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TREN.H.4 – Radiation Protection

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**Main Findings of the Commission's Article 35 verification in Spain**  
**ASCÓ-1 NUCLEAR POWER STATION**

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## INTRODUCTION

Article 35 of the Euratom Treaty requires that each Member State shall establish facilities necessary to carry out continuous monitoring of the levels of radioactivity in air, water and soil and to ensure compliance with the basic safety standards <sup>(1)</sup>.

Article 35 also gives the European Commission (EC) the right of access to such facilities in order that it may verify their operation and efficiency.

For the EC, the Directorate-General for Energy and Transport (DG TREN) and more in particular its Radiation Protection Unit (TREN H4) is responsible for undertaking these verifications.

The main purpose of verifications performed under Article 35 of the Euratom Treaty is to provide an independent assessment of the adequacy of monitoring facilities for levels of environmental radioactivity on the territory of the Member State.

Further to a radiological event that occurred in Spain at the Ascó-1 NPP, a team of three inspectors of DG TREN H4 visited the Ascó-1 NPP on 28/29 April in order to obtain full information from the NPP operator and from the regulatory authority and to verify a certain number of monitoring installations implied in the above mentioned event.

The purpose of the review was to provide full information both from the operator and from the regulator concerning the event itself and the investigations and countermeasures put in place till the date of the verification visit. Monitoring equipment related to the event was verified as well. The verification team witnessed also the localisation and capture of some radioactive particles released to the environment, by expert teams.

The visit to the Ascó NPP included also meetings with the Spanish competent authority *Consejo de Seguridad Nuclear (CSN)* <sup>(2)</sup>. Due to the limited time available, *Generalidad de Cataluña*, which, under contract with CSN, provides technical support with regard to the regulator's site related and national radiological monitoring programmes, could not be met during this mission.

This document summarizes the results of the discussions with the NPP operator, CSN's resident inspectors and the Spanish competent authority CSN itself, as well as results of the verification team's review and recommendations concerning some aspects of the environmental surveillance at and around the Ascó site in relation with the radiological event.

Recommendations are addressed to the Spanish competent authority.

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<sup>1</sup> Directive 96/29/Euratom, Council Directive of 13 May 1996 laying down basic safety standards for the health protection of the general public and workers against the dangers of ionising radiation (OJ L 159, 29.6.1996, p. 1).

<sup>2</sup> *Consejo de Seguridad Nuclear /Nuclear Safety Council*, Justo Dorado 11, 28040 Madrid.

## MAIN FINDINGS

All verification activities that had been foreseen by the team were completed successfully. In this regard, the information supplied during and after the verification activities, was useful.

The information provided and the verification findings led to the following conclusions:

- (1) The verification team received detailed information about the event both from the operator and the Spanish Nuclear Safety Authority (CSN), with special focus on its sequence. This information pointed to several shortcomings of the NPP operator, particularly in the early phase after the event. The verification team took note of the shortcomings; in particular it marks the observations in (3) and (4).
- (2) The programmes set up in response to the event by the NPP operator and in particular by CSN seem sound and effective to assess and to minimize the impact of the event. The team witnessed a part of the complex monitoring arrangements and verified administrative, operative and quality control measures. The information provided and the results presented to the Commission team were appreciated and the control and monitoring system put in place were considered to be appropriate.
- (3) The verification team does not understand why the cleaning procedure (involving transfer channel, spent fuel pond, ventilation system) was executed with little attention to foreseeable radioactive contamination problems. It is not understandable that the exceeding of radiation alarm levels was not duly considered by the operator.
- (4) The verification team identified a lack of communication between different operator's departments involved in the power station control, the radiation protection departments and the teams responsible for routine cleaning work. Furthermore, the inquiry demonstrated that routine and specific interventions are not sufficiently reviewed, monitored and recorded.
- (5) The different radioactivity monitoring systems in place seem to be efficient and effective. However, procedures for systematic control of the results have to be urgently established.
- (6) The measures introduced by CSN and the NPP operator after the event are in line with the provisions laid down under Article 35 of the Euratom Treaty.
- (7) The verification team recommends the operator setting up a system of notifying faulty events on a 'no-blame' basis, i.e. reporting issues that have not been handled in an optimal way or have even been dealt with in an erroneous way, without risking punishment for the person responsible for the error. Each such report should immediately trigger a discussion meeting including all relevant departments and the regulator with a view of better understanding the issues and their possible consequences. The regulator then should inform other groups that may be affected by a similar event, in an appropriate way. The verification team recommends the regulatory body demanding all operators of installations that may be likewise affected to implement such an approach.

- (8) The Commission Services request from the Spanish Competent Authorities to be kept fully informed about the results of the studies to explain the event in detail, as well as about any future findings relative to the Ascó event.
- (9) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

*[signed]*

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