



Contribution ID: 48

Type: Oral

Some Technical and Institutional Issues to Accelerate Deployment of SMRs

V. Troyanov, Iu. Kuzina, A. Gulevich, V. Usanov, A. Verbitsky
JSC State Scientific Centre of the Russian Federation, Obninsk, Russia

The vision on the development and deployment of SMRs is presented in the paper. The first SMRs were built in Russia in 1954 -1989. After this stage, SMRs of various types were designed but not built until early 2000s. New driving forces for the penetration of SMRs to the energy sector of the country are discussed in the paper. The recent accelerated development of the northeastern regions with rich natural resources but low population density and high cost of energy generation has created favorable conditions for the use of SMRs. However, it is necessary to revise the approaches used for construction of the reactors of large capacities and find new solutions to meet specific requirements of the remote regions. Comparison of the feasibility of these requirements for small PWRs of generation 3+ and generation IV reactors is provided. The discussion on the tasks of SMRs penetration is supplemented by consideration of their role as a large sustainable component of the future national and global energy sector.

Country OR International Organization

Russia

Email address

vouss@ippe.ru

Confirm that the work is original and has not been published anywhere else

YES

Author: Mr USANOV, Vladimir (Institute for Physics and Power Engineering)

Co-author: Ms KUZINA, Julia (Institute for Physics and Power Engineering)

Presenter: Mr USANOV, Vladimir (Institute for Physics and Power Engineering)