EUROPEAN COMMISSION

DIRECTORATE-GENERAL ENERGY

Directorate D – Nuclear Energy Radiation protection

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

SELLAFIELD NUCLEAR REPROCESSING PLANT CUMBRIA UNITED KINGDOM

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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 (1).

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 (DG ENER; formerly Directorate-General for Energy and Transport - DG TREN) and more in particular its Radiation Protection Unit (ENER D.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 monitoring facilities for:

- 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.

Taking into account previous bilateral protocols, a Commission Communication has been published in the Official Journal on 4 July 2006 with a view to define some practical arrangements for the conduct of Article 35 verification visits in Member States.

For the purpose of such reviews, on several occasions verification teams from the EC visited the Sellafield site located on the coast of Cumbria. At the time of the visit in 2004 the site was operated by British Nuclear Fuels plc (BNFL), at the current verification by DG ENER it was owned by the Nuclear Decommissioning Authority (NDA) and operated by Sellafield Ltd..

The visit also included meetings with the Environment Agency (EA) and the Food Standards Agency (FSA).

The present report contains the results of the verification team's review of relevant aspects of the environmental surveillance at the Sellafield site. 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.

With due consideration to 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 put on:

- The operator's monitoring and control facilities for gaseous and aqueous discharges of radioactivity into the environment, more in particular with respect to the following plants: THORP (Thermal Oxide Reprocessing Plant), EARP (Enhanced Actinide Removal Plant) and SETP (Segregated Effluent Treatment Plant).
- The implementation of the statutory "on site" environmental radioactivity monitoring programme as performed by the operator.
- The operator's effluent laboratory, including aspects of quality assurance and control as well as document control.

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 29/06/1996, page 1).

The monitoring by the operator of levels of environmental radioactivity in the marine, terrestrial and aquatic environment around the site was not included in this verification, as was also not the independent environmental monitoring programme as performed by the UK competent authorities (Environment Agency and Food Standards Agency). However, some aspects were discussed during the visit.

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 showed that for the facilities visited the recommendations laid down at the verification in 2004 have been taken up or reasons for not implementing them have been reasonably given. Thus, the recommendations are no longer pertinent.
- (2) 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 at the site of Sellafield are adequate. The Commission could verify the operation and efficacy of these facilities.
- (3) However, a few recommendations and suggestions are formulated. These aim at improving some aspects of the surveillance of the Sellafield site. They do not detract from the general conclusion that the Sellafield site is in conformity with the provisions laid down under Article 35 of the Euratom Treaty.
- (4) The recommendations are detailed in the 'Technical Report' document that is also addressed to the United Kingdom competent authority through the United Kingdom Permanent Representative to the European Union.
- (5) The Commission Services ask the UK competent authority to inform them of any achievements with regard to the situation at the time of the verification.
- (6) The verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

C. Gitzinger

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