

INTRODUCTION AND MAIN CONCLUSIONS

INTRODUCTION

At the request of the government of Spain, an IAEA Operational Safety Review Team (OSART) of international experts visited Vandellos Nuclear Power Plant from 21 September to 8 October 2009. 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 Vandellos OSART mission was the 153rd in the programme, which began in 1982. The team was composed of experts from Armenia, Belgium; Czech Republic; France; Hungary, Slovak Republic; Switzerland, the UK and the USA, together with the IAEA staff members and observers from China and the Netherlands. The collective nuclear power experience of the team was approximately 380 years.

Vandellos II NPP is part of Asociacion Nuclear Asco-Vandellos II, A.I.E. (ANAV) and has one PWR unit of 1087 MWe in commercial operation on the site since 1988. The Owner-Operators are ENDESA (72 %) and IBERDROLA (28 %). There are 300 workers on site.

Before visiting the plant, the team studied information provided by the IAEA and the Vandellos 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.

The following report is produced to summarise the findings in the review scope, according to the OSART Guidelines document. The text reflects only those areas where the team considers that either a Recommendation, a Suggestion, an Encouragement, a Good Practice or a Good Performance is appropriate. In all other areas of the review scope, where the review did not reveal further safety conclusions at the time of the review, no text is included. This is reflected in the report by the omission of some paragraph numbers where no text is required.

MAIN CONCLUSIONS

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

- the development of a database that links each of the plant licensing bases to the relevant plant system and to all the supporting documentation.
- establishing an operating experience communication programme that utilises various mechanisms to disseminate operating experience information to a wide range of groups.
- plant staff and permanent contractors working for the maintenance department follow the same initial and refresher training courses.
- the use of an interactive work tool for licence operator candidates which facilitates improved learning.
- the development of a formal procedure to augment the competencies necessary to carry out the duties of an upper management position being filled by a new incumbent. The person coming into a post benefits from the knowledge acquired by his/her predecessor in the post by obtaining numerous types of informal information such as personal contacts of the previous incumbent. At the end of the transition period, the new incumbent can then perform his/her duties with minimal support.
- A number of areas for improvements in operational safety were offered by the team. The most significant areas include the following:
 - the presence of managers and supervisors in the field is not sufficient to ensure that goals, objectives, expectations and corrections of poor behaviour is suitably communicated and performed.
 - plant management involvement in the management of training is not adequate to achieve the goal of having successful training and qualification programmes for all plant staff.
 - the need for improvement of the programme for detecting, reporting and resolving material condition deficiencies in some areas of the plant.
 - the current system of radiation contamination control practices does not minimize the potential spread of contamination to areas which are external to the radiation controlled area.
 - the number of qualified staff is not sufficient.

Vandellos 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.