Technical Meeting on Safety Culture Oversight and Assessment

Vienna, 15–18 February 2011

Safety culture oversight approach in Ukraine

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Vienna, 15–18²February 2011





Nuclear facilities in Ukraine

Four NPP sites - 15 Units (commissioned from 1978 to 2006) Net capacity - 13 835 MWt

> 3 Chernobyl NPP Units under decommissioning

- Vast «Chernobyl» program to recover environment, which includes the Plan to convert the Shelter into environmentally safe system (SIP)
- Dry SNFS at Zaporozhie NPP is in operation and dry SNFS at Chernobyl NPP is designing
- 2 research reactors





"General Provisions on Safety Assurance of Nuclear Power Plants" (2008)

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5 Fundamental safety principles

5.1 Safety culture

5.1.1 All organizations and all individuals involved into NPP designing, equipment manufacturing and supply, NPP construction, commissioning, operation and decommissioning as well as assessment and regulation of its safety shall develop the safety culture.





The safety culture is attained by:

- setting the safety priority over political, economical, and production objectives;
- selection, training, and advanced training of managers and personnel of utilities, nuclear power plants, suppliers of equipment and services, and regulatory authorities;
- strict discipline observance with clear distribution of authorities and personal responsibilities of managers and direct executors;
- observance of requirements of operating procedures and technical specifications, their continuous improvement on the basis of gained experience and results of scientific and technical studies;
- establishment by the managers at all levels the climate of confidence and such approaches to collective work that promote enforcement of positive attitude towards safety;
- understanding by each employee the influence of his work onto safety and consequences that could result from his failure to observe or improper fulfilment of regulatory requirements, operating procedures and duties;
- self-check of the activities influencing safety;
- understanding by each employee inadmissibility of hiding errors in his work, identification and elimination of their causes, necessity of continuous self-perfection, study and implementation of advanced experience including international experience;
- establishment of such incentive and penalty system based on the production activity results that inspires openness of employees' work and does not favour hiding errors;
- organizations undertaking commitments of continuous safety improvement and efficient implementation of the measures necessary for that.





5.1.2 The Utility and each NPP shall develop and implement a specific action program aiming at establishment and development of safety culture.

Such program shall include three levels:

- policy statement;
- management responsibility;
- personal responsibility of each employee.





10.1. Administrative management

- 10.1.1. NPP operation is performed in accordance with safety assurance principles.
- 10.1.4. NPP operator has to pay continuous attention to the creation of safety culture and improvement of NPP officials' professional level (director, chief engineer, his deputies, heads of departments). The required condition for a worker to appoint him for an executive position is his compliance with the qualifying requirements, as well as positive results of examination and qualification tests passed in the established order.





Requirements for Nuclear Installations Management system (Draft)

Refer to IAEA No. GS-R-3 "The Management System for Facilities and Activities" & Other





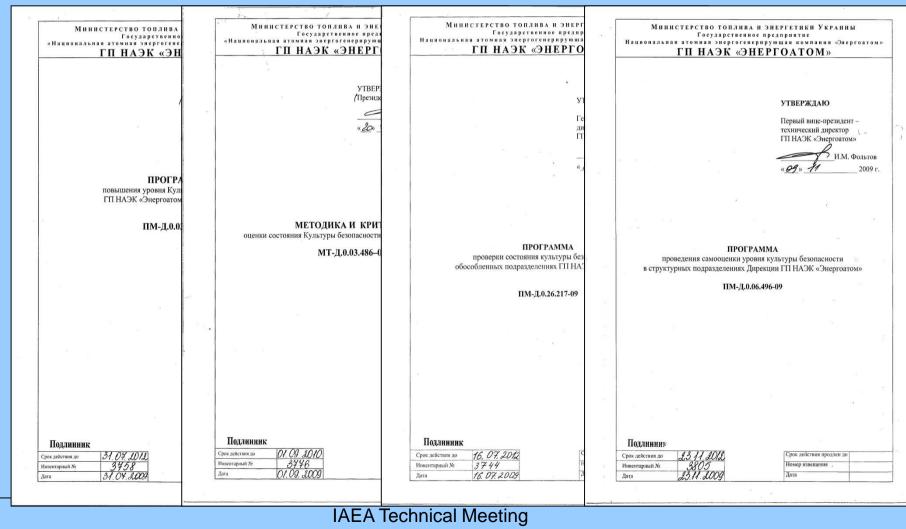
SC self assessment programs was developed based on the

- INSAG-4
- IAEA-TECDOC-744, 1321, 1329
- SCART Guideline, IAEA Service seria №16





Организационная и методическая основа для осуществления очередного этапа оценки текущего уровня культуры безопасности в подразделениях ГП НАЭК «Энергоатом»:



Vienna, 15–18 February 2011





Assessment areas

- Administration
- Operation
- Maintenance and repairs
- Staff training
- Quality assurance
- Departmental oversight





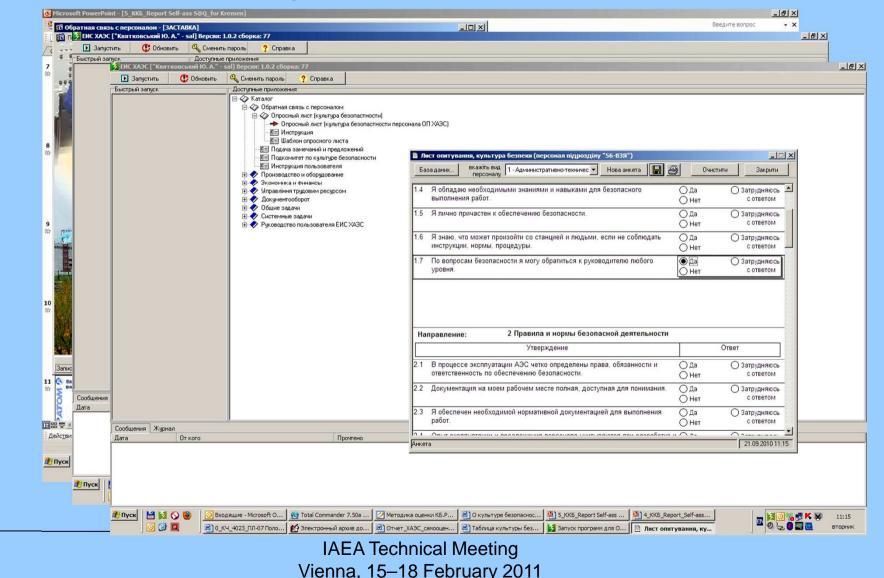
Tools to check the status of safety culture

- assessment of documentation
- observations at the workplace
- anonymous electronic survey
- different type of questionnaires





Electronic survey software







Areas for improvement (inconstancies revealed)

Areas for improvement	Zaporozhe NPP	Rovno NPP	South- Ukraine NPP	Khmelnits ky NPP
Management	-	1	2	2
Provision of safety	7	-	4	4
Operation	8	16	7	7
Repair and maintenance	13	7	8	5
Training	6	5	2	3
QA	4	2	2	-
Departmental oversight	3	6	2	2
TOTAL:	41	37	27	23
In particular - documentation	26	26	24	16
In particular - on the condition of equipment, buildings and structures	15	11	3	7

Thank you for attention!

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