

Radiation Safety and Licensing Process for Thailand Tokamak Experimental Facility

Thailand Institute of Nuclear Technology (TINT) is setting up the new experimental facility for the first tokamak in Thailand, TT-1, at Nakorn Nayok site. The first plasma is likely to discharge with hydrogen or argon. Some preliminary simulation result suggests that X-rays in a wide range of energy is expected; with most likely be absorbed in the vacuum vessel. During operation, there may be a small but considerable amount of high energy X-ray to the experimental hall. TT-1 tokamak is thus classified as radiation device (Class 1), where radiation safety and operating license would still be of concern. This contribution presents a planning to ensure all necessary radiation safety measures is properly incorporated into design and construction of the building complex. Access control, area monitoring, surveillance, and control will all be regulated to comply with safety practices. Also, licensing process for possession and operation is discussed.

Author: SAIDARASAMOOT, Kamtorn (Thailand Institute of Nuclear Technology (Public Organization))

Co-authors: POOLYARAT, Nopporn; TAMMAN, Arlee (TINT); PROMPING, Jiraporn; Mr WONGHABUT, Pasit (Thailand Institute of Nuclear Technology (Public Organization)); NILGUMHANG, Kewalee (Thailand Institute of Nuclear Technology (Public Organization)); Mr SANGWANG, Wutthichok (Thailand Institute of Nuclear Technology (Public Organization)); Mr RINTARAK, Panupong (Mahidol University); DANGTIP, Sam

Presenter: SAIDARASAMOOT, Kamtorn (Thailand Institute of Nuclear Technology (Public Organization))

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