HM NUCLEAR INSTALLATIONS INSPECTORATE

BNFL SELLAFIELD AND DRIGG AND UKAEA WINDSCALE LOCAL LIAISON COMMITTEE REPORT

QUARTERLY REPORT FOR 1 JULY TO 30 SEPTEMBER 2001

FOREWORD

This report is issued as part of the Health and Safety Executive's commitment to make information about inspection and regulatory activities relating to the above sites available to the public. It is for distribution to members of the Sellafield Local Liaison Committee (LLC) and covers activities associated with the regulation of safety at BNFL Sellafield and Drigg and UKAEA Windscale.

These reports are distributed quarterly and will be available on the Internet. Site Inspectors of HM Nuclear Installations Inspectorate (NII) attend LLC meetings and will be happy to respond to any questions raised there. Any other person wishing to inquire about matters covered by this report should contact HSE, Nuclear Safety Directorate Information Centre on 0151 951 4103.

This report will be put onto the HSE Website at

http://www.hse.gov/nsd/nsdhome.htm under “Local Liaison Committee Reports”

1 INSPECTIONS

Inspectors from HMNII made a total of 70 visits to the Sellafield, Calder Hall, Windscale and Drigg sites during the quarter. This involved a total of 249 inspector days on site (see table 1 for details).

Visit by HM Government Officials

The Deputy Chief Inspector accompanied Mr B Wilson, Minister for Energy during his visit to the Sellafield site on 19 July 2001. The party had tours of the B30, B38 and SMP plants and met representatives of BNFL management and workforce.

Personnel from the Department of Trade and Industry were accompanied by a number of inspectors during a visit to WVP, B30 and B38. General discussions on BNFL's progress in discharging the recommendations from the various public domain reports were also held

Visits of International Nuclear Regulators

Inspectors accompanied representatives of nuclear regulators from other countries during their visits to the Sellafield and Drigg sites on three separate occasions during this reporting period. Commissioner Merrifield of the US Nuclear Regulatory Commission visited THORP, SMP and WVP on 13 September as part of a series of visits to UK facilities. Issues associated with BNFL's response to the various HSE reports were discussed with BNFL as well as waste treatment and decommissioning of redundant plants.

Dr J Loy of the Australian Nuclear Safety and Radiation Protection Agency visited Drigg on 14 September. Nuclear fuel transport, marine discharges and issues associated with the various HSE reports were also discussed with BNFL management.

HMNII's Chief Inspector and other senior international regulators visited Sellafield on 24 September during a meeting of the International Nuclear Regulatory Association held at Newby Bridge between 24 and 26 September.

The working relationship between HSE and EA

HSE and the Environment Agency (EA) have recently produced a high-level Statement of Intent, signed by the Director General, HSE and the Chief Executive, EA, on 8 August 2001. This provides an explanation of the HSE and EA responsibilities for nuclear safety and environmental regulation on and around nuclear licensed sites and the ways in which the two regulators carry out their regulatory activities. It also lists areas of joint regulatory interest and the ways in which HSE, through its Nuclear Installations Inspectorate (NII), and EA interact on that work.

Various comments around the interface between environmental and safety regulation of the nuclear industry have arisen over the past months. The Agency and HSE/NII have been examining these comments with a view to identifying whether there are genuine issues and how these should be addressed. The Statement of Intent is part of that continuing process, which will help to build a more efficient and effective working relationship for the future.

A copy of the Statement of Intent can be found on both the EA and HSE websites.

Improving Understanding the work of NII
The nominated site inspector made a presentation to the Sellafield and Drigg sites Nuclear Safety Committee about the work done by NII during the past year. Comments on BNFL's progress in managing the safety of the Sellafield site and plans for improved performance were made.

Meetings of the three sub committees of the Local Liaison Committee were attended by inspectors during this period. Inspectors made presentations, provided briefings and answered questions relevant to the matters being considered by the committees.

Promoting Health and Safety
Inspectors attended a number of the BNFL Safety Representatives Forums as part of routine work. The nominated site inspector presented the findings of recent co-ordinated inspections and observations from the last site emergency exercise to this group. In addition a presentation on HSE's enforcement policy and procedures was made to members of management and workforce representatives.

Security
The nominated site inspector met with personnel of the Office for Civil Nuclear Security on 18 September. Areas of common interest were discussed and arrangements for future liaison / inspections were made.

2 ROUTINE MATTERS

2.1 SITE INSPECTION PROGRAMME

A summary of the work undertaken to meet Site Inspection Programmes (SIP) for the BNFL Sellafield, Drigg and UKAEA sites during the planning year 2001/2 is addressed in this section of the report.

Basic Inspection Programme
The Basic Inspection Programme consists of inspections to verify that BNFL and UKAEA are complying with the conditions attached to their respective licences. The more significant issues identified during these inspections are summarised below.

An inspection of various fuel storage ponds for compliance against the requirements of licence condition 17 (Quality Assurance) was undertaken. The arrangements in place for the newer ponds were considered to be acceptable, but this was not the case for one of the older ponds (see section 3.4 and 4.3). BNFL were required to prepare an action plan to make improvements in a number of areas and this plan is currently being reviewed by NII.

A co-ordinated inspection of BNFL's arrangements for meeting the requirements of licence condition 28 and other relevant statutory requirements for undertaking maintenance was carried out between the 4-6 July 2001. Inspectors concluded that, where the need for examination, maintenance, inspection and testing (EMIT) was recognised, there was generally a good standard of compliance. However, the current arrangements fail to properly ensure that all plant, equipment and items which may affect safety are subject to appropriate EMIT. We also considered that the current monitoring, review and audit processes applied to EMIT were in need of improvement and that the scope of EMIT needed to be increased. BNFL have been asked to review the findings from our inspection with those of their own audits and provide a programme of work by 1 October 2001. (NB. This programme was supplied on time). BNFL

were also required to take immediate steps to improve the control of loose lifting equipment and review the effectiveness of the learning from experience (LFE) process with respect to maintenance.

A follow up inspection of BNFL's improved arrangements for the control of radioactive sources was undertaken. This identified that significant improvements had been achieved in some areas, but the arrangements were still not being consistently implemented across the site. Whilst the deficiencies found were not sufficient to merit regulatory action it was of concern that despite the company spending considerable effort to this topic over the past two years deficiencies were still being found.

A co-ordinated inspection of BNFL's arrangements for the control of nuclear matter, specifically fissile material, was held. It was concluded that the systems for specifying controls for ensuring criticality safety are robust and personnel responsible for implementing these controls are knowledgeable. However, we judged that the some standards were poorly defined and in some cases inappropriate for long term storage of nuclear matter. We considered that the systems for monitoring the effectiveness of the implementation of the arrangements, in particular control of criticality and on site movement of fissile materials, need to be improved. BNFL has been requested to provide an action plan to respond to the findings of the inspection by 19 December 2001. During the inspection BNFL claimed that plans had been developed for the long term management of plutonium and uranium held on the site. The company have been asked to provide these plans in order to provide NII with confidence that they are both realistic and funded.

A planned inspection of UKAEA's nuclear fire safety arrangements involving a sample inspection of facilities and their safety cases was undertaken. We found that, generally, nuclear fire safety management was adequate, and staff responded in a positive and helpful way. Some areas for improvement were noted, the most significant being the potential deficiencies in the supply of fire-fighting water to Pile 1. UKAEA was unable to provide confidence that fire-fighting water could be supplied to the pile cap quickly and in sufficient quantities. NII have confirmed the matters identified by the inspection by letter and UKAEA has undertaken some urgent corrective measures, although some issues require longer term consideration.

UKAEA Windscale arrangements for compliance with Regulation 17 of the Ionising Radiations Regulations 1999 were subject to inspection. Inconsistencies in the documentation across the site and a lack of consultation between facility management and the Radiation Protection Adviser were found. UKAEA has initiated work to rectify these deficiencies and NII will carry out another inspection early next year to confirm that these have been rectified.

Emergency Exercises and Arrangements

The effectiveness of the Sellafield site emergency arrangements was observed during exercise PLUTO on 3 July 2001. Overall the exercise was judged to be a successful demonstration of the site emergency arrangements and provided confidence that suitable personnel could be "called in" to site during silent hours to support staff on duty. Whilst the exercise showed a number of areas of good performance it also demonstrated that the current arrangements for responding to a criticality need to be reviewed and the treatment of casualties improved.

Discussions have been held to determine the scenario for the next site exercise due to be held in November 2001. BNFL has been requested to develop a scenario based on an incident at Calder Hall which involves the main part of the Sellafield site being subject to radioactive

contamination. BNFL has also been asked to demonstrate the effectiveness of improved casualty handling site since this was a concern identified in the earlier exercise.

The IT based roll-call system, currently being developed for BNFL, was demonstrated during training exercise. NII formed the view that the system represented a pragmatic way of improving the current roll-call arrangements and supported its further development.

UKAEA's annual emergency exercise to demonstrate compliance with licence condition 11 was observed on 19 September. The scenario, based on an incident in the B13 facility was considered to be an adequate demonstration of Windscale's emergency arrangements. However, NII has encouraged UKAEA to consider a number of enhancements to the arrangements, including improvements to the B13 incident control room, access control point and the application of modern standards of command and control. NII has written to UKAEA formally recording its findings and will be seeking from UKAEA an improvement programme.

2.2 TEAM INSPECTION OF OPERATIONS AT SELLAFIELD

Work to review and monitor BNFL's actions to respond to the "Team Inspection" report has continued. BNFL has continued to achieve the majority of the work identified as "key deliverables" in their response to our report. The company has submitted a revised programme for completion of the outstanding recommendations. NII consider that revised programme dates are realistic and it could be possible to achieve close out of all recommendations by around April 2003. However, the progress made to date against recommendations 5 (single site management system) and 14 & 15 (associated with incident reporting and Learning from Experience) make the revised programme dates challenging.

BNFL has claimed that work to meet recommendations 8, 16, 17, 18, and 19 has been completed and has supplied NII with evidence files to support these claims. Following review and selective inspection NII has confirmed that sufficient improvements have been made to enable recommendations 17, 18 and 19 to be closed. Inspectors are currently carrying out work to test the claims made against the other recommendations.

2.3 CONTINUED OPERATIONS SAFETY REPORTS (COSR)

BNFL has developed a programme to meet the requirements of licence condition 15 (periodic and review and reassessment of safety) to prepare Continued Operations Safety Reports (COSR) for each plant and service on the site. These COSR documents are submitted to NII in accordance with an agreed programme. In order to provide assurance that the safety case is adequate a selective number of COSRs have been subject to examination and assessment by NII. This work is aimed at providing assurance that the COSRs have been prepared and reviewed in accordance with agreed process and it ensures that an action plan for implementing risk reduction measures has been issued.

BNFL has continued to progress satisfactorily its programme for preparing and delivering COSRs. During Quarter 3, one further COSR was implemented (for the North Group compound). BNFL has now submitted 19 COSRs (two behind a programme issued in 1999) and implemented 13 (one behind programme). The reasons for delays have been explained to NII inspectors to our satisfaction. In general the delays have reflected the need for more time to implement particular engineering improvements etc identified as part of BNFL's review process, and to overcome obstacles discovered during the delivery of some improvements.

3 NON-ROUTINE MATTERS

3.1 GENERAL SITE MATTERS

Licence Administration

There has been no progress on the resolution of the HSE policy matter which has prevented the relicensing of the BNFL and UKAEA sites to accommodate a change to the site boundaries.

Changes to the Site Organisation

NII has monitored BNFL's progress on the implementation of stage 1 of the new Sellafield organisation and a formal review meeting has been held. BNFL were advised that some of the performance monitoring information presented needed improvement in order to demonstrate that the change was being effectively implemented. It is understood that the company consider that much of the suggested information was already being collected and has agreed to included it the safety case for the start of stage 2.

Warning Notices

Inspection has confirmed that BNFL has implemented sufficient measures to ensure the safe evacuation routes for all buildings on the site have been marked by suitable and sufficient warning notices (see section 4.3).

Control of Radioactive Material

BNFL's plans for improvements to the control of radioactive materials on the site, in particular within the Separation Area, have been reviewed. The company now appears to have the project properly resourced, but this has taken a long time to set up following the issue of an Improvement Notice in October 2000 (see fourth quarter report for 2000).

Software Modifications

Progress on discharge of the Improvement Notice associated with the control of modifications to software systems has been reviewed. BNFL has set up a properly resourced team to address the requirements of the notice and good progress appears to be being made (see third quarter report for 2000).

Alarm Management Project

As a result of the investigation into the loss of the B215 ventilation systems and findings from other inspections BNFL has set up a project to make improvements to the response and management of alarms across the site. The company has completed a significant amount of work to scope the project and has allocated staff to manage it. Inspection has confirmed that standards for alarm management, control room operator training etc are being developed. NII will be closely monitoring BNFL's progress on this matter.

Risk Assessments

Following the completion of a number of incident investigations and review of findings from planned inspections NII concluded that BNFL's procedures for preparing risk assessments were inadequate. An Improvement Notice requiring BNFL to implement a programme of work to ensure that suitable and sufficient risk assessments are prepared for all operations which may affect safety has been issued (see section 4.3).

Improvement to Operating Instructions

BNFL's progress in making improvements to Operating Instructions, as required by licence condition 24 has been reviewed. This identified that in light of the recently issued "Risk

Assessment" Improvement Notice the company has revised its plans. BNFL has decided to integrate this work with the work required to make improvements with risk assessment and Safe Systems of Work in general. BNFL has undertaken to provide details of the integrated programme by early October 2001; NII will be closely monitoring BNFL's actions.

Fire Safety

Following the earlier reported Fire Safety inspection BNFL developed an action plan to improve standards across the site (see 2nd quarter report for 2001). The action plan is considered to be adequate and NII are content that the company are taking the matters identified by the inspection seriously. Inspection has confirmed that good progress has been made on the general site issues of the improvement programme. However, work to address the "Steps to be taken" notice associated with B311 Fuel Handling Plant has been found to be insufficient. BNFL applied for and has been granted an extension to period for compliance with the notice until 28 November 2001.

3.2 INCIDENTS

A number of incidents were investigated by inspectors during the quarter. The details of 5 events are summarised below and have been reported in the Sellafield Newsletters. Some of these incidents may be included in a future edition of the HSE Quarterly Statement of Incidents.

Swarf Flask Transfer Operations

Two incidents involving the failure to implement the conditions identified in the Operating Rules covering the transfer of Magnox Swarf flasks were reported. Owing to the lack of resources it was not possible for NII to fully investigate these events. However, following the second incident BNFL were requested by letter to take immediate steps to ensure that the situation was not repeated. These activities were suspended by the Director of Operations until he had been provided with confidence that improved measures had been implemented. BNFL has reviewed the implications of these events and submitted a programme of work to address improvements in other plants on the site. NII is monitoring BNFL's actions and may take regulatory action if progress against the submitted programme is not made.

Spread of Radioactive Contamination

Radioactive material was spread onto the floor of a redundant laboratory within B229 following ingress of rainwater. Inspection confirmed that the laboratory is currently undergoing decommissioning and BNFL has taken appropriate steps to minimise the likelihood of a recurrence.

Minor Fire

The fibre glass casing of an air sampling instrument beta in air monitor was set alight due to the overheating of its electric motor. The resulting fire destroyed the strip lighting in the area and burnt out a nearby cable tray.

Failure of Compressed Air Line

On 16 August 2001, two maintenance personnel suffered injuries whilst working on an energised section of a compressed air line. A preliminary investigation into the event has been completed. A decision on whether further investigation or regulatory action is required will be made once details of BNFL's own Board of Inquiry has been supplied.

Incorrect Sentencing of Radioactive Samples

During a three month period four incidents involving the sentencing of radioactive samples in the B229 laboratory area have been reported. One of these incidents, involving the incorrect sentencing plutonium nitrate samples was investigated. The investigation identified failings in the system for fissile material control as well as general supervision of activities within the laboratories. BNFL has been required to provide a details of their own investigations and a funded action plan to address any identified improvements. The root cause of the incidents appears to be the lack of adequate resources in the facility.

Completed Investigations

Investigations into three incidents (Contamination of Contractor, Loss of Ventilation Systems and Contamination of Glovebox Workers), which were reported in 1st quarter 2001 report have now been completed. An Improvement Notice, associated with risk assessments, has been issued (see section 4.3). BNFL has also been required to provide action plans to address the generic failings from these incidents and progress against these are being subject to regular review by NII.

3.3 MAGNOX REPROCESSING OPERATIONS

The Magnox reprocessing plants have operated consistently for most of the quarter. Throughputs have been sufficient to keep up with Magnox fuel receipts into B311 over this period and to make some progress into the stocks at reactor station ponds. The Magnox reprocessing plants were shutdown for a period of ten days at the end of September for a stock check and for maintenance work on down stream plants. The plant resumed operations on schedule on 30 September. Discussions were held which culminated in the agreement to defer the planned shutdown of B205 Magnox Reprocessing plants until 2002.

HSE has allowed an extension to the period for BNFL to complete the fire safety actions specified in the Notice of Steps to Take for problems identified in the Fuel Handling Plant (B311).

Following its operational problems early in 2001, SIXEP has operated satisfactorily during this period. Vessel 5 (which had suffered some internal damage) has been returned to normal service after assessment of the vessel integrity and trial transfers of material.

3.4 THORP OPERATIONS, INCLUDING HIGH LEVEL WASTE PLANTS

THORP

Work continues on the assessment of separate safety cases to enable BNFL to reduce the concentration of neutron absorber material added to the process during the dissolution of irradiated fuel and the reprocessing of increased burn up fuel

B215

A report entitled "The storage of liquid high level waste at BNFL, Sellafield - Addendum to February 2000 Report" was published in August and is available on the HSE website. The report summarises the issues associated with ensuring the long term safety of the plant and the

need for the reduction of HAL stocks. The performance of the vitrification plants is important to achieving the reduction in HAL stocks and this will require BNFL to restrict of inputs from reprocessing if vitrification performance does not met agreed targets.

BNFL are reporting HAL stocks and vitrification performance to NII each month. NII has requested BNFL to submit a safety justification to support the continuing receipt of THORP waste liquors into B215.

BNFL's management of the localised elevated temperature in one of the Highly Active Liquor tanks has been closely monitored. Enhanced agitation of the tank liquor has resulted in the localised temperature declining significantly. NII has required BNFL to develop the safety justification to address the potential for enhanced corrosion and its effect on tank integrity. This work will continue to receive a high priority.

Vitrification Plant - Lines One and Two

Following the integration of High Level Waste Plants into THORP group the safety documentation addressing senior management changes was reviewed and found to be satisfactory.

The safety upgrades to the shield doors are progressing on the plant, although the programme agreed with NII (five of the first shield doors to be upgraded in 2001) remains challenging.

Inspection has confirmed that vitrification operations have restarted in Line On, but Line Two remains shutdown, pending completion of maintenance and upgrades. During this shutdown period the backlog of full vitrified product containers was reduced through transferring them into the adjacent engineered store. However, none of the solid waste accumulated within the cells was transferred to the waste store during this quarter. BNFL’s progress in this area is being closely monitored.

Vitrification Plant - Line Three

The inactive commissioning of the new Vitrification Line has received considerable NII inspection and assessment during this quarter, as preparations for the start of active commissioning approaches. Inspection has been directed towards evaluating operator training, the adequacy of work control arrangements, (particularly during the maintenance of key safety equipment) and radiation protection measures for the work Some work currently remains outstanding before NII will be in a position to agree to active commissioning, but it is anticipated that this work should be completed during December 2001.

BNFL’s work to undertake replacement of equipment around the HAL Cell, to address materials integrity shortfalls identified during inactive commissioning, has been examined. This unplanned work has had some delay on the completion of this phase of commissioning.

Vitrified Product Store (VPS)

An inspection of the quality assurance arrangements relating to the transfer in to the store of full vitrified waste containers was undertaken. The arrangements and records sampled were found to be satisfactory. Inspection has identified deficiencies in alarm management and BNFL has been actioned to make improvements.

The construction work for the adjoining Revised Export Facility was inspected. BNFL’s safety case for the construction work will be assessed in the near future.

3.5 MOX OPERATIONS

Sellafield MOX Plant

A series of inspections have been undertaken in preparation for start of active commissioning of the plant. This identified a number of issues requiring resolution before a recommendation to allow the issue of a consent to start this work could be made. BNFL consider that the outstanding work will be completed within the current timescale of their work programme. (NB. A consent to allow a single can of plutonium to enter and leave the plant, without being opened was issued on the 11 October 2001. This was required to enable the calibration and functional testing of instrumentation).

MOX Demonstration Facility (MDF)

There has been no progress on the resolution of the policy issue which has prevented NII from issuing the agreement to enable BNFL to restart the plant as a development facility.

MOX Fuel Return

An agreement to enable unirradiated MOX fuel elements to be returned to Sellafield has been granted following review of BNFL's safety case.

3.6 SOLID WASTE MANAGEMENT

PCM Storage

NII concern associated with the storage of unconditioned historic plutonium contaminated material (PCM) at Sellafield resulted in the issue of specification no. 324 during 2000. This specification requires the emptying of a number of the older stores and the transfer of the waste to newer facilities for conditioning and storage. Inspection has confirmed that BNFL is committed to the emptying of the B100 series stores.

Recent assessment of a series stores constructed in the 1980's has identified concerns with the condition of the buildings and has led NII to the view that there is a need to empty the stores over a relatively short timescale. BNFL currently plan to use these stores for at least another 10 years and do not consider it appropriate to empty them earlier. NII is currently reviewing the regulatory options available to ensure that the risks from these activities are reduced so far as reasonably practicable.

BNFL have submitted the COSR for the North Group complex. This is being reviewed by the site inspector to confirm that there are satisfactory plans to empty and decommission all the plants that constitute the North Group complex.

B136

Inspection of the work to address the requirements of the Improvement Notice has confirmed that progress is being made to install an overbuilding. Work to upgrade the associated B166 facility has progressed well. The CID system is now functional and installation of the ventilation system is due to commence.

3.7 LIQUID EFFLUENT TREATMENT, WASTE RETRIEVAL AND DECOMMISSIONING

A number of meetings have been held to review the work being done to prepare a comprehensive plan to deal with the legacy waste at the site. Whilst NII are supportive of the work done to date it is considered that the scope of the work needs to be increased to include Low Level and PCM wastes, the storage and treatment of plutonium and uranium residues and non standard fuels as well as recovery of contaminated land.

B41
Work to assess the safety case to enable argon inerting of the silo is nearing completion. (NB. NII agreement was issued during early October). Whilst inerting of the silo is a significant risk reduction measure, inerting in itself will not produce a step-change reduction in risk. Further work is required to make the silo more resistant to a seismic event and this will take several years to complete.

B30
Inspection identified information which raised doubt with the integrity of the storage pond walls and skiphandler steelwork. As the pond structure and skiphandler will need to fulfil a significant safety function for many more years it is of concern that BNFL do not have any realistic plans to decommission this plant. An Improvement Notice, requiring the preparation of an adequate decommissioning programme, as required by site licence condition 35 has been issued (see section 4.3).

BNFL was also required to undertake an urgent review of the structural integrity of the plant. The findings of the initial assessment has been supplied to NII and a specification requiring the details of this review to be considered by the Nuclear Safety Committee has been issued (see section 4.4)

B38
Inspection and assessment of the safety case associated with the commencement of trials to compartment 7 cooling systems was under taken. This confirmed that BNFL had implemented sufficient measures to enable the trial to proceed and that the local staff had worked hard to bring forward the trial from its programme date of November 2001.

B203
Inspection has identified that decommissioning activities remain suspended due to the PCM embargo and the need to develop better personal protective equipment (PPE) suitable for use by those erecting scaffolding.

B211
BNFL's report of the inspection of the building roof beams and the recent COSR for the facility have been reviewed. NII remains unconvinced that an adequate safety case for the long term operation of the plant is sustainable and have required BNFL to submit further information by March 2002.

3.8 RESEARCH & DEVELOPMENT OPERATIONS

B229

A silent hours inspection of the area identified that control and supervision arrangements were adequate for the operations being undertaken during silent hours. However, inspection has indicated problems with the adequacy and effectiveness of maintenance within the laboratories, in particular air sampling equipment and associated alarms. This coupled with the

increase in the number of incidents in the facility led to NII questioning whether inadequate resourcing was the root cause. BNFL has reviewed and increased baseline resource for the facility. BNFL's progress in increasing the staffing levels within the plant will be closely monitored by NII.

3.9 CALDER HALL OPERATIONS

Due to the dropped fuel incident at Chapelcross, BNFL has imposed an embargo on fuel discharge operations at Calder Hall and Chapelcross. The incident at Chapelcross is believed to be similar to that which took place at Calder Hall in 1985. As a consequence of the 1985 event, Calder Hall fitted a grab locking device that Chapelcross chose not to. It is BNFL's assertion that this device prevents this type of incident from taking place. BNFL has agreed to carry out a review of Discharge Operations at Calder Hall and make any necessary improvements to its fuel discharge route prior to returning the fuel route back to operation. NII is monitoring the outcome of this review. BNFL has agreed not to reinstate the fuel route until NII is satisfied that BNFL is able to demonstrate that it is safe to do so.

3.10 UKAEA WINDSCALE OPERATIONS

Pile 1 decommissioning

Inspection has confirmed that UKAEA has strengthened its team with responsibility for the project and management of the facility. The changes include a new Project Manager and ATO (Authority to Operate) holder.

UKAEA's investigation of an event on 5 July, when the Pile 1 temperature monitoring system uninterruptible power supply failed, has been reviewed. The investigation was considered to be thorough and to have identified the key learning points. It was noted that earlier maintenance had recorded a fault, but that the management systems which existed had not adequately tracked it to resolution.

Divestment of AEA Nuclear Technology

AEA Technology operates across the UKAEA sites and is a tenant of UKAEA at Windscale. The company is in the process of divesting its interests in the nuclear industry and has already announced the completion of the sale of its Nuclear Consulting business to Serco Limited. AEAT's Nuclear Engineering business was sold to RWE NUKEM following NII's assessment of compliance issues associated with Licence Condition (LC) 36 - Control of Organisational Change. As a result RWE NUKEM now leases several facilities from UKAEA (see second report for 2001).

In September AEA Technology announced that it is exploring options for the sale of its Nuclear Science business. AEAT Nuclear Science currently operates as a tenant to UKAEA at various facilities across UKAEA's licensed sites. Included in the sale are staff and operations in B13 at Windscale, a Category 1 facility which is used for post-irradiation examination (PIE) of nuclear fuel and radioactive waste. NII will again scrutinise carefully organisational change considerations under LC36.

Transport of Sample

UKAEA reported that a sample of unirradiated natural uranium had been found at UKAEA Constabulary, Summergrove, which is outside the Windscale and Sellafield licensed sites. The material has been transported to B13 Windscale. NII advised UKAEA to check the likely exposure to radiation of people working at Summergrove, but the radiological significance is believed to be very minor. No other is planned.

Re-categorisation of B52

NII concluded its assessment of UKAEA's proposal to re-categorise B52 from Cat 2 to Cat 3. This facility is being decommissioned and the re-categorisation reflects B52's reduced hazard potential. B52 was originally designed to provide fuel build and dismantling services to the Windscale Advanced Gas-Cooled Reactor (WAGR) and some of the shielded facilities within B52 have also been used for various experiments on AGR fuel.

International Safety Rating System (ISRS)

NII was pleased to note that UKAEA Windscale had achieved Level 7 following a week-long audit by Det Norsk Veritas. The site had been awarded level 5 following an initial audit last November and has now exceeded the corporate target of level 6, due to be achieved next year. Windscale has had to demonstrate systems covering topics such as leadership, communication, PPE, Rules and Work Permits, Emergency preparedness, maintenance and training to gain this high level.

4 REGULATORY ACTIVITY

4.1 PROSECUTION

None

4.2 PROHIBITION NOTICE

None

4.3 IMPROVEMENT NOTICE

Satisfactory Discharge of I/2000/NSD/RET/1 - associated with licence conditions 8 & 9

Inspection has confirmed that BNFL has implemented sufficient measures to ensure the safe evacuation routes for all buildings on the site have been marked with by suitable and sufficient warning notices. In addition all persons who are authorised to be in these building have been provided with adequate instructions on the meaning of these notices and emergency routes.

I/2001/NSD/HKR/1 - associated with Risk Assessments

The Improvement Notice requires BNFL to implement a programme of work that ensures that suitable and sufficient risk assessments are prepared for all operations and activities which may affect safety. The date for compliance with the notice is 31 May 2002.

I/2001/NSD/PIB/1 - associated with Decommissioning of B30

The Improvement Notice requires BNFL to prepare an adequate programme and project specification for to decommission the building B30 plant, pond and facilities, taking account of the requirements to recover the radioactive wastes by the timescales specified in Licence Instrument 325. The date for compliance with the notice is 30 April 2002.

Extension to period for compliance with Fire Certificate

BNFL applied for and has been granted an extension to period for compliance with the conditions of the Fire Certificate for the B311 Fuel Handling Plant. The new date for compliance is 28 November 2001 compared to the original date of 1 September 2001.

4.4 SPECIFICATION

The specification requires details of the review of the structural integrity of the B30 plant to be considered by the Nuclear Safety Committee.

TABLE 1

QUARTERLY RETURNS FOR
SELLAFIELD, CALDER HALL, DRIGG AND WINDSCALE

DURING THE QUARTER
1 JULY - 30 SEPTEMBER 2001

	BNFL SELLAFIELD[1]	BNFL CALDER HALL [2]	BNFL DRIGG	UKAEA WINDSCALE
NUMBER OF VISITS	55	5	4	6
INSPECTION DAYS ON SITE	203	12	10	25
ENFORCEMENT ACTIONS [3]	3	nil	nil	nil
Incidents in the quarter likely to be published in HSE's quarterly "Statement of Nuclear Incidents at Nuclear Installations"	3	nil	nil	nil
CONSENTS, APPROVALS	nil	1	nil	
LICENCE INSTRUMENTS	5	1	1	1

[1] The figures shown for BNFL Sellafield are those for BNFL's chemical plants. They do not include figures for the plants within the Electricity Generation Group (see note 2 below)

[2] The figures shown for BNFL Calder Hall are those for the plants on the Sellafield site operated by (or for) the Electricity Generation group, primarily Calder Hall nuclear power plant.

[3] An enforcement action may be a Direction issued by HSE under the nuclear site licence, an Improvement Notice, or a Prohibition Notice, or the laying of information in pursuit of a prosecution.

TABLE 2

APPROVALS, CONSENTS, DIRECTIONS AND WITHDRAWALS ISSUED 1 JULY - 30 SEPTEMBER 2001

REF No	DESCRIPTION
BNFL Sellafield - Nuclear Site Licence No. 31F	
76	Consent to restart operation of Calder Hall reactor 4

TABLE 3

LICENCE INSTRUMENTS ISSUED DURING THE QUARTER

1 JULY - 30 SEPTEMBER 2001

REF NO	DESCRIPTION
BNFL Drigg - Nuclear Site Licence No. 29A	
371	Acknowledgement of safety case to justify modifications to PCM monitors
BNFL Sellafield - Nuclear Site Licence No. 31F	
368	Acknowledgement of receipt of safety case for to enable B215 to receive B205 HA Raffinate from 8.35 GWd/t 180 days cooled Magnox fuel
370	Agreement to the modifications to the Calder Hall fuel discharge route
374	Acknowledgement of safety case associated with the receipt of unirradiated MOX fuel
375	Acknowledgement of safety case to enable commencement of trials to B38 compartment 7 cooling systems
376	Specification requiring the submission of the risk assessment associated with failure of B30 Civil and Mechanical Structures to be considered by the Nuclear Safety Committee
UKAEA Windscale - Nuclear Site Licence No. 46A	
56	Acknowledgement of re-categorisation of B52