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



Contribution ID: 80 Type: Oral

## SPENT FUEL MANAGEMENT STRATEGY DEVELOPMENT IN BELARUS

Monday, 24 June 2019 14:20 (20 minutes)

Strategic analysis of the principal spent nuclear fuel management approaches is reported as they are seen for Belarus. Particular features of open and closed fuel cycles are considered and compared. The deferred decision perspectives for the nuclear fuel cycle back-end are discussed. Few available and arising options for the back-end are analyzed taking into account modern trends and technology developments in Russian Federation as the principal supplier of nuclear technologies and in other countries. Some results of feasibility evaluations of long term spent nuclear fuel storage are presented. General requirements for the storage system are formulated. Problems and perspectives concerning the reprocessing of high burnup fuel are presented in the context related to Belarussian NPP. The topic of high level waste management arising after nuclear fuel reprocessing as well as the perspectives of direct spent fuel disposal in Belarus are briefly discussed. Possible intermediate level radioactive waste management strategies including its disposal are considered in some details. Available strategic approaches for the spent fuel management in Belarus are outlined and compared. Recommendations for the national strategy and the short-term national action plan are given.

## Do you wish to enter the YGE SFM19 Challenge?

## **Country or International Organization**

Belarus

**Primary authors:** Mr SIKORIN, Svyatoslav (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus); Mr KUZMIN, Andrei (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus); Mr MALYKHIN, Aliy (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus); Mr KAZAZJAN, Vagan (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus); Mr ZHEMZHUROV, Mikhail (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus); Ms HRYHAROVICH, Tatsiana (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus)

**Presenter:** Mr KUZMIN , Andrei (State Scientific Institution «The Joint Institute for Power and Nuclear Research-Sosny» of the National Academy of Sciences of Belarus)

**Session Classification:** Session 1.2

Track Classification: Track 1: National Strategies for Spent Fuel Management