

## INTRODUCTION AND MAIN CONCLUSIONS

### INTRODUCTION

At the request of the government of France, an IAEA Operational Safety Review Team (OSART) of international experts visited Cattenom Nuclear Power Plant from 14 November to 01 December 2011. The purpose of the mission was to review operating practices in the areas of Management Organization and Administration; Training and Qualifications, Operations; Maintenance; Technical Support; Radiation Protection; Operating Experience; Chemistry; Emergency Planning and Preparedness and Severe Accident Management. 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 Cattenom OSART mission was the 166<sup>th</sup> in the programme, which began in 1982. The team was composed of experts from Belgium, Czech Republic, Germany, Hungary, Russian Federation, Slovakia, South Africa, Sweden and United Kingdom together with the IAEA staff members and one observer from Finland and one IAEA observer. The collective nuclear power experience of the team was approximately 380 years.

The four units on the site are operated by EDF and are 1300MWe. Unit 1 was put into commercial operation in 1986, Unit 2 in 1987, Unit 3 in 1990 and Unit 4 in 1991. There are approximately 1500 permanent workers on the site, including 300 permanent contractors.

Before visiting the plant, the team studied information provided by the IAEA and the Cattenom 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 good international practices.

### MAIN CONCLUSIONS

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

- Sheets displayed in storage areas where the fire load is updated readily and accurately by the area owner to ensure that the fire loading limits are complied with
- Neutron source handling technique whereby a simple container is attached to the device to ensure ease and safety of remote handling and reduce possible radiation exposure during use, transport and storage of the source.
- Redundant and diversified telecommunication means deployed in the various on-site emergency response facilities
- With respect to Severe Accident Management, the extent of support provided by a wide range of expertise and analytical tools

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

- Ensuring that all important management information, directives and expectations are clearly communicated, fed back to all staff and fully applied
- Enhancing the training programme in the area of assessment, objectives and competencies
- Improving the control of the plant surveillance test programme regarding scheduling and acceptance criteria
- Improving the effectiveness of the plant's root cause analysis process

Cattenom 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.