

International Conference on the Management of Spent Fuel from Nuclear Power Reactors 2019: Learning from the Past, Enabling the Future



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Cooperative Spent Fuel Management Partnership in the Pacific Rim

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National decisions about the management of spent nuclear fuel have global consequences for safety, security, and nonproliferation. For the past four years, the Nuclear Threat Initiative (NTI) has been catalyzing a spent fuel management partnership in the Pacific Rim –East Asia, the United States and Canada –a region with more than 230 power reactors and 170,000+ tons of spent fuel as of 2018. In the last year, the Partnership has created three expert working groups to address specific technical and societal challenges identified by the participants in previous workshops. These are: (1) underground research facility research and development; (2) long-term monitored dry cask storage; and (3) technical and non-technical aspects of repository siting. The working groups will meet several times a year to fulfill their objectives and identify additional topics that would benefit from collaborative research and development.

The paper: surveys the status of nuclear power generation, spent fuel accumulation and spent fuel disposal plans in the Pacific Rim; describes the security and nonproliferation implications of accumulating spent fuel stockpiles; details the efforts that led to the development of a Pacific Rim Spent Fuel Management Partnership and subsequent working groups; and discusses the research agendas of each working group. It is hoped that this Partnership will help provide solutions to practical problems faced by waste managers and can serve as a template for future similar cooperation in other parts of the world.

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Country or International Organization

United States of America

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