



Nordisk kernesikkerhedsforskning
Norrænar kjarnöryggisrannsóknir
Pohjoismainen ydinturvallisuustutkimus
Nordisk kjernesikkerhetsforskning
Nordisk kärnsäkerhetsforskning
Nordic nuclear safety research

NKS-105
ISBN 87-7893-164-9

Nordic Nuclear Safety Research (NKS) Seminar on
“Experience from Nordic Safety Improvement Pro-
grammes towards Nuclear Power Plants in Russia,
Central- and East-European Countries” Park Hotel,
Halden, Norway 25th-26th November, 2004.
- Seminar proceedings

Compiled by Thorbjörn Björlo

Institute for Energy Technology, Halden, Norway

April 2005

Abstract

Generally, the presentations and discussions showed that the experiences from the projects have been good and that most projects have been successful. The Nordic assistance programmes have clearly contributed, together with the NPPs own efforts, to an increased safety level at the plants. This has been shown by PSAs carried out both at the Kola and Leningrad NPPs.

It was agreement that it is important to keep up the "Nordic presence" at the Russian NPPs through carrying out cooperative projects also in the future. New projects should concentrate on building up knowledge and competence. There was also consensus that this is best achieved in concrete projects involving also improving equipment and systems.

Key words

Nordic assistance programmes, Russia, Central and East European Countries, seminar proceedings

NKS-105
ISBN 87-7893-164-9

Electronic report, April 2005

The report can be obtained from
NKS Secretariat
NKS-775
P.O. Box 49
DK - 4000 Roskilde, Denmark

Phone +45 4677 4045
Fax +45 4677 4046
www.nks.org
e-mail nks@nks.org

**Summary of the Panel Discussion/Brainstorming Session
of the
NKS Seminar on Experiences from Nordic Assistance Programmes towards
NPPs in Russia and Central and East European Countries**

*Thorbjørn Bjørlo, Institutt for energiteknikk, Halden Norway
E-mail: bjorlo@hrp.no*

Lessons-Learned from the Assistance Programmes

- Generally, the presentations and discussions showed that the experiences from the projects have been good and that most projects have been successful. The Nordic assistance programmes have clearly contributed, together with the NPPs own efforts, to an increased safety level in the plants. This has been shown by Probabilistic Safety Assessments (PSAs) carried out both at the Kola and Leningrad NPPs.
- The nuclear power plants are satisfied with the results obtained in the different projects. Important contacts between staff at the NPPs, the utility organisation (ROSENERGOATOM) and safety authorities (GAN) in Russia; and safety authorities, utilities and nuclear industry in the Nordic countries have been created through the projects.
- The assistance programmes have been important for increasing the knowledge of Russian plants, and thus for the general emergency preparedness status in the Nordic countries. The benchmarking of safety analyses between Russian and Western plants and the transfer of safety management principles through the projects have been important factors in placing more emphasis on safety culture in the Russian nuclear community.
- The problems and difficulties which have been encountered in the programmes, have not been related to the projects as such, but have been related to more political issues as problems around customs rules, liability issues, etc. This was especially true in the first phase of the assistance programmes and caused serious delays in some projects in the 90'ties. Now such problems have mostly been solved, and current projects are running smoothly.
- The personal relations and trust that have been built up between Russian experts and Nordic experts working together on the different projects are key factors for success.

Strategy Discussions

- There was consensus that the assistance programmes towards the NPPs in Russia should be continued. Finland will use all its available funds under the assistance programme towards Russia on nuclear safety in projects towards Leningrad and Kola NPPs. The reason is that risk assessments clearly show that accidents at the NPPs represent the greatest risk to both the Finnish and the Russian populations.
- The trend in Norway and possibly also Sweden is a gradual reduction of the funding for projects towards the NPPs, partly due to the increased safety of the plants, as demonstrated by PSA analyses. More funding will in the future be directed towards clean-up of radioactive waste (Andrejev bay, dismantling of scrapped nuclear submarines). From the Finnish side it was expressed worries about the trends in Norway and Sweden. It was stated that even if the safety at the NPPs has been improved, it is important to consolidate this situation and work towards a permanently improved safety culture in the Russian nuclear community. This is a continuous process and international cooperation and openness towards the Western nuclear community are very important factors. Nordic-Russian cooperation is important in this respect, as other international projects towards the Russian NPPs are decreasing in number. As one of the participants at the seminar stated. "When you start thinking that the safety level is good enough, then safety is in danger!"
- Norwegian participants explained the political discussions in Norway regarding the worry that the assistance programmes might lead to a longer life of the oldest NPPs in Russia. It seemed, as this is only a matter of discussion in Norway. A representative of the Swedish safety authorities stated that the starting point of this discussion is wrong. Nuclear safety is not primarily a matter of the age of a plant. A nuclear power plant which is not operated and maintained properly is dangerous long before e.g. an age of 30 years, while a plant that is maintained and upgraded properly can be operated much longer than 30 years. He referred to Oscarshamn 1, which is Sweden's oldest nuclear power plant, but now after the modernization and upgrading project it is Sweden's most modern plant.
- It was agreement that it is important to keep up the "Nordic presence" at the Russian NPPs through carrying out cooperative projects also in the future. New projects should concentrate on building up and improving the safety culture at the plants as well as building up knowledge and competence. There was also consensus that this is best achieved in concrete projects involving also improving equipment and systems. Pure "paper projects" (studies, courses) have limited effects. "Learning by doing" is the best, and competence in project and safety management, and

quality assurance and control is best built up by participating in real projects.

- Coordination of the Nordic assistance programmes and projects are important to achieve synergy and avoid duplication of work. Some participants felt that the Nordic countries should be more active in international fora in promoting assistance to the Russian NPPs. It should be possible to influence e.g. the TACIS programme to focus more on safety improvements. Norwegian, Swedish and Finnish representatives in the field of nuclear safety should “lobby” towards the EU commission and stress the importance of nuclear safety programmes towards Russia, using the success of the Nordic programmes as example. Another suggestion was that the Nordic countries should use some of their funds (which are limited) to run feasibility studies of potentially very large projects, which later, when the foundation is in place, can be funded by “big money” (EBRD, etc). The problem for these programmes is often a lack of well-defined projects (“mature” projects), and this model can solve this problem. One participant stated that an area that deserved more focus is severe accident management, and projects in this area should be emphasized.

Title	Nordic Nuclear Safety Research (NKS) Seminar on “Experience from Nordic Safety Improvement Programmes towards Nuclear Power Plants in Russia, Central- and East-European Countries” Park Hotel, Halden, Norway 25th-26th November, 2004. - Seminar proceedings
Author(s)	Compiled by Thorbjörn Björlo
Affiliation(s)	Institute for Energy Technology, Halden, Norway
ISBN	87-7893-164-9 <i>Electronic report</i>
Date	April 2005
Project	NKS_R_2004_38
No. of pages	In summary: 3 pages
No. of tables	In summary: 0
No. of illustrations	In summary: 0
No. of references	In summary: 0
Abstract	<p>Generally, the presentations and discussions showed that the experiences from the projects have been good and that most projects have been successful. The Nordic assistance programmes have clearly contributed, together with the NPPs own efforts, to an increased safety level at the plants. This has been shown by PSAs carried out both at the Kola and Leningrad NPPs.</p> <p>It was agreement that it is important to keep up the "Nordic presence" at the Russian NPPs through carrying out cooperative projects also in the future. New projects should concentrate on building up knowledge and competence. There was also consensus that this is best achieved in concrete projects involving also improving equipment and systems.</p>
Key words	Nordic assistance programmes, Russia, Central and East European Countries, seminar proceedings