

**OSART Good Practices**  
**OPERATIONAL EXPERIENCE FEEDBACK**  
Sources of operating experience

**Loviisa, Finland**

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Direct information exchanges with other nuclear power plants.

Direct information exchanges with other nuclear power plants, especially other VVER plants, has contributed for getting lessons learned. Since the beginning of the plant operation, the information exchanges have been an important way of sharing OE. This has been accomplished through twinning and personnel exchange with other plants.

The following examples have been implemented through the direct information exchange:

- Regular annual workshops/seminars for more than 15 years on common topics (maintenance, operations, quality control, etc.) between VVER plants (total 20 nuclear power plants around the world )
- Common database for VVER steam generator (SG) chemistry regimes and tube damages based on operation and monitoring data (Dukovany, Bohunice, Mochovce, Temelin, Paks and the plant).
- Experts and maintenance workers twinning during outages (Paks and the plant)
- Modification of the SG feedwater distribution pipe (several Russian nuclear power plants, Paks, Rovno and the plant)
- Modification of the SG primary collector sealing and cover (Dukovany and the plant)
- Testing of the pressurizer pilot-valves (Paks and the plant)
- Common repair programme for the primary loop shut-down valves (Paks and the plant)
- Endoscope- inspection system of the turbines and related training (Paks, Kola and the plant)
- Exchange of turbine repair technology (Paks, Kola, Novo-Voronezh, Dukovany and the plant)

These activities have contributed to improving the level of nuclear safety of the plant.

Operating Experience Feedback with operators from conventional plants.

All conventional and nuclear power plants of Electrabel are part of a network that shares information and experience related to equipments, organization, etc. The events that are addressed can be related to technical issues, human performance, health & safety and the environment. Operating Experience (OE) from all entities comes from various sources, including the Maintenance Competence Center, working in both conventional and nuclear generation.

The ensuing internal OE is formalized and made available to all sites in a common language (English). A point of contact is given on each report for additional information. Each plant analyses this OE and assesses the possibilities of incorporating it into its own organization. This specific way of experience feedback was implemented two years ago with about 15 reports per year. Out of them, 50 percent were used for analysis at the plant.

As an example, the plant received OE from the Maintenance Competence Centre (MCC) of Electrabel on the wrong operation of a high voltage circuit breaker. The MCC's recommendation was to open and close these circuit breakers using the pushbutton switch in test position after the disconnection of the low voltage but before removing the circuit-breaker from its compartment. This OE was used for analysis in Tihange NPP and led to the modification of the Operator's Handbook.

With this type of feedback from the conventional plants, the plant is able to improve its performance, especially in conventional areas like electrical systems, turbine generators and cooling towers. This could in turn help to improve nuclear safety as some of these systems or components may be involved in giving supply to nuclear safety systems.