

OSART Good Practices
TRAINING AND QUALIFICATION
General Employee Training

Mühleberg, Switzerland

Mission Date; 6-23 November, 2000

The Plant has used an effective process to develop and implement a new Web Based Training (WBT) Package for its Quality Management Program. The project team obtained senior management support for the initiative and then involved plant staff in the selection of the topics and in the development of the contents. This development technique significantly strengthened the outcome of the training package. The plant also took advantage of lessons learned from previous WBT projects and produced a training package that provides good training for the subject. The training has been very well received by those who have taken it. Of particular note is the integration of plant staff in the supporting photos and the use of a practical example of a pump replacement to illustrate the Quality Management process. The result is a package that the plant can be proud of, and a process that will serve it well as the basis for future WBT modules.

Rovno 1/2, Ukraine

Mission Date; 22 Sept-9 Oct, 2003

The training organization with the support of line managers has developed and conducts a series of training courses aimed at promoting safety culture. The training addresses all aspects of safety culture and managers are directly involved in the programme delivery. This should help with the application of safety culture principles at NPP.

The use of computer based training (CBT) courses for initial Nuclear General Employee Training (NGET) to qualify new staff, contract employees and visitors for unescorted plant access is considered to be a good practice. Prior to plant access, all employees, contractors and visitors who require unescorted access to Pickering A are required to complete a package of CBT courses. The CBT courses are always available by means of the corporate Intranet and the Internet for external users. Overall, the training is effective at providing the basic awareness necessary for personnel to work safely at Ontario Power Generation Nuclear sites and contributes to a safety culture. The quality of E-learning is of a very high standard.

- The CBT courses are available 24 hours a day by means of the corporate Intranet which is available to all staff and the Internet when the courses are required by external users. This allows trainees to take the CBT course at any time convenient to them and their work schedule.
- The training was developed in a systematic method and contains essential information and behavioral requirements for new employees in a nuclear environment. Each course is designed to introduce and reinforce safety culture, management expectations, event free tools, and industry operating experience. The CBT courses are available 24 hours a day by means of the corporate Intranet which is available to all staff and the Internet when the courses are required by external users.
- OPG's site-specific General Employee Training qualification is based on international nuclear industry standards, and also incorporates local site variations and Canadian regulatory and legal requirements.
- The training covers a variety of topics including Safety Awareness, Nuclear Physical Security, General Emergency Response, Work Protection Introduction, Human Resources Overview, Environmental Awareness, Workplace Hazardous Material Information System (WHMIS), and Importance and Use of Steam Doors.
- Learning retention of trainees is enhanced through the use of advanced computer animation, videos, interactive exercises, and randomized multiple choice questions.
- There is also a requirement for all NGET qualified staff to complete an annual continuing training CBT as part of maintaining their NGET qualification. The content for this CBT is revised annually to refresh and strengthen OPG employees' knowledge of NGET topics. In particular, it addresses areas related to human performance, plant modifications, or equipment changes that impact daily activities of trainees. It also includes in-house and industry operating experience, and special plant operations or maintenance activities that are of importance to a general employee population.
- The use of CBT courses for Radiation Protection continuing training to refresh existing employees' knowledge, deliver important changes and relevant Operating Experience is also a good practice. The requalification program includes both a CBT course and practical training. The CBT course is used to prepare the trainee for the practical evaluation. At all Radiation protection qualification levels an annual continuing training CBT course is employed to share OPEX and the most recent changes to equipment or procedures.
- CBT courses are routinely revised to incorporate changes resulting from procedural updates, new regulatory requirements, safety related issues, organizational changes, station equipment changes, employee feedback, senior management directives and improved technology.

Chinon, France

Mission Date; 27 Nov. - 14 Dec, 2007

The practical training presented to employees in the area of radiation protection and the different tools and simulation practices used are deemed very effective in simulating work practices and human actions inside a controlled zone; the continuous reduction in individual dose received could be attributed to some extent to these innovations which include:

- Actual piping, tank and valve mock-ups that can simulate leakage and industrial hazards.
- Portable radiation monitors, placed at a mock-up work site that can be triggered to alarm from a small control room. From here trainee response and actions to simulated high radiation levels can be monitored.
- Personal radiation monitors at exit of simulated controlled area that can be triggered to alarm and indicate contamination on the body of the trainee; the trainee response in decontamination actions can be monitored.
- The use of “fluorine” to simulate contamination that can be detected by the use of UV light, the trainee response and actions can be observed.
- Remote controlled feature added to the portable radiation monitors and the personal radiation monitors to allow the instructor to directly observe the trainees in situ when activating these alarms.

Balakovo 4, Russia

Mission Date; 19 May - 6 Jun., 2008

The psychological training of managers, operation and maintenance staff.

The scope of psychological training at Balakovo NPP is extended to the personnel other than control room staff.

The objective of training is to establish and maintain a psychological attitude, orientation and priorities, psychological qualities and skills important to profession, psychological readiness to act in case of emergency, psychological stability in stress and emotional-tense situations.

The training includes three specific areas: general psychological training special psychological training and target psychological training. There was performed the special project dedicated to psychological aspects of different types of pre-job briefings. The training is carried out in the form of the problematic situations with the use of the modern methods.

The combination of different training settings in frame of the training programmes significantly decreases the psychological burden during training and allows the trainees to effectively perceive the material. This training improves the self-control skills in order to carry out the complex tasks, conduct the responsible negotiations and improve the ability to make the decisions in case of time stress.

The results of different surveys show the sustainable satisfaction of the trainees and confirm the successfulness of this approach which can be considered as good practice.