following responsibilities:

1. Provide technical assistance to the owner/operator of the Pioneer NPP;

- 2. Assist and, if necessary, indicate or call the attention of concerned agencies and entities on the needed action for the timely delivery of their responsibilities under this Circular;
- 3. Consolidate the developments made by concerned entities and update them of such actions under this Circular;
- 4. Extend coordination with other relevant agencies and entities, other than those mentioned in this Circular, to implement the policies under this Circular; and
- 5. Lead or partner with development partners in the conduct of capacity building with relevant agencies and entities on nuclear energy;
- 6. Perform other duties as may be assigned or delegated by the Secretary.

The DOE may seek the assistance of other government agencies and instrumentalities or other private entities to achieve the purposes of this Circular.

Section 5. *Incentives in Support of the Pioneer NPP in the Energy Sector.* – The following shall be incentives in support of the Pioneer NPP:

- 5.1 The Pioneer NPP shall be automatically certified as Energy Projects of National Significance (EPNS), which entitles it to all the rights and incentives under Executive Order No. 30 and other related issuances of the DOE. The CEPNS of the Pioneer NPP may be issued before any applications for permits and licenses, subject to evaluation by the DOE of the proponent's plans and programs. Within ninety (90) days from the issuance of this Circular, the DOE shall issue the corresponding policies to facilitate an accelerated but efficient processing of NPP permits and authorizations, including processes for documents required prior to actual application.
- 5.2 Subject to other applicable laws and regulations, the Pioneer NPP may avail of existing fiscal and non-fiscal incentives.

RULE III POLICY FRAMEWORK FOR SUCCEEDING NPPs

- **Section 1.** Role and Responsibilities of Government Agencies. After assessment on the initial phase and operations of the Pioneer NPPs and to sustain the implementation of the principles under this Circular, the following agencies and entities shall have the following roles and responsibilities:
- A. Department of Energy (DOE). In addition to its functions under Rule II, the DOE shall:
 - Assess the appropriate mechanisms, arrangements and platforms for the further integration and full offtake of the succeeding NPPs in the grid for the financial and operational viability of all NPPs;

- Ensure that the formulation of the PSPPs of DUs shall be in such a manner as to accommodate the integration of nuclear energy consistent with their respective optimal energy mix and EPIRA mandate to ensure provision of least-cost power supply to its franchise area;
- 3. Conduct monitoring, coordination, and verification on compliance with the rules and requirements issued consistent with this Circular;
- 4. Supervise and monitor any contracts for Nuclear Energy by the DUs comply with their least-cost mandate under the EPIRA; and
- 5. Formulate policies, including the possible establishment of additional electricity markets such as a Capacity Market and a Futures Market, as part of the measures to address issues and concerns related to Nuclear Energy and achieve the objectives of this Circular.
- B. *Energy Regulatory Commission (ERC)*. In addition to its function under Rule II, The ERC shall:
 - Update, if necessary, the rules and guidelines for the determination and the appropriate price-setting formula for nuclear power generation and the prospected contracting by the DUs and participation in other offtake platforms, which includes, among others, setting of the reserved price or tariff range for nuclear;
 - 2. Ensure the compliance of NPP Owners/Operators, DUs and other regulated entities with the provisions on Cross Ownership, Market Power Abuse and Anti-Competitive Behavior under Section 45 of the EPIRA:
 - 3. Impose fines and penalties for any non-compliance or violations under this Circular and other relevant laws, rules and regulations; and
 - 4. Provide other regulatory support necessary to achieve the objectives of this Circular.
 - C. *Transmission Network Provider (TNP) and System Operator (SO).* In addition to its functions under Rule II, the TNP and SO shall:
 - Construct, enhance, or modify the necessary transmission infrastructure ready to support the effective integration and distribution of nuclear energy in the grid, including provisions for future multi-unit, multi-site NPPs, and harmonized transfer of such power generation to DUs;
 - 2. Formulate or amend the protocols for the dispatch of generation by NPPs and the necessary ancillary services (AS);

- 3. Perform other acts necessary for the smooth integration and harmonization of the Pioneer NPP in the grid.
- D. Independent Market Operator (IMO). The IMO shall:
 - Conduct studies and assessments such as the use of Contract for Difference Model or Zero Emission Credit (ZEC) for the further integration of nuclear power generation in other energy platforms and offtake arrangements;
 - 2. Establish efficient market conditions that can facilitate the future trading of nuclear-generated energy; and
 - 3. Perform all acts consistent with the issuances of the DOE pursuant to this Circular.

Section 2. *Mandate of Other Concerned Unit(s)* – The NEPIO and the NED, under the EUMB of the DOE, or any subsequent or successor entities or bodies, shall continue to perform its functions under Rule II and ensure that policies align to succeeding NPPs as well.

The DOE may seek the assistance of other government agencies and instrumentalities or other private entities to achieve the purposes of this Circular relative to succeeding NPPs.

RULE IV MISCELLANEOUS PROVISIONS

- **Section 1.** *Applicability and Transition.* Unless otherwise amended or subject to subsequent issuances of the DOE, all rules applied to the Pioneer NPP shall likewise govern the succeeding NPPs.
- **Section 2.** Separability. If for any reason, any section or provision of this Circular is declared invalid or unconstitutional, the other provisions not affected thereby shall remain valid and subsisting.
- **Section 3.** Repealing Clause. All other previous issuances, rules, and regulations inconsistent with the provisions of this Circular are likewise repealed or amended accordingly.
- **Section 4.** *Effectivity.* This Circular shall take effect fifteen (15) days following its publication in two (2) newspapers of general circulation or in the Official Gazette. A copy of this Circular be furnished to the University of the Philippines Law Center-Office of National Administrative Register (UPLC-ONAR).

Issued at Energy Center, Rizal Drive, Bonifacio Global City, Taguig City on _____ 2025.

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