

Regulatory Aspect of Periodic Safety Review Performed in Nuclear Power Plants in the Slovak Republic

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The paper deals with the regulatory aspect of Nuclear Power Plant (NPP) Periodic Safety Review (PSR) as a part of license renewal process in the Slovak Republic. It summarizes the history of activities similar to PSR performed in the past for NPPs operated in the Slovak Republic. Furthermore, it describes both the requirements involved in the current Slovak legislation to be met by licensee in the Slovak Republic in this field and the procedures concerning the PSR as well.

The objectives and rules of PSR to be performed for NPPs in the Slovak Republic were derived from the internationally accepted International Atomic Energy Agency (IAEA) document and have been implemented into national legislation.

PSR of two twin units located in Bohunice NPP and Mochovce NPP, respectively, has been initiated in the Slovak Republic based on evaluation of each area to be reviewed (safety factors) using recent methodology and practice. Safety factors, such as ageing, modifications of NPP and the safe operation for a specified future period, have to be assessed in the frame of PSR.

Report on performed PSR outlines the results of review for each area, the corrective plan, which considering mutual relations between assessed areas specifies the issues to be solved with the aim to eliminate shortcomings identified in the frame of PSR and to adopt safety improvements. The findings from PSR in the evaluated areas also serve as a source of information for updating of all documents to be attached to the written application of licensee for renewal of a nuclear power plant operating license.

The presented procedure describes how the Nuclear Regulatory Authority of the Slovak Republic (UJD SR) has reviewed the documents submitted during PSR. Based on results of submitted documents evaluation and licensee application for license renewal the license for next 10 years operation has been issued for Bohunice NPP (V2 NPP). At present, similar procedure for Mochovce NPP unit 1 and 2 (Mochovce 1 & 2 NPP) is underway.

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