

UKAEA, Windscale Report to the West Cumbria Sites Stakeholder Group

Date: October 2005

This report covers the period from 1st April 2005 – 30th September 2005

Nuclear Decommissioning Authority (NDA)

Windscale are now under contract to NDA and are working with NDA to meet the requirements of the contract. Regular meetings are held between the UKAEA and the NDA to review progress and deal with any issues arising.

Safety and Environment

At the end of Quarter 1 2005, there had been 62 days since the last safety event and 139 days since the last lost time accident. This is an improvement on last years record of 115 days between lost time accidents.

The Windscale site has been working hard to improve investigation reporting of Unusual Occurrence Reports (UNORs). Higher levels of reporting of even the smallest issue have assisted UKAEA in more accurately identifying trends. This allows UKAEA to take preventive action before things go seriously wrong. Last year the number of significant events was reduced, compared to the previous year, down by 25%.

During 2004/05 all 26 environmental milestone targets for the site were met, some earlier than planned.

The Environment Agency (EA) published their explanatory document for the Windscale Authorisations review in March 2005. The public consultation for the review ran from 24th to the 30th March 2005. Since the consultation, Windscale have been preparing for the implementation of the new authorisation certificate and have met with the EA to discuss the progress of the implementation. The new certificate will require the production of the following documents “Arrangements for Compliance with the Integrated Certificate of Authorisation for Disposal of Waste” and “Techniques for Determining the Activity of Waste Disposals Made Under the Integrated Certificate of Authorisation”. These documents are currently being drafted to send to the EA for review, prior to the formal issue of the documents to the EA at the end of November 05.

Site Strategy & Programme Delivery Summary

All Performance Based Incentives (PBIs) for the Windscale Site were achieved during 2004/2005.

The Near Term Work Plan 2 (NTWP2) for the Windscale Site was submitted to programme on 15 March 2005.

The Windscale Socio-economic plan was also submitted to the Nuclear Decommissioning Authority (NDA) on time in March 2005.

The intrusive surveys of the Pile 1, non-fire affected zone foil holes were completed 5 months ahead of schedule.

The remote decontamination of the Windscale Advanced Gas-cooled Reactor (WAGR) Fuel Handling Facility cave has been completed, achieving man access conditions 9 weeks earlier than anticipated.

The Scheme Design deliverables for Pile 1 Removable Fuel and Isotopes have been completed on schedule.

The Radiological Survey of the internals of the redundant cells housed within the redundant Post Irradiation Examination (PIE) facility have been completed on schedule.

Engineering Substantiation has been completed on schedule for the WAGR Fuel Handling Facility and the Pile 2 Containment Structure.

Future Plans and Performance

The Site remains on target to deliver all the environmental milestones and PBIs for 2005/06.

Life Cycle Base Line 3 (LCBL3) is due to be submitted to the NDA on 30 September as scheduled.

Piles Project

The Windscale Piles comprise of two graphite moderated air-cooled reactors and associated facilities constructed in the late 1940s. The complex became operational in 1950 and both piles operated until a fire in Pile 1 in October 1957.

A modern standard Safety Case for Pile 1 was endorsed by the Site Safety Working Party in July.

The Pile 1 foil hole intrusive survey Safety Case was assessed by the Nuclear Installations Inspectorate (NII) in December and subsequently approved. The intrusive survey work for the holes in the Non-Fire Affected Zone, was completed in June, some 5 months earlier than planned.

The Piles Waste Processing and Storage Phase 1 work is progressing. The Scheme Designs for the deliverables for Pile 1 removable fuel and isotopes were completed in June and the detailed design is on programme to commence in October 2005.

Drum venting plant operations were completed in March with 22 drums having been successfully vented and placed in interim storage.

The Pile 2 Scheme Design for isotope removal was completed in June and the tender has now been issued for the detailed design and manufacture for isotope removal.

Windscale Advanced Gas Cooled Reactor (WAGR)

WAGR was an industrial scale model for the UK AGR power stations, operating from 1963 until 1981. The interim decommissioning of the WAGR reactor is currently in progress. The decommissioning is being phased in 10 campaigns.

Campaign 9, Stage 2 to remove the Reactor Pressure Vessel and associated insulation is now underway. Hot cutting and removal of the pressure vessel is progressing but experiencing delays due to the configuration of the pressure vessel and insulation not being as anticipated. This has been compounded by equipment failure which has resulted in slow cutting progress. Revised technical solutions are being assessed along with the introduction of night shift working in order to regain progress. To mitigate the effects of these delays other work within the facility has been brought forward. Investigation work for emptying mortuary tubes is ahead of programme as is work to dismantle and remove the thimble flask.

WAGR Fuel Handling Facility

The Carousel in the redundant WAGR Fuel Handling Facility has been cleared on schedule representing an important milestone in the preparation of the facility for decommissioning. In addition the repackaging of operational waste from caves within this facility was also completed, some three months early, in December 2004. Work to remove the external stack was brought forward from 2005/06 and was completed in March with the majority of wastes being disposed of as free release.

In June 2005 the Decommissioning Safety Case (DSC) was approved by the Safety Working Party. In August the decontamination of Dismantling Cave 1 (DC 1) was completed some two months earlier than scheduled. The jammed shield plug in Stringer Breakdown Cave 2 (SBC2) has been freed and as a result the associated work to process the waste stored in the cave can be brought forward from next year.

Shielded Examination Facility

The Safety Case for this facility was delivered to the (NII) in December 2004 as per the programme. The Safety Case is currently being reviewed by the NII.

Considerable progress has been made within this facility in relation to the safe and accelerated programme for the disposal of Zinc Bromide. This work is now complete with a total of 7100 litres being safely disposed of during 2004/05.

On 13th April it was reported that a package of three items transported from B13 on the Windscale Site to B205 on the Sellafield Site had been monitored by the receiving building and found to show significant levels of radiation. The items were transported

on Monday 11 April 2005. Surveying of the items was carried out by British Nuclear Group.

This resulted in a formal investigation convened by the Head of Windscale site to identify the root causes of the incident and corrective actions to prevent a recurrence. Identified external contacts were informed of the event in accordance with UKAEA procedures. The NII convened an investigation independent from the site investigation. All parties recognised that there were shortfalls in the safety management arrangements for this type of operation and a comprehensive corrective action plan is being prepared. The NII have concurred with the Head of Site investigation and have subsequently issued an Improvement Notice to assist UKAEA in maintaining its focus on the corrective action programme. The facility tenant, NEXIA Solutions, were issued with a similar notice under the Management of Health and Safety at Work Regulations. UKAEA and NEXIA Solutions are working together to ensure that there is no repetition of this event.

UKAEA Board Changes

Mr John Kennedy was appointed as a Non-Executive Director on the Board of the UKAEA. Mr Kennedy took up his post on 1st June 2005.

Mr Andrew Jackson was appointed as Chief Financial Officer on 1st September 2005, replacing Mr Paul White who retired.

Stakeholder Interactions

During the period, UKAEA have hosted a number of visits from stakeholders, including the following;

15th April 2005 – Mr David Hayes, NDA Strategy Director

3rd May 2005 – Mr Laurence Williams, NDA Director of Safety, Security and the Environment.

4th May 2005 – United States Department of Defence (USDoD)

On 16th May 2005 a delegation from Windscale visited the Isle of Man to present an overview of UKAEA operations to the House of Keys Government.

6th June 2005 – Visit from the UKAEA Graduates

13th June 2005 – Visit from Mr Frank Hollowell (Stood as the Liberal Democrat Parliamentary Candidate in the local elections.)

20th June 2005 - A Best Practicable Environmental Option (BPEO) Stakeholder Workshop was held regarding the options for the decommissioning of the Pile 1 Reactor.

21st June 2005 – Visit from post graduate students from the Universities of Manchester and Liverpool.

29th June 2005 – Mr Mike Weightman, Chief Inspector of the NII and Ms Heather Bolton of the Health and Safety Executive (HSE).

23rd August 2005 – Visit to and meetings with Drigg Parish Council

24th August 2005 – Visit to and meetings with Cumbria County Council members.

5th September 2005 – Mr Mark Higson, Department of Trade and Industry (DTI) shareholder Executive.

14th September 2005 – Mr Derek and Margaret Thompson (Mayor and Mayoress of Allerdale) accompanied by Mr Alan Bragg of Allerdale Borough Council.

Additional stakeholder interactions which took place in the period were as follows:

UKAEA sponsorship of the Whitehaven Maritime Festival in June 2005.

UKAEA staff attended the British Energy Society (BNES) Cumbria Branch Decommissioning Seminar and made presentations on UKAEA's future plans and on Pile 1 Decommissioning.

Mr Terence Benest, Senior Project Manager Western Areas, attended the Organisation for Economic Co-operation and Development (OECD) Technical Advisory Group (TAG) Meeting in Japan.

Radio 4 visited Windscale and interviewed staff for inclusion in a programme on the history of the nuclear industry.

Mr Peter Mann was appointed as a Director of GENII.

On 6th September, the West Cumbria Sites Stakeholder Group (WCSSG) - Windscale Sub-committee (WSC) held their inaugural meeting at Cleator Moor Civic Hall.

Visit from the Business Gazette to carry out an interview regarding Windscale.

Attendance at the WCSSG – Low Level Waste Sub-committee on the 14th September.

Index of Acronyms

BNES – British Nuclear Energy Society

BPEO – Best Practicable Environmental Option

DSC – Decommissioning Safety Case

DC1 – Dismantling Cave 1

EA – Environment Agency

LCBL – Life Cycle Base Line

OECD – Organisation for Economic Co-operation and Development

NDA – Nuclear Decommissioning Authority

NII – Nuclear Installations Inspectorate

NTWP – Near Term Work Plan

PIE – Post Irradiation Examination

PBI – Performance Based Incentive

SBC – Stringer Breakdown Cave

TAG – Technical Advisory Group

UNOR – Unusual Occurrence Report

WAGR – Windscale Advanced Gas-cooled Reactor

WCSSG – West Cumbria Sites Stakeholder Group

WSC – Windscale Sub Committee

USDoD – United States Department of Defence