

<b>FREEDOM OF INFORMATION STATUS – Fully Open</b>	<b>NUSAC/03/2007</b>
<b>Nuclear Safety Advisory Committee (NuSAC)</b>	<b>APPROVED</b>
<b>Minutes of the meeting held on 26 October 2007 at Low Wood Hotel, Windermere, Cumbria LA23 1LP</b>	

**Members Present:**

Steve Vranich (Chair)  
 Sheila Ashford  
 Robin Bloomfield  
 Andrew Clarke  
 Roger Coates  
 Pam Duerden  
 Paul Haigh  
 Marion Hill  
 Peter Manning  
 Rod McKenzie  
 Alan Muir  
 Anthony Webb  
 Dick Bird  
 Malcolm Bonnett

**Members Apologies:**

Bryan Edmondson, John Billard,  
 Barry Cripwell, Murray Sinclair

**In attendance:**

Robin Dahlberg (HSC)

**Presenters:**

Frans Boydon (ND)  
 Andy Buchan (Sellafield Ltd)  
 Rick Hallard (Sellafield Ltd)  
 Derek Lacey (ND)

**HSE Officials:**

Les Philpott  
 Graham Collins (Secretary)  
 Shila Patel (Secretariat)

Mike Weightman – HM Chief Inspector of Nuclear Installations (HM CI)  
 Gary Booth (ND)

**Observers Present:**

Peter Wakefield (BE)  
 David Mason (Sellafield Ltd)  
 Geoff Gill (Springfields Fuels Ltd)  
 Alan Brandwood (BNF)  
 Jim MacHardy (GE Healthcare Ltd)  
 Andrew McFarlane (MoD)  
 Laurence Williams (NDA)  
 Bobby Ronnie (SE)  
 Nigel Holloway (UKAEA)  
 Andy Layton (BERR)  
 Ian Parker (EA)  
 Kevan Williams (AWE)  
 Jenny Chalmers (URENCO)  
 George Hunter (SEPA)

**Observer Apologies**

Frank Francis (DRDL)  
 Mary Morrey (HPA)  
 Clive Nurton (Welsh Assembly)

**Acronyms**

AWE	-	Atomic Weapons Establishment
BE	-	British Energy
BERR	-	Department of Business Enterprise and Regulatory Reform
BNFL	-	British Nuclear Fuels Ltd
CoRWM-	-	Committee on Radioactive waste Management
DNCS	-	Defence Nuclear Safety Committee
DRDL	-	Devonport Royal Dockyard Ltd
EA	-	Environment Agency
HPA	-	Health Protection Agency
HSC	-	Health and Safety Commission
MoD	-	Ministry of Defence
ND	-	Nuclear Directorate
NDA	-	Nuclear Decommissioning Authority
NII	-	Nuclear Installations Inspectorate
OCNS	-	Office of Civil Nuclear Security
SE	-	Scottish Executive
SEPA	-	Scottish Environment Protection Agency
UKAEA	-	United Kingdom Atomic Energy Authority

## **FINAL MINUTES OF NuSAC MEETING HELD ON 26 OCTOBER 2007**

### **1 Welcome and Introduction**

1.1 The Chair informed members of the death of Gordon Munro. Andrew Clarke and Dick Bird represented NuSAC at the funeral on 18 October. Everyone observed a one minute silence in Gordon's memory.

1.2 The Chair thanked Sellafeld Ltd and in particular Dave Mason for organising the member's site visit to Sellafeld on 25 October.

1.3 The Chair informed members of the resignation of Bill Heafield and thanked Bill for his work with NuSAC. Paul Haigh has now taken his position as the Convenor of Review Group 2. The Chair thanked members for taking on extra responsibilities to fill the gap on the committee. He also informed members of the appointment of Judith Hackitt as the new Chair of the Health and Safety Commission and reported on his recent meeting with Judith Hackitt. He highlighted the following points:

- Reconstitution of NUSAC in 2008 will coincide with the merger of HSC/HSE;
- Judith Hackitt has asked Commissioner Robin Dahlberg to report on the future shape and purpose of NuSAC by April 2008; and
- Members of NuSAC will be consulted on the reconstitution process.

1.4 The Chair welcomed Commissioner Robin Dahlberg; Les Philpott, HSE Director of Specific Interventions Division who is responsible for nuclear policy issues; presenters Frans Boydon and Derek Lacey (HSE), Andy Buchan and Rick Hallard (Sellafeld Ltd); observers Ian Parker (EA), Kevan Williams (AWE), Andy Layton (BERR) and George Hunter (SEPA).

### **Minutes of the meeting held on 5 July 2007- NuSAC/02/2007**

2 Minutes Approved.

### **Matters arising**

3 **Action 5/1/2007:** The Chair to write to HSE Chief Scientist Patrick McDonald inviting him to make a presentation to a future meeting on his views on the best use of science. **This action has been discharged.**

**Action 6/1/2007:** DTI now BERR to make a presentation to a future meeting on their vision for the National Nuclear Laboratory. **Action Ongoing.**

**Action 2/Closed/07:** BERR to provide insight into how NuSAC can contribute to BERR's Nuclear Sector Plan. **Action Ongoing.**

### **4 Chief Inspectors report- NuSAC(2007) P13**

4.1 Mike Weightman introduced his report, highlighting in particular: continuing resource pressures on ND; progress with the Generic Design Assessment process for new reactors (now at Step 2); and activities at selected sites. Malcolm Bonnett noted

the need to consider the possible safety implications of migrant labour eg the language problems.

4.2 The following actions arose from this item:

**Action 01/03/2007: Mike Weightman to provide a note on relevance of the Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007**

**Action 02/03/2007: Mike Weightman to update at a future meeting on common issues and concerns regarding safety case preparation.**

**Action 03/03/2007: Mike Weightman to report on an apparent increase in failures identified during emergency exercises.**

**Action 04/03/2007: Mike Weightman to circulate e-copy of the UK's report on compliance with the convention on nuclear safety obligations.**

4.4 Frans Boydon presented paper NuSAC (2007) P22 (a report on the extent to which the NDA influences safety management at licensed sites). The following points were raised on NuSAC (2007) P22:

- The paper reflects NuSAC's observations from discussions with NDA and SLCs;
- The recommendations do not refer to the internal funding approval process, which is regarded by some as too long, detailed and intrusive;
- Laurence Williams agreed NDA is moving towards a more strategic approach which requires SLCs to have robust processes for sanctioning expenditure. He welcomed working with ND for improvement in this area; and,
- The problem is a feature of the model and will need continual management; NII should formally review the extent to which NDA influences safety management at licensed sites on an annual basis.

**Action: 05/3/2007: Mike Weightman to update NuSAC in a year's time on developments in NDA/SLC relationship regarding the NuSAC (2007) P22 report.**

## **5 BERR Policy brief- NuSAC (2007)P14**

5.1 Andy Layton explained BERR's change of name was to reflect its aim to be the voice of business. He mentioned the following points in his brief:

- The Future of Nuclear Energy consultation has now closed;
- BERR is still negotiating with the Treasury on NDA's settlement for the Comprehensive Spending Review 2007;
- The Shareholder Executive (SHE) will take over responsibility in BERR for oversight of NDA;
- The Nuclear Consultations and Liabilities Unit remain responsible for policy matters affecting NDA and materials strategies;
- Agreement is close on setting up the National Nuclear Laboratory project. BERR plan to run a competition to find management contractors.

## **6 NuSAC representation at events and responses to consultations**

6.1 NuSAC's response to the DEFRA consultation on the framework for implementing geological disposal had been appended to a letter from HSC to DEFRA. Other topics were covered in item 7.

## **7 Review Group/Task Force Reports**

### **Review Group 1 (Safety Management and Performance)**

7.1 Andrew Clarke reported on following up issues raised by members and was pleased to report the encouraging progress that licensees are achieving in improving safety culture, and safety performance. Laurence Williams commented that NDA had observed similar trends. He reported on:

- Visits to Hinkley Point A, Hunterston A, British Energy and Dounreay;
- A visit to Sizewell B which included discussion on historical performance and its relevance to potential new nuclear build; and
- Steve Vbranch and Andrew Clarke met with Bill Coley (CEO) and Peter Wakefield of British Energy and were encouraged by the good practices being employed at BE.

In discussion of new build, Peter Wakefield explained that references to standardised designs mean a standard reference design as a baseline for consideration.

### **Review Group 2 (Fuel Cycle and operations and Interim Safety)**

7.2 Paul Haigh reported on a joint visit with Review Group 1 to Dounreay. He also thanked Capenhurst and URENCO following the group's visit. Review Group 2 will visit Sellafield Ltd to examine the fragility of fuel cycle operations.

### **Review Group 3 (Nuclear Decommissioning policy)**

7.3 Anthony Webb reported joint visits with review group 1 to Hunterston, Hinkley Point and Sellafield Ltd. A summary report with conclusions relating to NDA funding will be presented at the Spring 2008 meeting. A further meeting is planned with Terry Selby to discuss the NDA strategy. The Task force set up to review the interfaces between SLCs, Parent Body Organisations and Government /Agencies will also report to the Spring 2008 meeting.

**Action: 06/3/2007: Review Group 3 to report on NDA funding issues at the Spring 2008 meeting.**

**Action: 07/3/2007: Interfaces Task Force to report at the Spring 2008 meeting.**

### **Review Group 4 (Emergency Arrangements) Rod Mckenzie**

7.4 Rod Mckenzie reported on the need for better media handling aspects of emergency exercises. BERR offered to meet RG4 in the future on the co-ordination of emergency exercises.

**Action 08/3/2007: RG4 to meet with BERR on the co-ordination of emergency arrangements.**

#### **Review Group 5 (Ministry of Defence)**

7.5 Dick Bird reported a planned visit to AWE in early 2008. The group will also look at the impact of Babcock's takeover on organisational structure at Devonport. Andrew McFarlane reported MoD are about to publish their strategy for management of radioactive waste.

**Action 09/3/2007: Andrew McFarlane to provide Review Group 5 with weblink to MoD's Nuclear Waste Policy Review.**

#### **Review Group 6 (Research)**

7.6 Peter Manning reported the Nuclear Research Index has improved following the group's earlier criticism. The group is now reviewing the skills and capability of UK to undertake research and development. Laurence Williams invited the group to discuss research skills needs with NDA.

**Action 10/3/2007: Review Group 6 to accept invitation from Laurence Williams to discuss research skill needs with NDA.**

#### **Task Forces**

7.7 Marion Hill reported on the work of the Regulatory Framework Task Force. Laurence Williams invited Marion Hill to discuss regulatory arrangements for sites being decommissioned.

**Action 11/3/2007: Marion Hill to accept invitation from Laurence Williams to discuss regulatory arrangements for nuclear decommissioning with NDA.**

7.8 Roger Coates reported on the work of the Safety Culture Task Force. Bryan Edmondson had produced a paper on Safety Culture and invited comments from observers for their views/suggestions on how NuSAC could interact with them in order to get the assurances detailed in his paper.

7.9 Andrew Clarke reported on very positive telephone conversations with Len Creswell (NSD) regarding NuSAC's possible contributions if a new Nuclear Build programme went forward. Various items discussed were included in NuSAC (2007) P16.

**Action 12/03/2007: To circulate Bryan Edmondson's paper on Safety Culture to the Observers and invite comments on how NuSAC could interact with them for the assurances detailed in the paper.**

#### **8 Leadership for safety culture- NuSAC (2007) P15**

- 8.1 The following points were raised following Frans Boydon's presentation:
- Members welcomed ND's pilots and leading approach and offered to engage more closely with ND;

- Inspector behaviour can impact on SLCs and there is a need to educate inspectors in this respect;
- ND could use a variety of approaches, not just depending on site inspectors; and
- Dave Mason welcomed the move away from traditional team inspections and the focus on leadership and people interaction.

## **9 Issues potentially requiring NuSAC advice- NuSAC (2007) P16**

9.1 Following Mike Weightman's presentation of paper NuSAC (2007) P16, members agreed to consider the issues and fit these into tasks into current work plans.

**Action 13/3/2007: Convenors/Task Force Leads agreed to fit tasks from paper NuSAC (2007)16 into the Review Group/Task Force workplans and inform Gary Booth and Shila Patel of those tasks that can not be accommodated into the workplans.**

## **10 Oral update from NDA**

10.1 Laurence Williams reported on the NDA's funding submission under the Comprehensive Spending Review (CSR) 2007 on which they awaited a response. NDA will work up spending plans when they know the CSR outcome. Hazard reduction will be a priority. NDA will share details with Review Group 3 when they visit. On the Spent Fuel Review, a report is now available on the NDA's website.

**Action 14/3/2007: Secretariat to circulate weblink to NDA's report on the Spent Fuel Management.**

## **11 Lessons learnt from Thorp**

11.1 Andy Buchan presented lessons learnt by Sellafield Ltd from the Thorp event of April 2005 and Derek Lacey presented lessons learnt by ND. Discussions focused on the need for both organisations to embed and sustain the learning and do better in future.

## **12 Dose Control and Use of ALARP at Sellafield.**

12.1 Rick Hallard reported on the consistent downward trend in dose uptake. The following points were raised during this discussion :

- Ensuring doses are ALARP is the key driver in dose reduction. Doses are well below legal dose limits;
- The need to balance the demands of both radiation protection issues and general health and safety eg during demolition; and
- Sellafield is able to benchmark its processes through peer inspections by fellow World Association of Nuclear Operators members.

## **13 Below the line paper: Health and safety implications in the event nuclear licensee enters into insolvency proceedings NUSAC (2007) P21.**

**Action 15/3/2007: Members to submit comments on paper NuSAC (2007)P21 to Graham Collins.**

**AOB**

14 To circulate revised meeting dates for 2008.

**Action 16/3/2007: Secretariat to circulate revised meeting dates for 2008.**

**Response to Action 03/03/2007: To report on the apparent failures identified during emergency exercises**

**Background :**

1. At the Autumn 2007 NUSAC meeting, during discussion of the Chief Inspector's Report, the comment was made that recent reports gave the impression that there were an increasing number of partial or full repeats of level 1 exercises. This prompted the question were standards expected by the Inspectorate increasing or were the Licensees standards slipping?
2. The Chief Inspector took an action to look into this question and return to the committee with a response.

**ND Response to NUSAC:**

3. A brief review of Chief Inspector's reports to NUSAC covering the past 3 years reveals that the level of information presented on the outcomes of Level 1 Emergency Exercises varies between divisions and sites, and in consequence did not reflect the full picture.
4. In order to present a properly informed picture we have completed a review of exercise outcomes advised to Licensees over the past three financial years 2005/06, 2006/7 and 2007/8 to Feb 08, and there appears to be no increasing trend in the overall numbers of full or partial repeat of Level 1 exercises.
5. However the point raised by NUSAC is an important one and reinforces the need already identified by ND to improve our communication processes and our regulatory review of Emergency Preparedness and Response.
6. As part of a programme of continuous improvement in Emergency Preparedness and Response, the need was identified in Spring 2007 to carry out an annual review of lessons learned from all exercises to identify any issues/ trends that need specific action. This would build on the work already being done by ND in reviewing Lessons learned from Level 2/3 exercises which is reported annually to NEPLG. However due to limited resources, the work on this topic has awaited the provision of further technical support organisation inputs and is included in the 2008/09 work plan. It is planned to include MoD related sites so that a complete picture can be built up for Emergency Preparedness and Response across all nuclear sites within the UK covered by the Radiation Emergency Preparedness and Public Information Regulations 2001 (REPPIR).

7. As the first step in progressing this work stream it is planned to produce the report for the civil sites covering the years 2006/07 and 2007/08 by end September 2008. The timing being governed by the NEPLG process. The intent will be to progress areas for improvement identified from the bigger picture high level indicators and trend information on Level 1 exercises through the Nuclear Emergency Arrangements Forum (NEAF), with Level 2/3 matters progressed via NEPLG.
8. An update on this work will be given in the Chief Inspectors Report to NuSAC at the Autumn 2008 meeting.

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**Response to Action 01/3/2007: To provide note on the relevance of the *Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007***

Wylfa Operating Rule compliance arrangements define requirements for the availability of minimum safety related plant that include the Station's gas turbine generators. These are currently fuelled by gas oil that does not comply with Regulation 5(b) of The Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007 that prohibits the use of gas oil with a sulphur content exceeding 0.1% by mass after 31 December 2007.

NII highlighted that strict compliance with the new sulphur content regulation would also require the Station to produce and implement a Category 1 safety case to ensure operating rule compliance was maintained whilst the oil tanks were emptied and replenished with compliant gas oil. This process might have required both reactors to be tripped, a disposal route to be established for the large volume of unused gas oil stocks, and evidence be generated to justify adequate reliability of the gas turbines using low sulphur gas oil. This was not judged to be a proportionate regulatory approach. As a result of dialogue between MEL, EA, and the Minister of State at Defra, the Station was allowed to burn existing stocks of gas oil after 31 December 2007.