

INTRODUCTION AND MAIN CONCLUSIONS

INTRODUCTION

At the request of the Government of the Slovak Republic, an IAEA Operational Safety Review Team (OSART) of international experts visited Mochovce Nuclear Power Plant from 4 to 20 September 2006. The purpose of the mission was to review operating practices in the areas of Management organization and administration, Training and qualification, Operations, Maintenance, Technical support, Operating experience feedback, Radiation protection, Chemistry and Emergency planning and preparedness. In addition, an exchange of technical experience and knowledge took place between the experts and their plant counterparts on how the common goal of excellence in operational safety could be further pursued.

The Mochovce Nuclear Power Plant is situated in the Southeast of Slovakia, about 20 km from the town of Levice, on the area of former village of Mochovce. The plant operates two VVER-440 type V213 reactors. Unit 1 was commissioned in 1998, unit 2 in 2000. Mochovce NPP is an integral part of SE (Slovak power generating company) plc. The workforce is comprised of 688 employees directly reporting to Plant Director. Significant number of staff reporting to corporate organizations (e.g. Maintenance, Procurement) is permanently working at plant site.

The Mochovce OSART mission was the 136th in the programme, which began in 1982. The team was composed of experts from Czech Republic, France, Hungary, Japan, Romania, Slovenia, Ukraine, United States of America, United Kingdom together with the IAEA staff members and an observer from Korea. The collective nuclear power experience of the team was 269 years.

Before visiting the plant, the team studied information provided by the IAEA and the Mochovce plant to familiarize themselves with the plant's main features and operating performance, staff organization and responsibilities, and important programmes and procedures. During the mission, the team reviewed many of the plant's programmes and procedures in depth, examined indicators of the plant's performance, observed work in progress, and held in-depth discussions with plant personnel.

Throughout the review, the exchange of information between the OSART experts and plant personnel was very open, professional and productive. Emphasis was placed on assessing the effectiveness of operational safety rather than simply the content of programmes. The conclusions of the OSART team were based on the plant's performance compared with IAEA Safety Standards and good international practices.

MAIN CONCLUSIONS

The OSART team concluded that the managers of Mochovce NPP are committed to improving the operational safety and reliability of their plant while adapting to changes of market competition. The team found good areas of performance, including the following:

- Combined probabilistic and deterministic risk assessment for the different operational and maintenance scenarios control and minimize of risk;
- A specially developed computer application (JESETER) is used by operations day staff to support shift personnel in preparing, communicating and authorizing daily work schedules and facilitating the rapid transfer of safety related items;

- Monitoring and evaluation of active corrosion products in the primary coolant system in order to reduce dose rate.

A number of proposals for improvements in operational safety were offered by the team. The most significant issues are the following:

- Different levels of operations staff exhibit a tolerance to ‘low-level’ non-conformances; operators on one hand and managers and supervisors on the other hand should contribute to correcting the present situation;
- The identification and removal of industrial safety risks and adherence to the industrial safety requirements is not done consistently at all places of the power plant;
- The feedback from the employees and implementation of the corrective actions as well as the QA audit “areas for improvement” need more attention from the management side;
- Some maintenance and support activities in the field are not performed by plant and contractor staff in accordance with plant procedures and industry standards. Lack of management control and supervision is contributing to weaknesses not being identified and corrected.

Mochovce management expressed a determination to address the areas identified for improvement and indicated a willingness to accept a follow up visit in about eighteen months.