MISSION REPORT

ON

THE PHASE 1 FOLLOW-UP
INTEGRATED NUCLEAR INFRASTRUCTURE REVIEW
(INIR)

Counterparts:

Department of Energy of the Republic of the Philippines
and
Nuclear Energy Program Inter-Agency Committee (NEP-IAC)

2-6 December 2024

Makati City, Philippines

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CONTENTS

EXECUTIVE SUMMARY

The International Atomic Energy Agency (IAEA) conducted a Phase 1 Integrated Nuclear Infrastructure Review (INIR) mission in the Republic of the Philippines in December 2018. In March 2024, the Nuclear Energy Program Inter-Agency Committee (NEP-IAC) and the Department of Energy (DOE) of the Republic of the Philippines requested the IAEA to conduct a follow-up mission to review the status of implementation of the Recommendations and Suggestions from the 2018 INIR mission. The Philippines developed an Action Plan Progress Report on the status of implementation of the Recommendations and Suggestions from the main INIR mission and submitted it to the IAEA on 8 November 2024 together with supporting documentation.

The Phase 1 Follow-up INIR mission was conducted from 2 to 6 December 2024, Makati City, Philippines. The INIR team was led by Mr Mehmet Ceyhan of the IAEA Nuclear Infrastructure Development Section and consisted of one staff from the IAEA Department of Nuclear Energy and two international experts recruited by the IAEA. Appendix 2 lists INIR Team Members and Philippines counterparts. Interviews were conducted over four days. During the interviews, the Philippines counterparts provided clarifications, additional information, incl. supporting documents, and responded to the INIR team's questions.

During the main INIR mission in 2018, the INIR team made 14 Recommendations and 13 Suggestions. During the Phase 1 Follow-up INIR mission, it was concluded that:

- The Philippines has completely addressed 9 Recommendations and 10 Suggestions;
- There is on-going progress in the implementation of 5 Recommendations and 3 Suggestions.

The INIR team concluded that the Philippines has made significant progress to address Recommendations and Suggestions and has adopted national position for nuclear energy programme through a Presidential Executive Order No. 164 of 28 February 2022. The Philippines has already drafted the comprehensive nuclear law and progressed to its enactment; completed assessment in the areas such as human resource development (HRD), regulatory framework, radiation protection, radioactive waste management, and emergency preparedness and response (EPR); and drafted policies and strategies in the relevant areas.

The INIR team observed that further work is needed to finalize of the Philippines nuclear power strategy: completion of the studies needed for future activities in the areas such as electrical grid, industrial involvement, and review of the national legislation other than nuclear law.

1. INTRODUCTION

The International Atomic Energy Agency (IAEA) conducted a Phase 1 Integrated Nuclear Infrastructure Review (INIR) mission in the Philippines from 10 to 17 December 2018. The mission concluded that the Philippines was committed to a systematic approach to finalizing its

nuclear power strategy and completing the associated infrastructure development. Several studies had been completed and the Philippines recognized the importance of open and transparent public communication and the need to include a broader range of stakeholders in preparations to introduce nuclear power.

In order to assist the Philippines in making further progress in its infrastructure development, the INIR team made 14 Recommendations and 13 Suggestions.

In a letter dated 5 March 2024, the Department of Energy (DOE) of the Republic of the Philippines and the Nuclear Energy Program Inter-Agency Committee (NEP-IAC) requested the IAEA to conduct a Phase 1 Follow-up INIR mission in the Philippines. The Philippines developed an Action Plan Progress Report on the status of implementation of the Recommendations and Suggestions from the main INIR mission and submitted it to the IAEA on 8 November 2024 together with supporting documentation.

Mr Raphael P.M. Lotilla, Secretary of DOE, provided opening remarks for the Phase 1 Follow-up INIR mission. On the Philippines side, the mission was led by Ms Sharon S. Garin, Undersecretary of DOE. The INIR team was led by Mr Mehmet Ceyhan of the IAEA Nuclear Infrastructure Development Section. Appendix 2 lists INIR Team Members and Philippines counterparts.

During the closing session on 6 December 2024, the preliminary draft Phase 1 Follow-up INIR Mission Report was delivered to Mr Raphael P.M. Lotilla, Secretary of DOE.

The Phase 1 Follow-up INIR mission and associated activities were funded through the IAEA regular budget and an extrabudgetary contribution from the United States.

2. OBJECTIVES OF THE MISSION

The main objective of the Phase 1 Follow-up INIR mission to the Philippines was to assess the level of implementation of the Recommendations and Suggestions provided by the 2018 Phase 1 INIR mission.

3. SCOPE OF THE MISSION

The Phase 1 Follow-up INIR mission focused on how the Philippines has addressed the Recommendations and Suggestions given on the status of the infrastructure issues identified in the Phase 1 INIR Mission Report. The Philippines prepared the Action Plan Progress Report covering all Recommendations and Suggestions issued for Phase 1.

4. WORK DONE

Prior to the Phase 1 Follow-up INIR mission, the INIR team reviewed the Action Plan Progress Report prepared by the Philippines and summarizing the actions taken to address Recommendations and Suggestions as well as the supporting documentation (relevant national laws, regulations, reports and presentations, etc.).

The Phase 1 Follow-up INIR mission was conducted from 2 to 6 December 2024. The meetings were held at the Makati Diamond Residence in Makati City, the Philippines. The main interviews were conducted over four days. During the interviews, the Philippines counterparts provided clarifications, additional information, incl. supporting documents, and responded to the INIR team's questions.

A preliminary draft Mission Report on the Phase 1 Follow-up INIR was prepared by the INIR team and discussed with the counterparts as part of the mission. The conclusions were presented to the representatives of the Philippine Government in an exit meeting on 6 December 2024. The preliminary draft Mission Report on the Phase 1 Follow-up INIR was delivered to the counterparts during the exit meeting.

The evaluation results for the Phase 1 Follow-up INIR mission are included in Chapter 6 of this report. Appendix 1 provides detailed description of actions taken by the Philippines since the 2018 Phase 1 INIR mission for each Recommendation and Suggestion.

5. MAIN CONCLUSIONS

The Phase 1 Follow-up INIR mission was conducted in a cooperative and open atmosphere with participants representing 18 organizations involved in the nuclear power programme and corresponding infrastructure. The full list of participants is included in Appendix 2 of this report.

During the main INIR mission in 2018, the INIR team made 14 Recommendations and 13 Suggestions. During the Phase 1 Follow-up INIR mission, it was concluded that:

- The Philippines has completely addressed 9 Recommendations and 10 Suggestions;
- There is on-going progress in the implementation of 5 Recommendations and 3 Suggestions.

The INIR team concluded that the Philippines has made significant progress to address Recommendations and Suggestions and has adopted national position for nuclear energy programme through a Presidential Executive Order No.164 on 28 February 2022. The Philippines has already drafted the comprehensive nuclear law and progressed to its enactment; completed assessment in the areas such as HRD, regulatory framework, radiation protection,

radioactive waste management, and EPR; and drafted policies and strategies in the relevant areas.

The INIR team observed that further work is needed to finalize the Philippines nuclear power strategy: completion of the studies needed for future activities in the areas such as electrical grid, industrial involvement, and review of the national legislation other than nuclear law.

6. RESULTS OF THE FOLLOW-UP FOR PHASE 1

For the purposes of the follow-up INIR mission results, the following definitions are used regarding the status:

No actiona taken:

The recommendation or suggestion has not been taken into account or work on this issue has not started yet.

Work in progress:

Actions have been taken following the recommendation or the suggestion in the INIR report but have yet to produce their efforts for the issue to be considered addressed.

Completed:

The actions taken following the recommendation of the suggestions in the INIR report have solved the issue which is considered addressed.

1. National position	Phase 1		
Recommendations/Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
R-1.2.1 The Government should implement the proposed expansion of the current NEPIO in order to enhance nuclear power programme coordination.			**X**
R-1.3.1 The NEPIO should implement the work proposed in the executive order to define a national strategy for the nuclear power programme.		**X**	
S-1.1.1 The Government is encouraged to finalize the consultations on the proposed executive order to achieve consensus on the way forward.			**X**
2. Nuclear safety	**Phase 1**		
Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
S-2.1.1 The NEPIO is encouraged to continue developing its own and all relevant stakeholders' understanding of nuclear safety.			**X**
3. Management	**Phase 1**		
Suggestions	**Status**		
	No action taken	**Work in progress**	**Completed**
S-3.1.1 The NEPIO is encouraged to implement a leadership development programme to ensure that future leaders in the key organizations gain the experience needed for a successful nuclear power programme.		**X**	
S-3.1.2 The NEPIO is encouraged to gain awareness of approaches to promote a safety and security culture in the key organizations of the nuclear power programme and to plan relevant activities at the appropriate time.		**X**	

4. Funding and financing	Phase 1		
Recommendation/Suggestions	**Status**		
	No action taken	**Work in progress**	**Completed**
R-4.2.1 The NEPIO should review the viability of various financing options for a nuclear power project in the Philippines and identify any need for changes in the current legal framework.		**X**	
S-4.1.1 The NEPIO is encouraged to develop a multi-year assessment of the costs of nuclear power infrastructure development activities.		**X**	
S-4.1.2(corr.) The Philippines is encouraged to further consider arrangements to ensure the availability of adequate funds for radioactive waste management and decommissioning.			**X**
5. Legal framework	**Phase 1**		
Recommendations/Suggestions	**Status**		
	No action taken	**Work in progress**	**Completed**
R-5.2.1 The Philippines should further review some aspects of the current bills and ensure that its legislative plans include all necessary provisions of a comprehensive national nuclear law.			**X**
R-5.3.1 The Philippines should complete an analysis of laws that may affect the nuclear power programme and plan for their enactment or amendment as appropriate.		**X**	
S-5.1.1 The Philippines is encouraged to complete the legislative approval process of the Convention on Nuclear Safety, the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management as well as the Amendment to the Convention on the Physical Protection of Nuclear Material.			**X**
S-5.1.2 The Philippines is encouraged to carry out an analysis and develop a plan to pursue legislative approval of the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage, the Convention on Supplementary Compensation and the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention.			**X**

6. Safeguards	**Phase 1**		
There were no recommendations or suggestions in this area in the 2018 INIR Mission.			
7. Regulatory framework	**Phase 1**		
Recommendations/Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
R-7.1.1 The NEPIO should review the proposed structure and staffing requirements for the future regulatory body and ensure they are adequate to meet the needs of the nuclear power programme.			**X**
R-7.1.2 The NEPIO should develop a plan for the development of regulations that will be required for a nuclear power programme.			**X**
S-7.1.1 The Philippine Nuclear Research Institute (PNRI) is encouraged to identify regulators and organizations that can provide external support to PNRI or the future Philippine Nuclear Regulatory Commission (PNRC) and pursue opportunities for cooperation.			**X**
8. Radiation protection	**Phase 1**		
Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
S-8.1.1 The NEPIO is encouraged to continue assessing and planning for enhancements to radiation protection programmes with regard to the needs of the nuclear power programme.			**X**
9. Electrical Grid	**Phase 1**		
Recommendation	**Status**		
	No action taken	**Work in progress**	**Completed**
R-9.1.1 The NEPIO should ensure that a preliminary study of the grid system is conducted covering the reliability of the grid and its compatibility with the introduction of a nuclear power plant.		**X**	

10. Human resource development	**Phase 1**		
Recommendation	**Status**		
	No action taken	**Work in progress**	**Completed**
R-10.2.1 The NEPIO should develop outline plans for human resource development for each key organization to be integrated at the national level.			**X**
11. Stakeholder involvement	**Phase 1**		
Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
S-11.1.1 The NEPIO and other key organizations are encouraged to further develop outreach activities and materials specific to nuclear power in the Philippines for engaging all relevant stakeholders.			**X**
12. Site and supporting facilities	**Phase 1**		
There were no recommendations or suggestions in this area in the 2018 INIR Mission.			
13. Environmental protection	**Phase 1**		
There were no recommendations or suggestions in this area in the 2018 INIR Mission.			
14. Emergency planning	**Phase 1**		
Recommendation/Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
R-14.1.1 The NEPIO should assess existing EPR arrangements against the requirements for the nuclear power programme.			**X**
S-14.1.1 The Philippines is encouraged to ensure consistency between the comprehensive nuclear law and the National Radiological Emergency Preparedness and Response Plan (RADPLAN) with regard to the responsibility for maintaining the RADPLAN.			**X**

15. Nuclear security	Phase 1		
Suggestion	**Status**		
	No action taken	**Work in progress**	**Completed**
S-15.1.1 The Philippines is encouraged to review and adapt the national coordination mechanisms for nuclear security to meet the needs of the nuclear power programme			**X**
16. Nuclear fuel cycle	**Phase 1**		
Recommendation	**Status**		
	No action taken	**Work in progress**	**Completed**
R-16.1.1 The NEPIO should further assess options for the nuclear fuel cycle, including the supply of nuclear fuel and the management of spent nuclear fuel.			**X**

17. Radioactive waste management	**Phase 1**		
Recommendations	**Status**		
	No action taken	**Work in progress**	**Completed**
R-17.1.1 The NEPIO should perform a preliminary evaluation of the amounts and types of radioactive waste generated by a nuclear power plant and consider options for their management.			**X**
R-17.2.1 The NEPIO should consider disposal options for radioactive waste arising from the operation and decommissioning of the nuclear power plant.			**X**
18. Industrial involvement	**Phase 1**		
Recommendation	**Status**		
	No action taken	**Work in progress**	**Completed**
R-18.1.1 The NEPIO should seek further information from local industries and technology providers and develop a national policy for industrial involvement in the nuclear power programme.		**X**	
19. Procurement	**Phase 1**		
There were no recommendations or suggestions in this area in the 2018 INIR Mission.			

APPENDIX 1: EVALUATION RESULTS OF THE MISSION

6.1.1. 1. National position

2018 Mission Suggestion	
S-1.1.1	The Government is encouraged to finalize the consultations on the proposed executive order to achieve consensus on the way forward.

Action taken since the 2018 INIR mission

Executive Order (EO) No. 116 issued by the Philippine Government on 14 July 2020 established the Nuclear Energy Program Inter-Agency Committee (NEP-IAC), mandated it as the NEPIO of the country, and ordered to conduct the relevant studies for the adoption of a national position on a nuclear energy programme. Following the conduct of the various activities and public consultations, the NEP-IAC recommended the adoption of a national position, drafted the EO No. 16*4 Adopting a National Position for a Nuclear Energy Program, and or Other Purposes* and submitted it to the Office of the President. The Office of the President conducted the consultations required by the legislative process including consultations with the cabinet members. As a result, the Philippine Government issued the EO No. 164 on 28 February 2022. The INIR team was informed that the EOs have similar legal powers as the parliamentary laws in the areas of their scope.

Executive Order No. 164 includes a section on the national position for a nuclear energy programme which outlines the rationale for the programme, a section on guiding principles for the implementation of the national position, and a section on how to modify the structure and responsibilities of the NEP-IAC.

Suggestion status: Completed

2018 Mission Recommendation	
R-1.2.1	The Government should implement the proposed expansion of the current NEPIO in order to enhance nuclear power programme coordination.

Action taken since the 2018 INIR mission

Preliminary work for the Philippines nuclear energy programme was coordinated by the nuclear energy programme implementing organization (NEPIO) established by the Department Order No. DO2016-10-0013 on 24 October 2016. On 14 July 2020, the Philippine Government issued the EO No. 116 which constituted the NEP-IAC as the new NEPIO. The EO No. 116 includes a section on the formation of the NEP-IAC (11 organizations) and a section on the powers and functions of the NEP-IAC. The NEP-IAC is chaired by Department of Energy. Currently the NEP-IAC consists of 24 organizations.

On 28 February 2022, the Philippine Government issued the Executive Order No. 164 *Adopting a National Position for a Nuclear Energy Program, and for Other Purposes*. Additionally, this EO assigned additional functions to the NEP-IAC including the implementation and coordination of activities included in the roadmap and timeline of the nuclear energy programme.

The Nuclear Energy Division of the Department of Energy is acting as a technical secretariat to the NEP-IAC. Furthermore, the NEP-IAC has 6 Sub-Committees (SCs) to conduct its studies with each of the sub-committee having clear responsibilities for different infrastructure issues. Each SC develops an annual workplan to streamline its work with the timeline of the Nuclear Energy Programme (NEP). The deliverables are submitted to the NEP-IAC secretariat. The secretariat then circulates the deliverables to all members of the NEP-IAC before its endorsement by the NEP-IAC. The NEP-IAC meets quarterly and the SCs meet monthly. However, if needed, the NEP-IAC and SCs may meet any time to discuss or work on its topics.

The EO No. 164 binds all member organizations of the NEP-IAC to allocate budget to fund their activities related to the nuclear energy programme. In addition, the INIR team was informed that the NEP-IAC has a specific budget allocated to the nuclear power infrastructure project to support the funding of some of the activities of the SCs, if needed.

Recommendation status: Completed

2018 Mission Recommendation	
R-1.3.1	The NEPIO should implement the work proposed in the executive order to define a national strategy for the nuclear power programme.

Action taken since the 2018 INIR mission

The Philippine Energy Plan (PEP) for 2023–2050 has been prepared and adopted by the Department of Energy in 2023. PEP includes nuclear power as an option in the Clean Energy Scenario.

In line with the Executive Order No. 164, the NEP-IAC drafted the Philippine Nuclear Energy Programme (NEP) 2024-2050. The draft NEP includes several elements of the national strategy for the nuclear energy programme including a roadmap and timeline for the implementation of the nuclear energy programme. According to the NEP, the Philippines expects to complete the preparation for the contracting and construction and to start construction of the first nuclear power plant (NPP) by 2028. The plan envisages to complete the construction and connect the NPP to the grid by 2032 with a capacity of 1200 MW(e). The NEP sets the goal of achieving a total installed capacity of 4800 MW(e) until 2050, including nuclear power added to the energy mix of the country.

The Nuclear Energy Programme (NEP) includes a roadmap with a number of activities to develop and implement the NPP project and to develop the required infrastructure throughout

the years of 2024–2032 including the development of a contracting strategy and decision on financial options for the first NPP by 2026.

The INIR team was informed that the first NPP is likely to be a small modular reactor (SMR) type. The INIR team was further informed that rehabilitation of Bataan NPP is also under consideration. The final decision will be made depending on the results of the feasibility studies to be conducted in coming years. The INIR team was further informed that the roadmap and the timeline will be updated after the final decision.

The INIR team was informed that the NEP has been circulated to the NEP-IAC members and will be submitted to the Office of President for adoption.

Recommendation status: Work in Progress

6.1.2. 2. Nuclear Safety

2018 Mission Suggestion	
S-2.1.1	The NEPIO is encouraged to continue developing its own and all relevant stakeholders' understanding of nuclear safety.

Action taken since the 2018 INIR mission

According to the Action Plan Progress Report, the NEP-IAC conducted an event called the Nuclear Safety Caravan in Masbate, Aroroy, in the Luzon region. Plans are underway to organize similar events across the proposed nuclear installation sites to comprehensively educate and engage local communities. These events aim to raise awareness about nuclear safety, security, safeguards measures, emergency preparedness, and the benefits of nuclear energy when used safely and responsibly.

During interviews conducted by the INIR team, the Philippine counterparts explained that local government units and decision-makers, including the Governor, attended the Nuclear Safety Caravan event.

A workshop was held on 9-13 September 2024 with the participation of several stakeholders to draft a document entitled *National Policy and Strategy for Nuclear Safety and Radiation Protection*. This document, endorsed by the NEP-IAC, has been circulated among its members. The INIR team was informed that NEP-IAC members are following the policy directions and implementing the relevant strategic actions defined by the document.

Furthermore, a nuclear energy awareness training on the *Philippine Nuclear Energy 101: Powering the Future* for NEP-IAC members in 23-25 October 2024 was conducted by qualified PNRI experts to improve the level of understanding of nuclear safety requirements.

Suggestion status: Completed

6.1.3. 3. Management

2018 Mission Suggestion	
S-3.1.1	The NEPIO is encouraged to implement a leadership development programme to ensure that future leaders in the key organizations gain the experience needed for a successful nuclear power programme.

Action taken since the 2018 INIR mission

The Nuclear Energy Program Inter-Agency Committee (NEP-IAC) has engaged with relevant stakeholders and international partners like the IAEA for various capacity building activities for leadership development. The NEP-IAC is implementing HRD plan which includes elements of leadership development. The INIR team was informed that the Philippines is planning to launch its NPPs through the private sector as national legislation limits the Government role in the power generation sector. The NEP-IAC invited for trainings on nuclear energy prominent professionals from the private sector that could be considered as future leaders of the owner/operator of NPPs in the Philippines. Private sector has pursued its own programmes which included leadership and management trainings, as part of their plans for future NPPs. However, the Government's role regarding ownership can be established based on the results of a feasibility study. The INIR team notes the NEP-IAC may consider implementing a leadership development programme should the Government, in the light of results of the prefeasibility study, decide on its role as NPP owner/operator.

The Philippine Nuclear Research Institute (PNRI) has its own programme to educate and train senior managers for the future regulatory body.

Suggestion status: Work in Progress

2018 Mission Suggestion	
S-3.1.2	The NEPIO is encouraged to gain awareness of approaches to promote a safety and security culture in the key organizations of the nuclear power programme and to plan relevant activities at the appropriate time.

Action taken since the 2018 INIR mission

The Nuclear Energy Program Inter-Agency Committee (NEP-IAC) and the Philippine Nuclear Research Institute (PNRI) hosted a number of capacity building activities in cooperation with the IAEA and other international organizations covering nuclear safety and related topics including safety culture aspects.

The Nuclear Energy Program Inter-Agency Committee (NEP-IAC) organized a number of internal workshops to discuss safety matters and developed the draft document entitled '*Philippines National Policy and Strategy for Nuclear Safety and Radiation Protection*'. The policy includes strategic actions on developing and implementing safety culture policy in the key organizations. It also includes an action plan to develop and implement a process of regulatory oversight for safety culture in the operating organization.

The NEP-IAC has also drafted the *National Policy and Strategies for Nuclear Security* which includes promotion of security culture development in organizations; however, the policy does not include a plan for relevant activities.

Suggestion status: Work in Progress

6.1.4. 4. Funding and Financing

2018 Mission Suggestion	
S-4.1.1	The NEPIO is encouraged to develop a multi-year assessment of the costs of nuclear power infrastructure development activities.

The Philippine Nuclear Energy Program (PNEP) 2024–2050 contains action plans to develop infrastructure for the implementation of the nuclear power programme. However, it does not contain any information about the estimated costs of those activities.

The INIR team was informed that cost of construction of the physical infrastructure required such as roads, ports, and transmission lines will be part of the NPP project owner's responsibility. The INIR team notes that this will reduce the amount of funding required from the Government.

The INIR team was further informed that the relevant organizations are ensuring financial resources for infrastructure development in their annual budgets. Since 2018, total budget allocated to the NEP-IAC has reached PHP239 million; this amount covers specific infrastructure development activities such as siting and capacity building. The budget is allocated annually based on the estimates provided by the NEP-IAC members. However, the

INIR team notes that a multi-year assessment of the costs of nuclear power infrastructure development activities would facilitate assurance of the required funding in the longer term.

Suggestion status: Work in Progress

2018 Mission Suggestion	
S-4.1.2(corr.)	The Philippines is encouraged to further consider arrangements to ensure the availability of adequate funds for radioactive waste management and decommissioning.

Action taken since the 2018 INIR mission

The Congress' of Philippines, House of Representatives, House Bill No. 9293 has provisions for the establishment of trust funds in the Development Bank of the Philippines for funding radioactive waste management and decommissioning. Both funds will be credited with a share from electricity sales by the NPP operator. The INIR team was informed that such mode of funds allocation will be reviewed from time to time allowing adjustment of share from electricity sales. These funds will be under strict control to ensure that use of these funds for any other purpose will not be possible. The details on the management and operation of both funds will be established by implementing acts and regulations at later stages.

Suggestion status: Completed

2018 Mission Recommendation	
R-4.2.1	The NEPIO should review the viability of various financing options for a nuclear power project in the Philippines and identify any need for changes in the current legal framework.

Action taken since the 2018 INIR mission

The INIR team was informed that the modality for the ownership of the first NPP would be through private sector involvement consistent with the existing power generation projects in the country. However, the Government role regarding ownership can be introduced based on the results of feasibility studies to be conducted by the NEP-IAC.

The INIR team was further informed that the Government may consider providing support to financing of the NPP in case of private sector ownership; financial support could be provided through an energy auction mechanism which factors cost recovery akin to what was implemented for the renewable sector in the Philippines, or through investments made by the Maharlika Investment Corporation or other authorized Government corporations. Further

evaluation of the financing options will be carried out after decision is made of the Government's role in the ownership model.

Recommendation status: Work in Progress

6.1.5. 5. Legal Framework

2018 Mission Suggestion	
S-5.1.1	The Philippines is encouraged to complete the legislative approval process of the Convention on Nuclear Safety, the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management as well as the Amendment to the Convention on the Physical Protection of Nuclear Material.

Action taken since the 2018 INIR mission

The Philippines completed the legislative process to ratify the Amendment to the Convention on the Physical Protection of Nuclear Material in June 2021. Furthermore, the Philippines is signatory to the Convention on Nuclear Safety and to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. NEP-IAC Members and other relevant Government agencies have been consulted with and their respective Certificate of Concurrence for the ratification of the remaining international legal instruments have been received.

The process will continue with the Department of Foreign Affairs preparing the package for ratification and submission to the Office of the President. The signed instrument for ratification will be returned to the Department of Foreign Affairs. Thereafter, the treaties will be submitted to the Senate for its concurrence to the ratification by the President. It is expected that the process to adhere to those instruments will be completed by 6 June 2025 when the current Congress cycle ends.

Suggestion status: Completed

2018 Mission Suggestion	
S-5.1.2	The Philippines is encouraged to carry out an analysis and develop a plan to pursue legislative approval of the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage, the Convention on Supplementary Compensation and the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention.

Action taken since the 2018 INIR mission

The Philippines is contracting party to the Vienna Convention on Civil Liability for Nuclear Damage and signatory to the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage, the Convention on Supplementary Compensation and the Joint Protocol

Relating to the Application of the Vienna Convention and the Paris Convention. NEP-IAC Members and other relevant Government agencies have been consulted with and their Certificate of Concurrence for the ratification of remaining international legal instruments have been received.

The process will continue with the Department of Foreign Affairs preparing the package for ratification and submission to the Office of the President. The signed instrument for ratification will be returned to the Department of Foreign Affairs. Thereafter, the treaties will be submitted to the Senate for its concurrence to the ratification by the President. It is expected that the process to adhere to those instruments will be completed by 6 June 2025 when the current Congress cycle ends.

The pending House Bills in Senate include provisions for implementing the obligations that arising from those instruments.

Suggestion status: Completed

2018 Mission Recommendation	
R-5.2.1	The Philippines should further review some aspects of the current bills and ensure that its legislative plans include all necessary provisions of a comprehensive national nuclear law.

Action taken since the 2018 INIR mission

The Philippines drafted the Congress bills to form a comprehensive nuclear law and started legislative process for its enactment. The bills have been reviewed several times by the relevant organizations and the Congress. Currently, there are pending bills before the Philippine Congress (House of Representatives and Senate). The House Bill (HB) No. 9293 (National Nuclear Energy Safety Act) has been reviewed and approved by the House of Representatives on 22 November 2023. Currently the Senate Bills (SB) SB Nos. 1194, SB 1491, SB 2498 and SB 2506 are with the Senate. Once the Senate reviews and approves those bills, a committee will consolidate different bills to form one Senate Bill. If there are differences and conflicting provisions between the bills from the Senate and from the House of Representatives, a bicameral committee will be established to consolidate those into one bill. The INIR team was informed that upon the invitation to the bicameral conference committee, the NEP-IAC will participate to clarify the issues that may arise during the consolidation. Afterwards, the final bill will be submitted to the Office of President for approval. It is expected to complete the whole legislative process to enact comprehensive nuclear law by 6 June 2025 when the current Congress cycle ends.

The INIR team was informed that the House Bill No. 9293 has been reviewed by the IAEA through its legislative assistance programme and its comments have been incorporated into the draft. The bill includes the provisions for the establishment of a new regulatory body, regulatory control of activities and facilities, radiation protection, emergency preparedness and response,

nuclear security, safeguards, radioactive materials transport, export and import controls, radioactive waste management and spent fuel management and the enforcement in non-compliance. Recognizing the importance of a sound legal framework for a national nuclear power programme, the Philippines may continue to review the bill to ensure that it covers all the essential elements of a comprehensive nuclear law before and after it will be enacted to support the introduction of nuclear power in the Philippines.

Furthermore, there are other bills pending before the Philippine Congress (House of Representatives and Senate). The House Bill HB No. 8623 is pending with the Special Committee on Nuclear Energy and the Senate Bill SB No. 2545 is pending with the Committee of Science and Technology. The draft bills will establish the national legal framework for the nuclear liability issues once enacted.

Recommendation status: Completed

2018 Mission Recommendation	
R-5.3.1	The Philippines should complete an analysis of laws that may affect the nuclear power programme and plan for their enactment or amendment as appropriate.

Action taken since the 2018 INIR mission

The Nuclear Energy Program Inter-Agency Committee (NEP-IAC) has identified various laws affected by the Nuclear Power Programme and areas needing amendment to support the introduction of nuclear power in the Philippines. The INIR team notes that this evaluation needs to be expanded to cover all the legislation that might indirectly affect the implementation of the nuclear power programme. Following this comprehensive analysis, a plan needs to be developed to make required amendments to the legislation which may affect the implementation of nuclear power.

Recommendation status: Work in Progress

6.1.6. 6. Safeguards

There were no findings in this area in the main INIR mission.

6.1.7. 7. Regulatory Framework

2018 Mission Recommendation	
R-7.1.1	The NEPIO should review the proposed structure and staffing requirements for the future regulatory body and ensure they are adequate to meet the needs of the nuclear power programme.

Action taken since the 2018 INIR mission

There are several bills on comprehensive nuclear law currently under consideration in both chambers of the Philippine Congress. The House of Representatives Bill No. 9293 and the Senate Bills Nos. 1194, 1491, 2498, and 2506 include provisions for establishing a nuclear regulatory body under different names: the Philippine Atomic Energy Regulatory Authority (PhilAtom), the Philippine Nuclear Regulatory Commission (PNRC), the Philippine Atomic Regulatory Commission (PARC), and the Philippine Atomic Energy Regulatory Commission (PAERC), each with similar but distinct functions.

The qualifications for appointment as Director General (DG) and Deputy Director General (DDG) of the regulatory body are defined at varying levels of detail in each bill. The House Bill No. 9293 and the Senate Bill SB No. 2498 include provisions stating that the regulatory body shall employ a sufficient number of qualified and competent personnel. The INIR team was informed that all the bills would be consolidated into one final bill in a bicameral committee, and the NEP-IAC, upon invitation from the bicameral committee, would be present to provide clarifications and to answer any questions.

All the bills include provisions specifying that the proposed regulatory body shall develop its organizational structure, incorporating the necessary qualification requirements and standards in accordance with other legislation governing civil personnel. Draft organizational structure of the future nuclear regulator and its staffing requirements have already been developed by NEP-IAC and PNRI. According to the proposed structure, there are five offices directly dealing with the regulatory activities.

Recommendation status: Completed

2018 Mission Recommendation	
R-7.1.2	The NEPIO should develop a plan for the development of regulations that will be required for a nuclear power programme.

Action taken since the 2018 INIR mission

The pending bills before the Philippine Congress (House of Representatives and Senate) include provisions for the promulgation of rules and regulations upon the laws' enactment. All

existing laws and issuances by the Philippine Nuclear Research Institute (PNRI) and the Food and Drug Administration (FDA) that are not inconsistent with the new law will remain valid.

While all the bills grant the regulatory body the authority to issue regulations, none specify any particular regulations that must be issued. However, under the draft *National Policy and Strategy for Nuclear Safety and Radiation Protection*, a set of documents to be developed is defined in accordance with the principle of effective regulation of nuclear safety and radiation protection.

Additionally, a set of regulations for implementing nuclear energy has already been in place since the Bataan Nuclear Power Plant (BNPP) project and is regularly updated by the PNRI. Those regulations will be reviewed to adapt to the current nuclear power programme.

Recommendation status: Completed

2018 Mission Suggestion	
S-7.1.1	PNRI is encouraged to identify regulators and organizations that can provide external support to PNRI or the future PNRC and pursue opportunities for cooperation.

Action taken since the 2018 INIR mission

The Philippine Nuclear Research Institute (PNRI) has been engaging with the Korea Institute of Nuclear Safety (KINS), the Korea Atomic Energy Research Institute (KAERI), the Korea Institute of Nuclear Non-proliferation and Control (KINAC), the U.S. Nuclear Regulatory Commission (NRC), the U.S. Department of Energy (DOE), and the National Nuclear Security Administration (NNSA).

Furthermore, the INIR team was informed that the Philippines has concluded cooperation agreements with the United States, Korea and Canada, and the NEP-IAC is currently negotiating agreements with other vendor countries like France, Argentina, and Japan. The conclusion of these agreements will provide further opportunities for regulatory cooperation.

Additionally, PNRI actively participates in international cooperation forums such as the International Regulatory Development Partnership, the Nuclear Regulators Forum, and the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM).

Suggestion status: Completed

6.1.8. 8. Radiation Protection

2018 Mission Suggestion	
S-8.1.1	The NEPIO is encouraged to continue assessing and planning for enhancements to radiation protection programmes with regard to the needs of the nuclear power programme.

Action taken since the 2018 INIR mission

The Philippines has drafted a *National Policy and Strategy for Nuclear Safety and Radiation Protection* document which emphasizes identifying and addressing additional radiation risks and special needs related to nuclear facilities, regularly updating radiation protection regulations to align with international standards and local requirements, and establishing key systems such as a National Dose Registry (NDR), a certification system for radiation protection officers, and an accreditation system for technical service providers to ensure comprehensive radiation safety and regulatory compliance. The policy outlines the need to identify the required expertise and capabilities in nuclear safety and radiation protection, supported by a national human resource development program to ensure a skilled workforce. This draft policy also emphasizes collaboration with academic and vocational institutions to create degree programs, scholarships, and specialized training in these fields.

The Philippines hosted an Occupational Radiation Protection Appraisal Service (ORPAS) mission in October 2022. The INIR team was informed that there are studies to update the regulations regarding radiation protection and upgrade the current infrastructure for radiation protection considering the recommendations of the ORPAS mission and the nuclear power programme requirements.

Suggestion status: Completed

6.1.9. 9. Electrical Grid

2018 Mission Recommendation	
R-9.1.1	The NEPIO should ensure that a preliminary study of the grid system is conducted covering the reliability of the grid and its compatibility with the introduction of a nuclear power plant.

Action taken since the 2018 INIR mission

The Philippine Energy Plan 2023–2050 (PEP) provides detailed analysis of energy demand and supply outlook. The PEP indicates nuclear power as an option in clean energy scenarios. The PEP includes the Transmission Development Plan (TDP) which is being updated annually and provides detailed plans for grid expansion for the period covered. The latest TDP approved by the Department of Energy covers the period 2023–2040 and yet to include the NPP. Once the details regarding siting/location and capacity of NPPs are available, the DOE and the National Grid Corporation of the Philippine (NGCP) can proceed with running a simulation to

determine the required grid development. The 2024 TDP is currently under review. There will be another TDP update in 2025 which will include the consideration of NPP. The INIR team notes that preliminary grid study needs to be completed before the TDP update.

The INIR team was further informed by the NEP-IAC that Philippines has a history of a stable grid without any total blackout for more than 20 years despite multiple disruptive weather events like typhoons, cyclones etc.. The National Grid Corporation of the Philippines' (NGCP) System Integrity Protection Scheme plays a pivotal role in this regard automatically handling grid abnormalities. In addition, upgrade and expansion of electrical grid is a continuous activity in the Philippines, with full support of the Government to complete the transmission projects on time.

Recommendation status: Work in Progress

6.1.10. 10. Human Resource Development

2018 Mission Recommendation	
R-10.2.1	The NEPIO should develop outline plans for human resource development for each key organization to be integrated at the national level.

Action taken since the 2018 INIR mission

The NEP-IAC has carried out various assessments and capacity building activities since 2022 for human resource development (HRD) for each key organization which include the NEP-IAC, future regulator and operator in line with the IAEA guidance including *Human Resource Management for New Nuclear Power Programmes* (IAEA NE Series No.NG-T-3.10 (Rev.1), 2022). The NEP-IAC has conducted a national workshop on HRD and workforce planning in September 2022. The INIR team was informed that capacity building activities are being done based on gap analysis for each key organization.

The INIR team was informed that PNRI is considering the option of external support services in order to facilitate licensing of the first NPP. In the long term, PNRI will develop its competency by cooperating with the other regulators and international organizations.

The NEP-IAC has a Nuclear Energy Awareness Training (NEAT) program specifically for developing pipeline activities for nuclear power programme. Industrial chambers and vocational training institutes are also being utilized for HR development.

In collaboration with academia, the NEP-IAC has initiated activities to include nuclear related subjects for students at secondary and university level for building knowledge and awareness, and to promote possible careers awaiting the students in nuclear energy/industry. Over the years 2019–2024, the Department of Energy (DOE) conducted 11 symposia with various colleges and universities in the National Capital Region (NCR), Luzon, Visayas, and Mindanao, as part

of the Information, Education and Communication (IEC) campaign. Over 200 students and faculty members from selected universities participated in these events.

Furthermore, the Philippine universities are collaborating with international universities through Memoranda of Understanding (MOUs) for the development of programs related to nuclear science and technology.

Recommendation status: Completed

6.1.11. 11. Stakeholder Involvement

2018 Mission Suggestion	
S-11.1.1	The NEPIO and other key organizations are encouraged to further develop outreach activities and materials specific to nuclear power in the Philippines for engaging all relevant stakeholders.

Action taken since the 2018 INIR mission

The Philippines has conducted a variety of events engaging various stakeholders including universities, legislators, government agencies, students, teachers, local stakeholders, to secure public awareness and acceptability. In 2019, the NEP-IAC conducted a public perception survey with 79% of favourable results; the similar survey conducted May–June 2024 resulted in 82%of participants being in favour of nuclear power. PNRI accepts public visits throughout the year and organizes an Atomic Energy Week annually. In addition, PNRI in coordination with the NEP-IAC has initiated a series of events in the framework of the Nuclear Safety Caravan campaign; the first event took place in Masbate, Aroroy on 13-16 May 2024, with more events planned in other locations, especially around candidate sites for the future NPP.

The NEP-IAC has drafted a Strategic Communication (StratCom) Plan which includes stakeholder mapping, key messages, engagement tools, etc. The draft will be finalized after the consultation with NEP-IAC members and will be implemented according to the NPP timelines such as siting, licensing and construction.

The INIR team was informed that DOE and PNRI have core communication teams consisting of 7 and 8 persons respectively, including designated qualified spokespersons.

Suggestion status: Completed

6.1.12. 12. Site and Supporting Facilities

There were no findings in this area in the main INIR mission.

6.1.13. 13. Environmental Protection

There were no findings in this area in the main INIR mission.

6.1.14.

6.1.15. 14. Emergency Planning

2018 Mission Recommendation	
R-14.1.1	The NEPIO should assess existing EPR arrangements against the requirements for the nuclear power programme.

Action taken since the 2018 INIR mission

The Philippines has drafted the National Radiological/Nuclear Emergency Preparedness and Response Plan (RADPLAN) 2024. The RADPLAN 2024 addresses nuclear emergencies and aims at establishing the basis for a coordinated national-scale approach that is effectively integrated with international, national, and local responses. Its purpose is to enhance the overall readiness and effectiveness of the country's preparedness and response to any nuclear or radiological incident around and inside the Philippines, enabling authorities to regain control of the situation and mitigate its consequences.

Under the RADPLAN 2024, the National Disaster Risk Reduction and Management Council (NDRRMC) is assigned to coordinate the activities related to nuclear and radiological emergencies. The RADPLAN focuses on risk identification, emergency classification, and phased management (preparedness, response, and recovery). It specifies roles for government agencies like the PNRI, licensees, and local authorities in managing emergencies across all five hazard categories.

Recommendation status: Completed

2018 Mission Suggestion	
S-14.1.1	The Philippines is encouraged to ensure consistency between the comprehensive nuclear law and the RADPLAN with regard to the responsibility for maintaining the RADPLAN.

Action taken since the 2018 INIR mission

The INIR team was informed that House Bill No. 9293 and the Substitute Senate Bills assign the responsibility for maintaining, reviewing, and updating the National Radiological/Nuclear Emergency Preparedness and Response Plan (RADPLAN) to the National Disaster Risk Reduction and Management Council (NDRRMC), headed by the Secretary of the Department of National Defense (DND) as Chairperson. The future nuclear regulator will be represented in

the NDRRMC and will be tasked with proposing necessary modifications and expert services in radiation monitoring and risk assessment to the RADPLAN.

The RADPLAN will be reviewed and updated every two years.

Suggestion status: Completed

6.1.16. 15. Nuclear Security

2018 Mission Suggestion	
S-15.1.1	The Philippines is encouraged to review and adapt the national coordination mechanisms for nuclear security to meet the needs of the nuclear power programme.

Action taken since the 2018 INIR mission

The bills pending before the Philippine Congress have provisions giving coordination responsibility to the regulatory body.

The NEP-IAC prepared a draft *National Policy and Strategy for Nuclear Security* which outlines the Philippines' approach to ensuring nuclear security by preventing, detecting, and responding to unauthorized acts involving nuclear materials and facilities. It aligns with the National Security Policy (NSP) 2023–2028, aiming to protect people, property, and the environment. The policy establishes a national nuclear security regime and highlights international cooperation, threat assessments, legal frameworks, and response systems. Its principles focus on government roles, legislative and regulatory development, secure transport of materials, penalties for offenses, and enhancing detection, response, and recovery measures.

The INIR team was informed that there are other acts regulating national security issues. The Anti-Terrorism Council (ATC), operating under the National Security Council, is responsible for coordinating the national response to security threats. The future regulatory body will be represented at the ATC to coordinate nuclear security issues.

Suggestion status: Completed

6.1.17. 16. Nuclear Fuel Cycle

2018 Mission Recommendation	
R-16.1.1	The NEPIO should further assess options for the nuclear fuel cycle, including the supply of nuclear fuel and the management of spent nuclear fuel.

Action taken since the 2018 INIR mission

The NEP-IAC Sub-Committee 6 (SC6) has conducted preliminary studies to assess options for the nuclear fuel cycle including the spent fuel management. The SC6 report states that the Philippines will not seek to develop domestic commercial capabilities in the front end of the nuclear fuel cycle. Instead, they will pursue long term arrangements for the supply of nuclear fuel. With regard to the spent fuel management, the Philippines is planning to build a national storage facility while establishing arrangements for either a national disposal or disposal in a shared disposal facility. The Philippines will consider the fuel leasing arrangement or other emerging spent fuel management strategy if the option becomes available. The Philippines will not consider reprocessing. The country will support the development of a network of multi-lateral fuel assurances.

The INIR team was informed that a *National Nuclear Fuel Cycle Policy* is being prepared by the NEP-IAC. The conclusions from preliminary studies will serve as the basis for drafting this policy.

The options for spent fuel management will be elaborated in the National Policy and Strategy for Radioactive Waste and Spent Fuel Management foreseen by the comprehensive nuclear law bills currently pending before Congress.

Recommendation status: Completed

6.1.18. 17. Radioactive Waste Management

2018 Mission Recommendation	
R-17.1.1	The NEPIO should perform a preliminary evaluation of the amounts and types of radioactive waste generated by a nuclear power plant and consider options for their management.

Action taken since the 2018 INIR mission

The NEP-IAC SC6 was formed to assess and evaluate nuclear fuel cycle (NFC) and radioactive waste management (RWM) infrastructure. To this end, the NEP-IAC SC6 performed assessment of existing radioactive waste facilities, radioactive waste inventory, as well as forecasting of waste generation for two scenarios: operation of

1. Two (2) pressurized water reactor (PWR) (Bataan NPP) and;

2. Small modular reactor (SMR) with 12 modules.

The NEP-IAC has drafted a *National Policy for Radioactive Waste Management and Spent Fuel Management* which includes provisions for enacting legislation specifically addressing RWM and SFM, the establishment of a national RWM organization, and sustainable funding mechanism. The national RWM authority will be responsible for the management of RWM and SFM of all types and all sources in the Philippines including building and operating necessary facilities.

The Philippine Nuclear Research Institute (PNRI) has already a regulation in force for the disposal of low and intermediate level radioactive waste within the country. Moreover, the House Bill No. 9293 has provisions for an effective management of radioactive waste in the Philippines.

Recommendation status: Completed

2018 Mission Recommendation	
R-17.2.1	The NEPIO should consider disposal options for radioactive waste arising from the operation and decommissioning of the nuclear power plant.

Action taken since the 2018 INIR mission

The NEP-IAC SC6 was formed to assess and evaluate nuclear fuel cycle (NFC) and radioactive waste management (RWM) infrastructure. The SC6 studied existing institutional, legal, regulatory and infrastructure to address the management of radioactive waste. A rating guide was developed to systematically determine the most suitable option for spent fuel and radioactive waste management. Based on the results of the study, the SC6 considered establishment of a national storage and disposal facility as the back-end strategy for managing radioactive wastes and spent fuel. The INIR team was informed that same model is being considered for the management of radioactive waste from decommissioning. However, further details will be finalized as the nuclear power program progresses.

Recommendation status: Completed

6.1.19. 18. Industrial Involvement

2018 Mission Recommendation	
R-18.1.1	The NEPIO should seek further information from local industries and technology providers and develop a national policy for industrial involvement in the nuclear power programme.

Action taken since the 2018 INIR mission

In 2023, the NEP-IAC conducted a workshop on establishing the national policy for industrial involvement and the Philippine International Nuclear Supply Chain Forum organized also by NEP-IAC took place in November 2024. Companies from the power distribution sector, engineering, construction and manufacturing industries participated in this 3-day event.

The NEP-IAC is actively pursuing cooperation to develop capabilities in industrial involvement with countries with existing nuclear power programmes.

The INIR team was informed that, given the aggressive timeline, the Philippines will rely on existing international nuclear supply chain for its first NPP. In the longer term, the NEP-IAC will be developing nuclear industrial involvement policy as part of national industrial development policy. Currently, they are identifying areas of industrial involvement to develop domestic capabilities.

The INIR team was further informed that the next update of Strategic Investment Priority Plan (SIPP) will include NPP as a separate energy project class for the purposes of incentives which will provide a vehicle to facilitate industrial involvement.

Recommendation status: Work in Progress

6.1.20. 19. Procurement

There were no findings in this area in the main INIR mission.

APPENDIX 2: LIST OF INIR TEAM MEMBERS AND COUNTERPARTS

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APPENDIX 4: ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
ASEANTOM	ASEAN Network of Regulatory Bodies on Atomic Energy
ATC	Anti-Terrorism Council
BNNP	Bataan Nuclear Power Plant
DDG	Deputy Director General
DG	Director General
DOE	Department of Energy of the Philippine
EO	Executive Order
EPR	Emergency Preparedness and Response
FDA	Food and Drug Administration
FS	Feasibility Study
HRD	Human Resources Development
IAEA	International Atomic Energy Agency
IEC	Information, Education and Communication (campaign)
INIR	Integrated Nuclear Infrastructure Review
KAERI	Korea Atomic Energy Research Institute
KINAC	Korea Institute of Nuclear Non-proliferation and Control
KINS	Korea Institute of Nuclear Safety
MoU	Memorandum of Understanding
NCR	National Capital Region
NDR	National Dose Registry
NDRRMC	National Disaster Risk Reduction and Management Council
NEAT	Nuclear Energy Awareness Training

NEP-IAC	Nuclear Energy Programme Inter-Agency Committee
NEPIO	Nuclear Energy Programme Implementing Organization
NFC	Nuclear Fuel Cycle
NGCP	National Grid Corporation of the Philippines
NNSA	U.S. National Nuclear Security Administration
NPP	Nuclear Power Plant
NRC	U.S. Nuclear Regulatory Commission
NSP	National Security Policy
ORPAS	Occupational Radiation Protection Appraisal Service
PAERC	Philippine Atomic Energy Regulatory Commission
PARC	Philippine Atomic Regulatory Commission
PEP	Philippine Energy Plan 2023–2050
PhilAtom	Philippine Atomic Energy Regulatory Authority
PNRC	Philippine Nuclear Regulatory Commission
PNRI	Philippine Nuclear Research Institute
PWR	Pressurized Water Reactor
RADPLAN	National Radiological/Nuclear Emergency Preparedness and Response Plan
RWM	Radioactive Waste Management
SC6	Sub-Committee 6, NEP-IAC
SFM	Spent Fuel Management
SIPP	Strategic Investment Priority Plan
SMR	Small Modular Reactor
SQP	Small Quantities Protocol
SSAC	State's System of Accounting for and Control of Nuclear Material
StratCom	Strategic Communication
TDP	Transmission Development Plan