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



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Capacity Extension of ISFSF Jaslovske Bohunice

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TThe Interim Spent Fuel Storage Facility (ISFSF) Jaslovské Bohunice purpose was to cool down the spent fuel under water before its transport to the Soviet Union. After the political change this transport became impossible. Therefore, the capacity of ISFSF had to be increased. However, the storage capacity will be fully exhausted in 2022. As there is not any other option yet, the solution is to expand the current storage capacity. The operator of ISFSF, the Nuclear and Decommissioning Company (JAVYS), decided to build a new dry storage. In 2016 the EIA process was successfully completed and after selection of contractor in 2018 the preparatory work started.

An important role in this process has been performed by the Nuclear Regulatory Authority of the Slovak Republic (UJD). After extensive discussions the basic requirements have been set up. New storage capacity will be dry, vault type storage with passive residual heat removal.

At present the basic documents are completed. The Technical Report "Assignment to Safety Analyzes" was approved, and the technical report will, in addition to the assessment of normal operation and its impact on the radiation protection of the population, also assess the radiation risk to the population in the following postulated internal initiation events: loss of power supply, transport and handling accidents, accidents associated with loss of heat removal, criticality accidents, loss of the monitoring functions, the leakage of primary and of the secondary lid of the canister. External initiation events: explosion, fire, flooding, earthquake, extremely hot and cold and plane crash.

The UJD will pay particular attention to requirements for seismic resistance and protection against accidental fall, or deliberate attack with airliner. UJD will also demand all spent fuel suitable for dry storage to be transported form wet to dry store. This will increase nuclear safety and nuclear security as well.

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Country or International Organization

Slovakia

Primary author: VACLAV, Juraj (Nuclear Regulatory Authority of the Slovak Republic)Presenter: VACLAV, Juraj (Nuclear Regulatory Authority of the Slovak Republic)Session Classification: Session 1.2

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