

dti

ADVANCE ALLOCATION

Proposal on how to
manage overseas spent
nuclear fuel awaiting
processing at Sellafield

A CONSULTATION

JUNE 2007

Explanation of the wider context for the consultation and what it seeks to achieve

Overseas spent fuel is reprocessed in the Thermal Oxide Reprocessing Plant (THORP) at Sellafield in Cumbria to recover and separate the reusable nuclear materials, plutonium and uranium, from the waste. Once the materials have been recovered an allocation of those materials and the associated waste can be given to the customer. Repatriation of the materials and waste can then be set in motion.

The Nuclear Decommissioning Authority (NDA) proposes to allocate such materials from UK stocks in advance of the actual recovery from reprocessing. The advance allocation would be for an equal amount of materials to that contained in the spent fuel and would be effected by a simultaneous transfer of titles. Such a proposal would help to ensure the return of these materials to the customers in a timely manner.

The NDA has sought the approval of the Department of Trade and Industry (DTI) for its proposal in line with its governance arrangements, and in line with the policy as set out in the White Paper “Managing the Nuclear Legacy”, which requires the Secretary of State’s approval for any changes to existing contracts at THORP.

We are presently minded to endorse the NDA’s proposal, subject to consideration of any issues raised by this consultation. The proposed arrangement would permit a timely return of waste and plutonium to overseas customers. It is consistent with the existing policy described in the 1995 White Paper “Review of Radioactive Waste Policy, Final Conclusions” (Cm 2919) and has no safety, security or environmental implications.

Although advance allocation such as this was not specifically considered at the time of the 1995 White Paper the proposal would not affect the broad approach to waste management that it sets out, except in the unlikely event that the fuel could not be reprocessed through THORP.

The purpose of this consultation is to ensure that interested parties have an opportunity to make their views known before a decision is taken to ensure that we do not overlook any significant factors in coming to our decision.

Issued	14 June 2007
Respond by	26 July 2007
Enquiries to	Dean Gallacher Department of Trade and Industry Nuclear Consultations and Liabilities Unit 1 Victoria Street London SW1H 0ET

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Executive Summary

1. THORP, located at Sellafield in Cumbria, reprocesses UK and overseas spent nuclear fuel to recover reusable uranium and plutonium. The recovered plutonium and the resulting wastes are pooled with other like materials and amounts of each, equal to that recovered, are allocated to the respective customers. Uranium is allocated directly to the respective customers following reprocessing.
2. The NDA proposes to allow, where appropriate, an advance from the UK stockpiles of nuclear materials and waste to overseas customers prior to the reprocessing of their spent fuel. This would be in lieu of the material yet to be recovered from their spent fuel and would be effected by a simultaneous transfer of titles. The proposal would guarantee the availability of nuclear materials to overseas customers on a timescale which meets their needs and which best facilitates the timely return of waste, plutonium and uranium.
3. This proposal does not affect the broader approach to waste management and is essentially a business matter between the customer, the NDA which owns the site and British Nuclear Group Sellafield Ltd (BNGSL) which operates the site and manages the contracts for the benefit of the NDA through a management and operations contract. This proposal has been referred to the DTI for approval in line with governance arrangements relating to reprocessing activities. The DTI is presently minded to approve the proposal on the basis that:
 - Advance allocation of material is within the policy covering the import of overseas spent fuel for reprocessing (Cm 2919).
 - It is intended that all the overseas spent fuel covered by existing overseas contracts will be reprocessed.
 - There will be no net increase in the stocks of nuclear materials or waste held in the UK.
 - The proposal is environmentally neutral.
4. However, before we reach any conclusion on whether or not to approve the proposal, views are sought from non governmental organisations, industry, representative bodies, individuals and other interested parties on whether there are factors that we have not considered that would affect our decision on the NDA proposal.
5. The purpose of this consultation is to outline the NDA request. It is not introducing proposals for new regulations or legislation and nor is it a consultation on the development of new policies. Cabinet Office

guidelines advise a minimum of 12 weeks for written consultation at least once during the development of policy. In this case as there is no new policy being developed and because the proposal will have no effect on business, the consultation period will differ from that set out in these guidelines in that it will run for six weeks. As there are no regulations being introduced there is no requirement for a Regulatory Impact Assessment. This consultation will close on 26 July 2007

6. This consultation relates to England, Wales, Scotland and Northern Ireland.

How to respond

7. When responding please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of an organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.
8. A response can be submitted by letter, fax or email to:

Dean Gallacher
Department of Trade and Industry
Nuclear Consultations and Liabilities Unit
1 Victoria Street
London
SW1H 0ET
Tel: 020 7215 0428
Fax: 020 7215 2842
Email dean.gallacher@dti.gsi.gov.uk

9. A list of those organisations and individuals to whom this consultation has been sent is at Annex B. We would welcome suggestions of others who may wish to be involved in this consultation process.

Additional copies

10. You may make copies of this document without seeking permission. Further printed copies of the consultation document can be obtained from:

DTI Publications Orderline
ADMAIL 528
London SW1W 8YT
Tel: 0845-015 0010
Fax: 0845-015 0020
Minicom: 0845-015 0030
www.dti.gov.uk/publications

11. An electronic version can be found at <http://www.dti.gov.uk/files/file39759.pdf>. A Welsh version can be found at <http://www.dti.gov.uk/files/file39760.pdf>.
12. Other versions of the document in Braille, other languages or audio-cassette are available on request.

Confidentiality & Data Protection

13. Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004). If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.
14. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.
15. The Department will process your personal data in accordance with the DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

Help with queries

16. Questions about the policy issues raised in the document can be addressed to:

Dean Gallacher
Department of Trade and Industry
Nuclear Consultations and Liabilities Unit
1 Victoria Street
London
SW1H 0ET
Tel: 020 7215 0428
Email dean.gallacher@dti.gsi.gov.uk

17. If you have comments or complaints about the way this consultation has been conducted, these should be sent to:

Kathleen McKinlay, Consultation Co-ordinator

Department of Trade and Industry
Better Regulation Team
1 Victoria Street
London
SW1H 0ET

E-mail: Kathleen.McKinlay@dti.gsi.gov.uk
Tel: 020 7215 2811
Fax: 020 7215 2235

18. A copy of the Code of Practice on Consultation is in Annex A.

The proposal

19. Spent nuclear fuel reprocessing activities at Sellafield include overseas contracts under which the customers receive uranium and plutonium for re-use and in which, provision is made for the repatriation of the radioactive waste products to the customers. Following reprocessing the recovered plutonium, uranium and wastes are pooled with existing stocks of like material. Amounts equal to that recovered from reprocessing are allocated to each customer's inventory. Uranium is allocated directly to the respective customers following reprocessing. The customer's plutonium can then be used for the manufacture of MOX nuclear fuel. Uranium and waste are stored pending their return to the customers.
20. The NDA are the owners of THORP. BNGSL operate the site and manage the reprocessing contracts for the benefit of the NDA through a management and operations contract. In this case the NDA have approached DTI in line with their governance arrangements and because their proposal requires approval from the Secretary of State following the commitment in the White Paper "Managing the Nuclear Legacy".
21. The NDA asked DTI to agree to the NDA separating the performance of the THORP plant from the availability of material from reprocessing. This would be achieved by allocating in advance of reprocessing, materials (and waste) in quantities that were equal to those that would be recovered following actual reprocessing.
22. The advance of the material would be in lieu of that which would be recovered from the overseas spent fuel following reprocessing at THORP. It would not affect the actual reprocessing, which will go ahead in line with existing contracts. This advance allocation allows plutonium to be made available for manufacture into new MOX fuel in a timely manner for the customer, in addition to making overseas waste available for repatriation. The UK stockpiles and waste inventory will be replenished once the relevant spent fuel has been reprocessed.
23. To permit the advance allocation, the customer ownership of the spent fuel and the UK ownership of an equivalent amount of fissile material have to be swapped. This is required to prevent the customer from taking double title (ownership of both their spent fuel and some UK material) and results in the UK taking permanent responsibility for the spent fuel. In return, the customer simultaneously takes permanent responsibility for the equivalent quantities of plutonium, uranium and waste materials from the UK stockpile. No issues will arise from this except in the highly unlikely circumstance that the THORP plant is permanently closed and unable to reprocess the material. This is further explored in paragraph 29 below.
24. The primary driver for this proposal is timely repatriation of the products of reprocessing to overseas customers. The temporary but prolonged outage of THORP and closure of some European reactors has meant that its reprocessing timetable is no longer in line with that for the MOX fuel

fabrication, putting at risk MOX fuel delivery to overseas customers – the form in which most customers want to take back their reprocessed plutonium. Similarly advance allocation of waste will help to permit timely return of waste. As this flexibility assists customers in meeting their programme, it will provide an economic benefit to the NDA for use in decommissioning activities.

Advance allocation arrangements will only be supported by the NDA in a given case where there is a specific justification for it and where it is satisfied that there is an appropriate economic benefit.

Policy on import of overseas waste

25. The policy covering the import of overseas waste for reprocessing is described in the Review of Radioactive Waste Policy, Final Conclusions (Cm 2919). The key principles are that:-
- high level wastes should be returned to customers as soon as practicable after vitrification.
 - radioactive waste should not be imported to or exported from the UK (except for the recovery of reusable materials, provided that this is the genuine prime purpose);and
 - where such processes would add materially to the wastes needing to be disposed of in the UK, the presumption should be that waste and any reusable materials will be returned to the customers.
26. Advance allocation is entirely consistent with these key principles in that it facilitates the timely return of waste to BNGSL's overseas customers. It is our clear intention that the spent fuel will be reprocessed in THORP, and that the materials and waste recovered will replenish the UK stockpile from which the advance allocations have been made. Given that it is intended that the spent fuel will all be reprocessed, approval of advance allocation would require no change of policy.
27. Government policy is to keep THORP open until the overseas contracts have been completed. Advance allocation will have no impact on this policy as the spent fuel will continue to be reprocessed in THORP.
28. The THORP plant has consent to restart and will be ready to continue reprocessing spent fuel as soon as supporting evaporative capacity is re-established. This is expected around the autumn of 2007 but owing to the complexities of the evaporator supporting THORP, further delay is possible. The worst case would mean waiting for the new evaporator, currently under construction, to come online around 2010 / 2011.
29. In the unlikely event that THORP was closed permanently, we would at that stage consider;
- transferring the spent fuel to another reprocessor for reprocessing;
 - retaining the spent fuel in the UK.

Any decision would be subject to the outcome of a separate public consultation.

Effect on Waste

30. Advance allocation has no impact on the amount of radioactive waste to be disposed in the UK. Overseas customers will receive the appropriate amount of waste as normal. This waste material will be returned as agreed under existing contracts. Subject to negotiation between the BNGSL and its overseas customers the proposal could help make an earlier return of waste possible.

Environment

31. While the fuel is being properly managed, the process of advance allocation is broadly neutral in terms of its net effect on the environment.
- a. The advance allocation proposal will not impact on the THORP reprocessing timetable. The same spent fuel will be reprocessed on the same timetable, with the same emissions.
 - b. The UK will not have to dispose of any more waste as the customers will receive the appropriate amount of waste as normal.
 - c. There will be no overall increase in the transportation of radioactive materials: the same amount of new fuel and waste will be sent back to the customers.
 - d. There will be no overall increase or decrease in the UK's stock of nuclear materials.

Questions

Your views are sought on the following questions:

Question 1 The proposal

Are there any possible consequences of this proposal which the Government might not have anticipated?

Question 2 Other comments

Are there any significant factors that we may have overlooked that would influence our decision on the NDA's proposal?

What happens next?

32. This consultation will close on 26 July 2007. The Government will consider the responses to the consultation and then publish a Government response, setting out how it intends to proceed. The proposal set out in this consultation document does not require any changes to existing legislation to implement and could be taken forward under current policy.
33. Criterion 6 of the Cabinet Office Code of Practice on consultation states that decisions in the light of the consultation should be made public promptly with a summary of views expressed and reasons given for decisions finally taken. This should be on the DTI website, including a link from the central DTI consultation webpages, with paper copies of the summary of responses made available on request.

ANNEX A

The Consultation Code of Practice Criteria

1. Consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy.
2. Be clear about what your proposals are, who may be affected, what questions are being asked and the timescale for responses.
3. Ensure that your consultation is clear, concise and widely accessible.
4. Give feedback regarding the responses received and how the consultation process influenced the policy.
5. Monitor your department's effectiveness at consultation, including through the use of a designated consultation co-ordinator.
6. Ensure your consultation follows better regulation best practice, including carrying out a Regulatory Impact Assessment if appropriate.

The complete code is available on the Cabinet Office's web site, address <http://www.cabinetoffice.gov.uk/regulation/consultation/index.asp>

Comments or complaints

If you wish to comment on the conduct of this consultation or make a complaint about the way this consultation has been conducted, please write to:

Kathleen McKinlay,
Consultation Co-ordinator,
1 Victoria Street,
London
SW1H 0ET

Telephone Kathleen on 020 7215 2811
or e-mail to: Kathleen.McKinlay@dti.gsi.gov.uk

ANNEX B

List of Individuals/Organisations consulted

Elected Representatives

Jamie Reed	MP
Tony Cunningham	MP
Elaine Woodburn	Copeland Borough Council (Leader)
Fergus McMorrow	Copeland Borough Council (Officer)
Jim Musgrave	Allerdale Borough Council (Leader)
Sean Gorman	Cumbria County Council (Officer)

Trade Unions (Sellafield Site)

Peter Kane	GMB
Peter Clements	Prospect
Howard Rooms	UCATT

Trade Unions (National)

Mike Graham	Prospect
Dougie Rooney	Amicus
John Rowse	T&G

International

Paul McKenna	Isle of Man Government
Peter Brazel	Ireland

BNG

Barry Snelson	BNG Sellafield (MD)
Bill Anderton	BNG Sellafield (Communications)
Mark Morant	Reactor Sites (MD)
Mark Drulia	Reactor Sites (Communications)
Neil Baldwin	Reactor Sites (Northern Bundle)

Other

The NDA Board

UKAEA

David Moore

West Cumbria Site Stakeholder Group

Martin Forwood

Cumbrians Opposed to a Radioactive Environment

Jean McSorley

Greenpeace

Fred Barker

NuLeaf

CoSLA

The Regulators

SERA

Nuclear Industry Association

British Nuclear Energy Society

