

Progress with BNFL's response to the 'Control and Supervision' Report issued by HSE on 18 February 2000

Introduction

The Health & Safety Executive's Nuclear Installations Inspectorate carried out an in-depth inspection of the management of control and supervision of activities at BNFL Sellafield in September 1999. The HSE inspection report, published in February 2000, contained 28 recommendations. A follow up HSE report, published in February 2001, reviewed the progress BNFL had made in addressing those recommendations in the intervening year. This report reviews the position reached by BNFL two years after the publication of the 28 recommendations.

Initial response to the 1999 HSE/NII Team Inspection

BNFL's response was published on 18 April 2000. They developed a strategy and identified a programme of "key deliverables" which they believed would be necessary to address the recommendations. They collated the recommendations into 6 themes:

Safety Management Systems

Safety Management Practices

Management of Change

Control and Supervision

Safety Related Operations

Safety Culture and Initiatives

BNFL set up teams to co-ordinate the work for each theme and appointed 'champions' for individual themes and recommendations. The company developed 'Task Sheets' which identified the measures planned for each recommendation and the criteria by which success would be measured.

NII process for assessing and closing-out

At the same time as BNFL gave its initial response we developed our detailed project arrangements and the approach for closing out each of the recommendations. This included identifying an experienced inspector to lead on each recommendation, liaising with the appropriate BNFL champion. He/she has the responsibility for all aspects of the recommendation but is supported by other site inspectors and assessment inspectors.

In addition to the contact between inspectors and BNFL dealing with each recommendation, the Superintending Inspector of our BNFL Chemical Plants Inspection Unit maintains regular contact with the relevant BNFL Project Manager. Project meetings are held regularly to monitor progress and resolve any disagreements. We have also used a database to monitor the status of work against each recommendation. Progress reports are generated from the database and used during the routine meetings.

To manage our work we devised a protocol for liaison with BNFL and monitoring progress against the recommendations. This protocol set out the means of communication, how BNFL was expected to submit its evidence, and how NII formally gave its agreement to the close-out of a particular recommendation.

Agreement to the scope of the task sheets was the first major stage. This involved us in assessing if BNFL had properly identified what was needed to address each recommendation and whether the criteria by which success was to be measured were appropriate. Where these plans were considered not to be fully adequate our lead inspector provided an explanation to BNFL and offered advice on what needed to be addressed. When a recommendation task sheet was judged to be adequate our lead inspector confirmed this in writing to BNFL and the status was marked as 'scope agreed' in the database.

Each task sheet identified a number of actions or deliverables which were expected to be achieved to discharge the recommendation. These built on the key deliverables that BNFL identified in its first response to our recommendations, *Going Forward Safely*.

Our acknowledgement of BNFL's achievement of a deliverable is the second stage of the protocol. BNFL submits evidence and our lead inspector makes a judgement as to whether the agreed action has been completed. The judgement is based upon an assessment of the written submissions and evidence from inspection of plant, looking at records, interviewing staff etc as appropriate. We acknowledge the achievement of the deliverable in writing to BNFL. Again, if agreement cannot be obtained our lead inspector provides an explanation of her/his opinion and offers advice on the matters to be addressed.

Summary table of progress against the 28 recommendations

No.	PROGRESS STATEMENT	STATUS
1	A revised corporate health and safety policy has been issued which has been signed by the Chief Executive. The workforce representatives were consulted on this policy and supportive of it.	Closed out
2	BNFL has reviewed the scope and adequacy of the corporate health and safety procedures. It has prepared and issued a number of revised procedures and a single BNFL corporate Environment, Health & Safety Manual has been issued.	Closed out
3	The new Chief Executive has made significant changes to the organisation at the most senior level to ensure responsibilities and accountabilities are clear. A person with overall responsibility for the Sellafield site has been appointed. The BNFL Board of Directors has established a Health and Safety sub-committee to ensure that it is provided with independent objective advice on health and safety performance.	Closed out
4	A team of corporate inspectors has been recruited and working for more than a year. The Sellafield team of independent compliance advisors (representing about 120 years of combined experience in the nuclear industry) has been in post for around 18 months. They are proving to be effective; eg in the last 12 months outstanding actions have reduced from 4100 to 11 and the closure rate has increased from 16 to 89%. The WANO peer review system has been adopted, but the first full assessments have yet to be completed (May 2002). Full effectiveness is yet to be judged.	Scope agreed
5	A programme for the review and development of a single set of Sellafield site arrangements has been prepared. The procedures which underpin the 11 key Site Licence Conditions have been issued and are in the process of being implemented. There is substantially more work involved than originally envisaged to complete this topic.	Scope agreed
6	BNFL has introduced standards for performance expectations for all staff on the site and has developed guidance for those carrying out control and supervision duties. Awareness training has been provided for over 10,000 staff and additional training provided for 7,000 staff to ensure full understanding of the standards.	Scope agreed
7	A new organisation structure and accountabilities have been defined for all management positions on the site. Over 800 additional staff recruited to site. Implementation of these changes, in line with the requirements of licence condition 36 (Control of Organisational Change), is nearly complete. It will take a number of months before evidence of effective implementation is available.	Scope agreed
8	Action has been taken to ensure that BNFL personnel are directly responsible for all work undertaken by a contractor on the site. Additional controls have been identified and these have been implemented and judged to be effective.	Closed out
9	Targets for the time plant managers spend on safety-related issues have been set. Work is in hand to reallocate priorities to ensure that the targets can be achieved. This cannot be implemented fully until recommendation 7 is completed. NII will seek evidence that the process is in place and working.	Scope agreed and BNFL has submitted a claim of close out
10	A review of safety workloads of staff has been undertaken in line with the response to recommendation 7. This cannot be implemented fully until recommendation 7 is completed. NII will seek evidence that the process is in place and working.	Scope agreed and BNFL has submitted a claim of close-out
11	A consistent process for identifying, assessing and recording training needs and delivery has been defined. Work is currently being taken to implement this across the site. In addition, 465 Duly Authorised Persons have been trained across the Sellafield site. NII will then need to judge the effectiveness.	Scope agreed
12	A consistent process for assessing and appointing Duly Authorised Persons and others with safety duties has been defined. A substantial amount of work is being undertaken to develop SQEP packages. Work is currently being undertaken to implement this across the site. NII will then need to judge the effectiveness.	Scope agreed

No.	PROGRESS STATEMENT	STATUS
13	BNFL has developed the system and have implemented it across the site. BNFL has claimed close-out. NII need to judge its effectiveness.	Scope agreed
14	Revised arrangements for reporting, recording and investigation of incidents have been issued. All 'Learning from Experience' roles have been defined and fully populated. Implementation is being piloted in one area, before being rolled out across the whole site.	Scope agreed
15	Revised arrangements for learning from experience have been issued. Further work is currently in hand to improve the revised arrangements.	Scope agreed
16	Formal arrangements for the exchange of information with other chemical and nuclear operators have been established.	Closed out
17	The baseline resource assessment for the Sellafield site has been completed. There was sufficient evidence of the outcome of this work to enable close-out. Further work is now being taken forward under Recommendation 7.	Closed out
18	Arrangements for establishing minimum staffing levels have been established. These levels have been included as part of the baseline assessment work. There was sufficient evidence of the successful implementation of these arrangements to enable close-out.	Closed out
19	Key roles have been identified as part of the baseline assessment, and identified vacancies are being filled as part of the implementation of the new arrangements.	Closed out
20	Revised management of change arrangements have been issued. Inspection has confirmed that there is sufficient evidence of implementation to allow closure of the recommendation.	Closed out
21	Based on best industry practice, BNFL has developed systems for confirming that the plant is operating within its safety case at all times. These are being implemented across the site, with BNFL aiming to complete by October 2002.	Scope agreed
22	BNFL has specified processes for better control of operations with particular reference to deviations from normal conditions. A programme of work to achieve effective implementation at the workplace is being rolled out.	Scope agreed
23	A programme for implementing consistent arrangements for plant labelling and plant configuration control has been developed together with the provision of up-to-date drawings. Work against this programme is on target, despite the large amount to be completed; for example around 90,000 valves have been permanently labelled, and 30 000 items on the Plant Maintenance System have been tagged and labelled.	Scope agreed
24	A revised safe system of work (SSOW) procedure has been issued. Training of key personnel in the operation of this system has been completed. Over 1400 people attended and passed a SSOW training course, and over 7500 people briefed on the new arrangements. 80 SSOW control offices have been created to a defined standard, and 350 SSOW controllers appointed. BNFL is reviewing its effectiveness prior to submitting its request for close-out.	Scope agreed
25	A revised system of isolations, handover and handback has been issued. Key roles have been defined and populated. Training of key personnel in the operation of this system has commenced, and 1280 people trained to date.	Scope agreed
26	A bench mark assessment of the safety culture/behaviour at Sellafield was completed in 2000. A second assessment was completed in December 2001 and the results are now being analysed.	Scope agreed
27	Close-out relies on the progress against other recommendations, but BNFL is now near to seeking NII agreement to close-out. There is evidence of BNFL improving its processes for meeting commitments and implementing improvements.	Scope agreed
28	A review of initiatives has been completed and this has resulted in a number being terminated whilst others have been rationalised.	Closed out

The third stage occurs when BNFL considers that all the requirements of the recommendation have been met and supplies evidence to NII to support this view. We then adopt a similar process to that already outlined. If our lead inspector is satisfied with BNFL's response then he/she prepares the case for close-out. This is peer reviewed by another inspector before presenting to the Superintending Inspector to obtain NII management agreement to formal close-out. We inform BNFL in writing of the close-out of the recommendation. Should the case not be made then our lead inspector informs BNFL by letter why close-out is not being recommended and indicates where further evidence is required.

There is inevitably a time lag between BNFL submitting its case for close-out and NII agreeing to close-out. This lag occurs because we are not only challenging BNFL's submission but are also looking for evidence that the particular improvement has been implemented and is proving to be effective. For example, we only cleared recommendation 3 (clearer management structure with identified safety responsibilities and accountabilities) when it was obvious that the head of site was effectively in control of the site within his revised range of responsibilities.

Progress made by BNFL

BNFL has submitted task sheets for all the recommendations and these have been reviewed. Some were accepted as submitted while others were revised following comment from NII. We agreed task the scope of all the 28 recommendations by the end of the first year.

Overall, there has been good progress against the 28 recommendations. A summary of the current state of each recommendation is included with this report. BNFL assembled a large project team to respond to the 28 recommendations. The company is expending significant effort to overcome the inconsistencies and different practices across the site. We do not consider that the number of recommendations closed is a good indicator of the substantial amount of work undertaken by BNFL in response to this report. The amount of work committed and delivered is not visible by simply counting the number of recommendations closed out which currently stands at 10. Furthermore, as indicated in the attached summary table, several recommendations are interdependent; for example, close-out of recommendations 9 and 10 depend upon the successful implementation of recommendation 7.

In the 2 years since publication of the report a better measure of progress is the key deliverable count. BNFL has now delivered 25 out of the total of 36 key deliverables. In a number of instances BNFL decided to delay their submission to ensure that it fully covered all the work necessary to support the deliverables. While it is disappointing that BNFL missed the target dates, we support their actions, recognising their commitment to getting things right. The remaining deliverables are planned for completion before October 2002, which is an acceptable position.

During our inspections we are seeing evidence of the high priority being given by the company to implementing safety improvements related to our recommendations. There are the obvious indicators such as major changes at Board level and in the senior management structure and accountabilities. BNFL has improved and re-issued its policies on health and safety matters, and has issued a new Environment, Health & Safety Manual based on HSE guidance. We are also seeing evidence of a systematic approach to activities such as determination of operational structures, training and appointment of staff, control of plant handovers and some aspects of learning from experience. BNFL has also recruited around 800 additional staff. These are less obvious to the outside observer but are important features of progress which gives us confidence.

NII views on progress

When deciding whether or not to close out, we look for evidence that the particular improvement has been effective. Many of the changes will, after implementation on site, inevitably take time to bed in and become effective. For example Recommendation 4 required BNFL to "develop and implement an effective system for the independent inspection, audit and review of health and safety". BNFL has established one team of independent EH&S inspectors and another of independent compliance advisors on the Sellafield site. A process for peer review, informed by World Association of Nuclear Operators (WANO) standards has also been established. These constitute an appropriate system for meeting Recommendation 4, but before we can close it out we need to see evidence of the system working effectively. The judgement we have to exercise is in deciding how much evidence is sufficient to convince us that the Recommendation has been met, including confidence that improvements will be sustained.

We have witnessed significant improvements at Sellafield over the last two years from changes in organisational structure and policies to improvements in day-to-day operations and control, as well as improved auditing and refreshment of the Sellafield organisation at all levels, with a particular emphasis on strengthening control and supervision, quality, technical and engineering capability at site level and within the Operating Units. As noted above there have been beneficial changes at corporate as well as at site level. The Quality Function at corporate and site level has been totally reorganised and strengthened through the appointment of experienced Senior Managers from outside the Nuclear Industry. A new role of Director of Quality, Health, Safety and Environment has been created together with 10 Independent Inspectors and six Compliance Advisors. Management of change procedures and a framework for implementing and sustaining the process has been developed and implemented across the site.

Whilst a considerable amount of work has been undertaken, more remains to be done. Many changes have been made and new systems/procedures introduced, in several areas it is still too early for us to judge whether or not they are implemented, are being effective, and are sustainable in the longer term. The challenge in the next few months is for BNFL to convince us that there is sufficient evidence to close out the remaining recommendations. It needs to maintain the momentum for change while continuing to operate its plants safely.