

International Conference on Human and Organizational Aspects of Assuring Nuclear Safety –Exploring 30 Years of Safety Culture



Contribution ID: 36

Type: **Invited Presentation**

Developing and Strengthening of Safety Culture at Ukrainian NPPs: Experience of NNEGC «Energoatom»

Tuesday, 23 February 2016 14:30 (30 minutes)

Synopsis

The moratorium, which was introduced in Ukraine after the Chernobyl accident for the construction of new nuclear power plants at the legislative level, was broken in 2004, when two new power units at Khmelnytsky and Rivne nuclear power plant were put into operation. Currently, the nuclear energy sector plays the main role in the electric power industry of Ukraine. Ukraine has intention to finish the construction of two new units at the Khmelnytsky nuclear power plant.

NAEC “Energoatom” as the operating organization is aware that the attitude and behavior of top management as well as organisational features and activities have a significant impact on the safety culture.

In the management statement dedicated to nuclear safety establishment, NAEC declares the absolute priority of safety over other objectives, in accordance with the principles of safety culture.

Beginning with 2009, in cope with the IAEA recommendations, and based on the introduced in Ukraine in 2008 new revision of safety rules “General Safety of nuclear power plants”, NAEC “Energoatom” activities for improving the safety culture are carried out under special programs.

There are three levels of management in this activities:

- Council on safety culture (top management)
- Working Group (representatives of all divisions of NAEC)
- Committees on safety culture (all NPP sites).

The programs are developed and updated every 2 years and the implementation of measures is provided on three levels of responsibility:

- Technical policy for the safety;
- responsibility and leadership obligations;
- personal responsibility and duties of every employee.

The main achievement of these programs was to define and establish the strategy and a set of permanent measures, which are aimed at improving the safety culture.

On the basis of corporate programs the plants developed the programs of concrete actions aimed at the establishment and development of a safety culture, including:

- Self evaluation of safety culture
- Questioning the staff
- Independent audits of safety culture

NAEC “Energoatom” seeks to take into account international experience, and to participate in conferences (such as this one), seminars and workshops held under the auspices of the IAEA, as well as to follow the guidelines and standards of the IAEA in the organization of activities to improve the safety culture. Other sources of international experience in this field are the EU-funded projects of “soft” assistance and guidance of

other authorised international nuclear industry organizations such as WANO. In this regard, it should be mentioned WANO guidance document GL 2002-02 «Principles of effective personnel organisation» that identifies five fundamental principles relating to human factors, and important for the development of a sustainable safety culture in the organization:

- Even the best experts make mistakes.
- A situation fraught with errors is predictable, manageable and preventable.
- Human behavior is determined by organizational processes and values.
- Highest efficiency operation is achieved through the promotion and support.
- Violations can be avoided if to understand the causes of errors and implement lessons learned.

Within the framework of the international programs of EC “soft” aid in recent years the projects that contribute to the development of a safety culture in the NAEC “Energoatom” have been either carried out or continue carrying out.

These projects include the solution of certain problems (for example, in the area of human factor –the task of «not punishment for error» approach establishment), as well as more common tasks of improving safety culture in overall, such as:

- Implementation of programs to inform senior staff and management, including the essential features needed to create a strong culture of safety; creating conditions for the improvement of the organizational and managerial impact on the safety of nuclear power plants and the development of a deep understanding of the importance of safety approach and the practical realization of the principles of safety culture in production activities;
- Creating an atmosphere of fruitful cooperation between management and staff, the improvement of collective action and of the behavior, developing a positive safety culture;

Currently NAEC “Energoatom” is making efforts to improve the effectiveness of the implementation of these projects; to analyse the emerging issues in the implementation of project both at the pilot nuclear power plant and during its subsequent extension to the rest of the NPP; to conduct generalization, systematization and integration of the results of these projects into a single management system of safety culture for NAEC “Energoatom.”

Realizing the importance of safety culture to achieve the goals of safety, as well as performing for many years a whole range of measures to improve safety and to improve the safety culture, NNEGC “Energoatom” considers the need for constant attention to safety culture at all organizational levels to be the key to success, and the main driving mechanism of progress and development in this area - wide awareness of international experience and achievements in improving the safety culture, their integration and implementation in your organization.

Country or International Agency

Ukraine

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Yes

Primary author: Mr SHEYKO, Yury (NNEGC “ENERGOATOM”)

Co-author: KOTIN, Petro (Ukraine)

Presenter: KOTIN, Petro (Ukraine)

Session Classification: TO1: Topical Session: Learning from the Past, Going Forward