

## INTRODUCTION AND MAIN CONCLUSIONS

### INTRODUCTION

At the request of the government of France, an IAEA Corporate Operational Safety Review Team (OSART) of international experts visited the French Corporate organization EDF S.A. from 24 November to 09 December 2014. The purpose of the mission was to review corporate functions in the areas of Corporate Management; Independent Oversight; Human Resources; Communication; Maintenance; Technical Support; Operating Experience, Chemistry and Emergency Preparedness and Response & Accident Management. In addition, an exchange of technical experience and knowledge took place between the experts and their counterparts on how the common goal of excellence in operational safety and corporate functions could be further pursued.

The EDF Corporate OSART mission was the second Corporate OSART and 182nd in the OSART programme, which began in 1982. The team was composed of experts from Canada, the Czech Republic, Finland, Germany, Slovakia and the United States of America, together with IAEA staff members, one observer from the IAEA and one from the Russian Federation. The collective nuclear power experience of the team was approximately 340 years.

Before visiting the corporate organization, the team studied information provided by the IAEA and EDF to familiarize themselves with the EDF corporate main features and operating performance, staff organization and responsibilities, and important programmes and procedures. During the mission, the team reviewed many of the EDF corporate programmes and procedures in depth, examined indicators of the corporate performance, held in-depth discussions with the corporate personnel and visited Blayais, Saint Laurent, Chooz and Chinon NPPs and DIN-CIPN and DIN-CEIDRE, UTO, FARN and INTRA organizations.

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

The following report is produced to summarize the findings in the review scope, according to the Corporate OSART Guidelines and OSART guideline documents.

### MAIN CONCLUSIONS

The OSART team concluded that the managers of EDF S.A. are committed to improving the operational safety and reliability of their nuclear power plants and corporate processes and performance. This was clearly demonstrated by the fact that since the Corporate OSART preparatory meeting in November 2013, the Corporate organization has introduced or extended several programmes contributing to improved performance. The team found good areas of performance, including the following:

- "Academies of Common Knowledge" and "Academies of Specific Knowledge" are effective in training recruits entering EDF Nuclear Generation and Engineering Division, including trainees.

- EDF Corporate has provided successive levels of emergency response resources, such as the Rapid Nuclear Response Force (FARN), that will help the nuclear power plants to cope with extreme unexpected situations.
- EDF has strong relationships with stakeholders and experts through its local, national and international outreach.
- The independence of the General Inspector for Nuclear Safety and Radiation Protection (IGSNR) and Nuclear Inspectorate strengthens the Independent Oversight function across the utility.

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

- EDF Nuclear Generation should consider completing the evaluation phase for the tailored and progressive training program for EDF staff.
- The corporate organization should consider improving its planning and documentation in scheduled outage modification activities.
- The corporate organization should consider completing the ongoing implementation of the new safety event analysis method over the entire nuclear fleet and strengthen the ownership of this new practice

EDF 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.