

## **BRADWELL POWER STATION – LICENCE APPLICATION**

### **1 SUMMARY**

- 1.1 The Environment Agency has started a three month consultation on applications from British Nuclear Fuels plc to dispose of radioactive waste from eight Magnox Power Stations and the Berkeley Technology and Engineering Centre. This includes Bradwell Power Station. The consultation documents have been deposited in the Members' Room. Responding to this consultation is discretionary.

### **2 INTRODUCTION**

- 2.1 Eight Magnox Power Stations in England and Wales are currently being operated, or decommissioned, by Magnox Electric plc. In January 1998 the Government made Magnox Electric a wholly owned subsidiary of British Nuclear Fuels plc (BNFL) by transferring its ownership of Magnox Electric to BNFL. BNFL is a public limited company owned by HM Government. Its activities include Magnox Fuel Fabrication and reprocessing, and low level waste disposal at Drigg.
- 2.2 BNFL now intends to integrate its Magnox related activities more fully by taking over the operation of the Magnox Power Stations from its subsidiary and transferring the staff from Magnox Electric to itself. Before BNFL can operate or decommission these stations it needs its own authorisations under the Radioactive Substances Act 1993 (RSA 93).
- 2.3 The Environment Agency regulates the disposal of radioactive waste from nuclear sites in England and Wales under RSA 93. BNFL submitted applications to the Agency for authorisation in January 1998 of which Bradwell is one.

### **3 CONSULTATION**

- 3.1 The Agency is consulting widely with members of the public, national and local public bodies, interest groups and organisations, the Agency's relevant Advisory Committees and Groups, and the Bradwell Local Community Liaison Council. In addition, copies of the documents have been deposited in libraries.

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- 3.2 A public meeting and surgery/exhibition is to be held on 26 and 27 June 2000 at The Three Rivers Golf and Country Club, Stow Road, Cold Norton, Near Chelmsford.

**4. OVERVIEW**

- 4.1 At Bradwell, radioactive discharges will occur whether the power station is operated or not. Proper management can keep down the level of discharges but cannot reduce them to zero. Reasonably practical design modifications have the potential for only a limited effect on discharges. The only practical way of making a substantial reduction in discharges would be to cease operation. BNFL announced on 1 December 1999 that it would cease generation of electricity at Bradwell in March 2002. In due course, when Bradwell is being decommissioned, discharges will continue albeit at a reduced level.
- 4.2 BNFL's applications for Bradwell proposed that one authorised limit on discharges could decrease, six should remain as at present, and one (the limit on gaseous discharges of tritium) should increase. The Agency has carried out a rigorous review of BNFL's proposals and the draft authorisation includes five reduced discharge limits, three remain as they are and an improvement programme together with new conditions intensifying downward pressure on discharges.
- 4.3 Bradwell has incinerators which have not so far been authorised for incinerating low level radioactive waste. BNFL's applications requested this and the draft authorisation provides for it.
- 4.4 The Agency has considered the total radiological impact of the Station on members of the public, including the effects of discharges at the current limits, at the limits proposed by BNFL and the limits the Agency has included in the draft authorisation. In each case the maximum radiation exposure of individuals is within the UK annual dose limit, 1mSv/year ( one millisievert – one thousandth of a sievert – a measure of radiation dose received).
- 4.5 Bradwell currently has a separate authorisation for each disposal route. In keeping with the Agency's holistic approach to environmental protection a single integrated certificate of authorisation has been drafted which would regulate all radioactive waste disposal routes. The draft authorisation introduces improved conditions regarding the application of best practical means to minimise waste production and discharges. These conditions intensify downward pressure on discharges below the limits imposed by the authorisation. This approach helps to ensure that radiation exposure of the public is as low as reasonably achievable and that any impact on the environment is small. The draft authorisation also introduces a new condition

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addressing requirements for management, competence and supervision.

- 4.6 For some nuclear sites, the Agency is considering whether it should issue separate authorisations for each of the main tasks at the site, e.g. power generation, decommissioning and dealing with backlogs of radioactive waste. At Bradwell the main operation at present is power generation. The limits and conditions in the draft authorisation reflect this. When Bradwell begins decommissioning, the Agency will review the Station's authorisation.

## **5 ENVIRONMENTAL IMPLICATIONS**

- 5.1 Environmental implications are contained within the report.

## **6 RESOURCE IMPLICATIONS**

- 6.1 No specific resource implications although this Council is a member of the Bradwell Local Community Liaison Council.

## **7 RECOMMENDATION**

It is proposed that the Committee **RESOLVES**

That a letter of response is sent to the Environment Agency requesting that discharges from the installation should be kept to a minimum.

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