



Republic of the Philippines
Department of Science and Technology



PHILIPPINE NUCLEAR RESEARCH INSTITUTE

20 September 2019

PNRI INFORMATION NOTICE 2019-01

NEW REGULATION: CPR PART 5, "REQUIREMENTS FOR SITING OF NUCLEAR INSTALLATIONS"

ADDRESSEES

All applicants of PNRI license for the establishment of nuclear installation and other interested parties who will be involved in the siting for nuclear installations.

PURPOSE

The Philippine Nuclear Research Institute (PNRI) is issuing this information notice to inform addressees of the new Code of PNRI Regulations (CPR) Part 5 "Requirements for Siting of Nuclear Installations". This Part is promulgated pursuant to Republic Act No. 2067: "Science Act of 1958", as amended by Republic Act No. 3589 and Republic Act No. 5207: "Atomic Energy Regulatory and Liability Act of 1968", as amended by Presidential Decree No. 1484, to establish the requirements for the siting of nuclear installations in the Philippines. It also establishes the requirements for site selection and evaluation to determine the suitability of sites prior to the construction of nuclear installation and to fully characterize the site specific conditions pertinent to the safety of the said installation. The CPR Part 5 was developed to ensure adequate protection of the public, workers and the environment from harmful effects of ionizing radiation that could arise from nuclear installation.

DESCRIPTION OF CIRCUMSTANCES

The Philippines has a high vulnerability to natural hazards due to its geographical location. Natural disasters such as typhoons, earthquakes, floods, volcanic eruptions and landslides, among others, affect the country. There is now also a growing concern that climate change may increase the severity and frequency of natural disasters that may occur.

Given the vulnerability of our country to natural disasters, selecting a suitable site for a nuclear installation requires a significant safety and environmental considerations. The CPR Part 5 was developed to address critical areas on siting and site evaluation due to

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the interconnectivities between site features and facilities conditions. Thus, to evaluate the adequacy of a proposed site for nuclear installation, a systematic approach based on multidiscipline reviews is necessary. Based on the IAEA Safety Requirements No. NS-R-3 (Rev. 1) "Site Evaluation for Nuclear Installations", CPR Part 5 presents a technical basis for siting of nuclear installations.

The CPR Part 5 requirements are applicable to siting for nuclear installations, like the Subcritical Assembly for Training and Educational Research (SATER) or new research reactor or nuclear power plant, to ensure that it will not create unreasonable risks to the public and the environment.

DISCUSSION

The CPR Part 5 was published in the Official Gazette Vol. 115 No. 31 on 5 August 2019 and took effect fifteen (15) days thereafter. The requirements in this regulation are applicable to all addressees involved in the establishment of nuclear installations.

The CPR Part 5 is mainly focused on identifying and selecting a suitable site for a nuclear installation based on the detailed evaluation and appropriate assessment. The requirements pertaining to site preparation are outside the scope of this CPR.

Chapter II of the regulation provides the general requirements for the evaluation of site in consideration of the following criteria:

- Characteristics of the natural environment in the region
- Hazards associated with external natural and human induced events
- Potential effects of the nuclear installation in the region
- Considerations of population and emergency planning

Chapter III covers the requirements for evaluation of below external events that may affect the safety of the facility or activity:

- Earthquakes, surface faulting and volcanoes
- Meteorological events
- Tsunami and flood hazards
- Geotechnical and Foundation Hazards
- External human induced events

Chapter IV covers the characteristics of site and the potential effects of the nuclear installation in the region, as follows:

- Dispersion of Radioactive Materials in the Atmosphere
- Dispersion of Radioactive Materials through Surface Water
- Dispersion of Radioactive Materials through Groundwater
- Population Density and Distribution
- Uses of Land and Water in the Region
- Ambient Radioactivity

CPR Part 5 also provides the requirements for the monitoring of hazards and quality assurance program that are part of the overall management system for nuclear installations.

The new CPR Part 5 is now available and can be downloaded from the PNRI website.
(www.pnri.dost.gov.ph).

REQUIRED LICENSEE RESPONSE

The new regulation contains requirements that all addressees are required to comply.

CONTACT

If you have any question about the information in this notice, please contact:

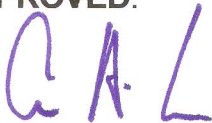
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