

EUROPEAN COMMISSION

DIRECTORATE-GENERAL ENERGY

Directorate D – Nuclear Energy Radiation protection

Main Conclusions of the Commission's Article 35 verification at:

Jaslovské Bohunice NPP: Discharge Control and Monitoring of Environmental Radioactivity in its Surroundings

Slovak Republic

Date:

08 to 12 June 2009

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Reference of report:

SK-09/04

INTRODUCTION

Article 35 of the EURATOM Treaty requires that each Member State 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 ⁽¹⁾.

Article 35 also gives the European Commission 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 (DG ENER; formerly Directorate-General for Energy and Transport - DG TREN) and in particular its Radiation Protection Unit (at the time of the visit: TREN.H.4) 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 facilities for monitoring:

- liquid and airborne discharges of radioactivity into the environment by a site (and control thereof).
- levels of environmental radioactivity at the site perimeter and in the marine, terrestrial and aquatic environment around the site, for all relevant pathways.
- levels of environmental radioactivity on the territory of the Member State.

For the purpose of such a review, a verification team from DG TREN.H.4 visited the Slovak Republic, in particular the *Jaslovské Bohunice* NPP site and its surroundings and the town of *Trnava*. The team was divided into two sub-teams, one dealing with the monitoring of liquid and gaseous discharges from the *Jaslovské Bohunice* NPP and the other one with the monitoring of environmental radioactivity at the site perimeter and in its surroundings. Parts of the national monitoring network and the measuring laboratories were also included in this verification. Meetings with representatives of the National Public Health Authority (PHA), the Nuclear Decommissioning Company (*JAVYS*) and a private company, performing investigations and evaluations regarding environmental protection in the area of underground water at the *Jaslovské Bohunice* NPP, *EKOSUR*, also took place.

The purpose of the review was to provide independent verification of the adequacy of monitoring facilities for:

- Discharges of radioactivity into the environment.
- Levels of environmental radioactivity at the site perimeter and in the terrestrial and aquatic environment around the site, for all relevant exposure pathways.

With due consideration for the scope of the verification mission and taking into account the relatively short time available for the execution of the programme, it was agreed that emphasis would be placed on:

- The operator's monitoring and control facilities for gaseous and liquid discharges of radioactivity into the environment;
- The implementation of the statutory environmental radioactivity monitoring programme as performed by/for the operator and by/for the regulator;

Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation (OJ L-159 of 29/6/1996).

- The sampling provisions and analytical procedures of the *Jaslovské Bohunice* NPP used by the authorised laboratories of the operator:
 - Discharge Control Laboratory
 - Environmental Control Laboratory
- Several off-site monitoring and sampling stations;
- The off-site radiological environmental monitoring as performed by/on behalf of the regulator;
- The national environmental monitoring programme as established by the competent authority (Public Health Authority) in the region of *Jaslovské Bohunice*.

The present document gives an overview of the main conclusions by the verification team and corresponding recommendations. More detailed information concerning the verification is available at the technical report of the verification.

MAIN CONCLUSIONS

All verification activities that had been planned were completed successfully. In this regard, the information supplied in advance of the visit, as well as the additional documentation received during and after the verification activities, was useful.

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

- (1) The verification activities that were performed demonstrated that the facilities necessary to carry out continuous monitoring of levels of radioactivity in the air, water and soil around the site of the *Jaslovské Bohunice* NPP as well as on the territory of the Slovak Republic (as far as included in the verification) are adequate. The Commission could verify the operation and efficacy of a representative part of these facilities
- (2) Several recommendations have been formulated, in particular with regard to the control of the operator by the regulator and availability of data to the regulator. Some suggestions, mainly in relation to quality assurance and quality control, have also been made. These recommendations and suggestions aim at improving some aspects of the environmental surveillance. They do not detract from the general conclusion that discharge monitoring at the *Jaslovské Bohunice* NPP and the monitoring of environmental radioactivity in the surroundings of that NPP as verified by the team are in conformity with the provisions laid down under Article 35 of the EURATOM Treaty.
- (3) The detailed verification findings and ensuing recommendations can be found in the 'Technical Report' document that is also addressed to the Slovak competent authority through the Slovak Permanent Representative to the European Union.
- (4) The Commission services ask the Slovak competent authority to inform them of any progress or significant changes with regard to the situation at the time of the verification. In particular, they will closely follow up the progress made with respect to point (2) above. The Commission services may decide to conduct a re-verification in due time.
- (5) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

C. Gitzinger

Team Leader