

**OLDBURY ON SEVERN POWER STATION  
SITE STAKEHOLDER GROUP**

**MINUTES OF THE MEETING HELD AT OLVESTON PARISH HALL  
ON WEDNESDAY 20 APRIL 2011**

**PRESENT:**

Cllr M Lynden (in the chair)	-	Oldbury on Severn Parish Council
Cllr C Clifford	-	Thornbury Town Council
Cllr D Dovey	-	Monmouthshire County Council
Cllr C Evers	-	Glos Assn of Parish and Town Councils
Rev B Goodwin		
Cllr Dr K Graupner	-	South Gloucestershire Council
Dr L Hales		
Cllr N Halsall	-	Thornbury Town Council
Cllr M Hawkins	-	Aust Parish Council
Cllr G Vaughan-Lewis	-	Alkington Parish Council
Cllr P Mair	-	Falfield Parish Council
Cllr Mrs S O'Neill	-	South Gloucestershire Council
Ms A Paine	-	Stroud Green Party
Cllr Mrs P Parsloe	-	Thornbury Town Council
Mr D Wride	-	Lower Severn Drainage Board
Cllr Mrs P Wride	-	Chair, Berkeley SSG

**IN ATTENDANCE:**

Mr J Dalton	-	Nuclear Decommissioning Authority
Mr R Flynn	-	Nuclear Decommissioning Authority
Mr J Jenkin	-	Nuclear Decommissioning Authority
Dr M Ghannad	-	Office for Nuclear Regulation
Mr M Lester	-	Civil Nuclear Constabulary
Dr R MacGregor	-	Environment Agency
Ms G Ellis-King	-	South Gloucestershire Council
Dr P Sprague	-	Oldbury on Severn Power Station
Mrs A Chapman	-	Oldbury on Severn Power Station
Mr M Pratt	-	Oldbury on Severn Power Station
Mr M Castle	-	Oldbury on Severn Power Station
Ms Z Young	-	Oldbury on Severn Power Station
Mrs E Vaughan Lewis	-	Oldbury on Severn Power Station
Ms V Simm	-	Oldbury on Severn Power Station
Mr T Proudler	-	Eon UK
Mr B Delve		
Mr J Jackson		
Mr J Kempster		
Mr P Marshall		
Ms L-J Gillespie		
Ms L Hutchinson		
Mr M J Davis (Secretary)		

**WELCOME AND INTRODUCTIONS**

- 1 Cllr Lynden welcomed everyone to this meeting of the Oldbury on Severn Site Stakeholder Group.

## **APOLOGIES FOR ABSENCE**

- 2 Apologies for absence were received from Cllr D Biddle, Cllr R Birch, Cllr M Brady, Cllr T Jenner-Fust, Mr P Page, Ms P Page, Mr J Peachey, Cllr M Pirie, Cllr M Riddle, Mr B Seward, Mr B Wilcox and Mr J Wilson.

## **MINUTES OF PREVIOUS MEETINGS**

### **(a) Accuracy**

- 3 The minutes of the SSG Meeting held on 19 January 2011 and the minutes of the Socio-Economic Sub-Group meeting held on the same date were approved as accurate records.

### **(b) Matters arising**

- 4 There were no matters arising from the minutes of previous meetings.

## **PUBLIC FORUM**

- 5 Cllr Lynden invited members of the public to raise any issues which might not otherwise be discussed under subsequent agenda items. He pointed out that Dr Sprague would be commenting on the Fukushima accident during his report later in the meeting. No issues were raised by members of the public.

## **CHAIRMAN'S ANNUAL REVIEW**

- 6 Cllr Lynden referred to the large number of significant changes during the past year including changes of government, re-organisation of the NDA, re-unification of Magnox North and Magnox South and organisational changes in the NII. Changes in personnel included the appointment of Dr Sprague to succeed Mr Lamonby, the transfer of Ms French to NDA responsibilities for other sites, the appointment of Dr MacGregor to succeed Dr Mountford-Lister and the appointment of Mr Heaton as Deputy Site Director.
- 7 Cllr Lynden said he felt that throughout this period of significant change, the local public were able to remain confident in the high standards of safety culture which existed at the power station and he felt that the staff were to be congratulated on their performance.
- 8 Cllr Lynden referred to the power station accident at Fukushima. He said that while it would be some time before all of the lessons could be learned from the accident personnel at the site were continuing to face challenges in dealing with the post-accident circumstances. Members agreed with his suggestion that a letter of support should be sent from this meeting to the staff at Fukushima.
- 9 Cllr Lynden referred to the various meetings and consultations he and Cllr Hawkins had taken part in throughout the past year. He thanked members for their attendance and support during what he believed had been a very

successful year for this Group. He pointed out that elections for the posts of chairman and vice chairman would take place at the next meeting. There would be an opportunity for members to submit nominations for those posts before that meeting. He indicated that both he and Cllr Hawkins intended to offer themselves for re-election to their current positions.

## **QUARTER 3 REPORTS**

### **Nuclear Decommissioning Authority**

10 Mr Jenkin provided a report on current NDA issues, drawing particular attention to the following:

- (i) Arrangements had been co-ordinated for the supply of various items of equipment which might be helpful to staff at Fukushima in dealing with the circumstances they faced. There were significant differences between the plant at Fukushima and UK nuclear power plants but the scale of the accident was such that it was appropriate to review lessons which might be learned. The industry was fully supporting the review being undertaken by Dr Weightman.
- (ii) Following public consultation and Government approval, the NDA had published its second Strategy document. Copies were available for members; the document could also be accessed on the NDA website.
- (iii) The NDA had published its Business Plan for 2011/12 and the two subsequent years. The plans represented a substantial volume of work with generation at Oldbury and Wylfa being optimised, decommissioning programmes being accelerated where possible at Bradwell and Trawsfynydd and other sites being prepared for an interim care and maintenance state earlier than previously planned.
- (iv) The NDA had published a report on options for dealing with stocks of plutonium; this factual report was available for use in informing government policy decisions. The report identified as an option the use of plutonium in producing fuel for future reactors.
- (v) The NDA's Insight magazine continued to be published. A limited number of copies were available for members; the publication could also be accessed via the NDA website.
- (vi) Arrangements for providing socio-economic support for local communities were being changed to give more responsibility to Magnox for delivery of these benefits.
- (vii) The NDA was making arrangements to maintain engagement with stakeholders at national level.

## Site Director's Report

- 6 Dr Sprague presented a report on current activities at the Oldbury power station site, drawing particular attention to the following:
- (i) During 2011/12 the station had produced over 3TWh of electricity, the highest level of output since 2004. Significant programmes of graphite core inspections had also been completed. A total of 29 flasks of irradiated fuel had been despatched to Sellafield in accordance with the required programme.
  - (ii) There had been no accidents on Site involving time lost from work for more than 450 days and it was almost a year since the last accident requiring medical treatment.
  - (iii) Work had been completed to secure the operation of Reactor 2 until 30 June 2011 bringing it in line with Reactor 1. Reactor 2 would cease generation at that time. A case was being made to justify the continued operation of Reactor 1 beyond that date up to the end of 2012 using all available fuel, including some fuel removed from Reactor 2. An outage of Reactor 1 to support this work would commence in May.
  - (iv) A fire awareness safety campaign had been organised on site recently and had been well received.
  - (v) The failure of a small electrical component on Turbine 2 had caused the turbine and the reactor to shut down on 17 March. Throughout the shut down the plant had operated correctly; the discharge of a large volume of steam during these operations had attracted some attention off-site. Following this unplanned shutdown various inspections were being undertaken as required by operating procedures. These inspections included the viewing of 130 channels within the central region of the graphite core; none of the inspections had indicated any cause for concern and it was hoped to return the reactor to service later in the current month.
  - (vi) The optimisation of generation at Oldbury and Wylfa beyond the earlier planned shutdown dates was providing the NDA with valuable income to help fund decommissioning work.
- 7 Cllr Dr Graupner asked why there appeared to be a shortage of fuel for these reactors. Dr Sprague said that the fuel had been made at BNFL's Springfields facility. The final orders for fuel for these reactors had been made when the planned date for cessation of generation had been December 2008. The Springfields facility had subsequently been decommissioned and there was no possibility of manufacturing any more fuel. The Oldbury fuel was essentially made of natural uranium but there was a slight enrichment in some fuel elements.

- 8 Dr Sprague provided information on the accident at the Japanese Fukushima power plant following the recent earthquake and tsunami. The following points were noted during his presentation:
- (i) The Fukushima plant was comprised of six Boiling Water Reactors. At the time of the earthquake on 11 March, three of the reactors were operating and three were shut down for inspections. For those inspections with that type of plant all fuel was removed from the reactor and placed in a pond
  - (ii) When the earthquake occurred the reactor systems operated correctly and promptly to shut down the operating reactors; there was no significant damage to the plant from the earthquake.
  - (iii) The tsunami rendered the station's main and back up electrical supply systems inoperable. Electrical supplies to the pumps needed to maintain cooling systems were therefore lost.
  - (iv) A reaction between steam and the zirconium fuel cladding at high temperature generated hydrogen which when vented from the reactor caused explosions.
  - (v) In the BWR design the steam to drive the turbines was generated within the reactor vessel itself resulting in potential radiation doses from the whole of the steam cycle. Radiation doses to staff at a BWR plant would therefore be much higher than at a Magnox plant where the feed water to the boilers and steam to the turbines did not come into direct contact with the reactor coolant gas.
  - (vi) Significant design differences meant that an accident of this type could not occur with a Magnox reactor and there was substantial redundancy and diversity in the installed systems to provide sufficient cooling to the reactor in any circumstances.
  - (vii) Reviews were being undertaken to identify lessons which might be learned from the circumstances of the Fukushima accident. Reviews which were being undertaken included resilience to "beyond design basis" earthquakes and earthquakes followed by a tsunami; resilience to loss of essential supplies; resilience to loss of all cooling; "common cause" failures affecting plant systems; and the capability of operators to deploy emergency measures in a timely manner. Dr Sprague outlined the current position on each of these issues. He pointed at that the review being undertaken by Dr Weightman, the Chief Inspector at the Office for Nuclear Regulation was expected to produce an interim report during May with a final report due in September 2011.
- 9 During discussion Mr Jackson referred to a flood or tidal surge which had occurred in the Severn estuary in 1607. Dr Sprague said that studies undertaken since the flooding in 2004 indicated that the Oldbury site could withstand with a margin of one metre any potential flooding which might arise from any cause.

- 10 Ms Paine asked whether the reactors which were being considered for possible new build at the Oldbury site would be expected to behave in the same way as the Magnox design. Dr Sprague pointed out that the PWR design which was being considered also had a separate secondary circuit for its steam raising system.
- 11 Mr Wride asked about the effect on other nuclear power plants in Japan, possibly of different designs. Dr Sprague said he understood that all operating reactors had shut down safely. Other BWR and PWR plants had been affected by the earthquake and tsunami but to a lesser extent than Fukushima.
- 12 Cllr Halsall asked about the effects on the station's systems if the site did become flooded. Dr Sprague said that in the event of the loss of normal cooling systems there would be much more time available due to the characteristics of the design to introduce further cooling and there were diverse systems available for delivering that cooling without reliance on electrical supplies.
- 13 A member drew attention to the fact that even though the power station was designed to withstand the effects of "one in ten thousand year" earthquakes and floods the effects of such events on the whole area and its infrastructure would be catastrophic.
- 14 In reply to a question from Dr Hales, Dr Sprague explained the characteristics of BWR fuel which made its post-shutdown cooling requirements much more demanding compared with Magnox fuel.

### **Nuclear Installations Inspectorate**

- 15 Dr Ghannad reported on his activities as NII Site Inspector for Oldbury, drawing particular attention to the following:
  - (i) Reactor 1 had operated at nominal full load in accordance with the core irradiation limit justified in its graphite safety case. No safety issues had been reported during the past quarter. The licensee was proposing that this reactor should be operated to the end of 2012. Some safety case documents to justify such operation had been received and were being assessed; others were to follow.
  - (ii) There had been three unplanned shutdowns of Reactor 2. All automatic protection and post shutdown cooling systems had operated satisfactorily. Following the shutdowns, graphite channel inspections had been carried as required by the graphite safety case; no issues of concern had been noted. The reactor shutdown on 17 March had followed the shutdown of Turbine 2 and steam from the boilers was vented via the safety relief valves. The steam was not radioactive and posed no risk to staff or members of the public.
  - (iii) The NII Deputy Chief Inspector had visited Oldbury in January to carry out a safety inspection. Improvements to fire safety were noted together

with the need to focus on housekeeping standards and material condition of the plant.

- (iv) The application for delicensing part of the Oldbury site was currently being assessed. No issues of concern had been noted.
- (v) Legislation was to be introduced to create a new independent statutory body outside of the HSE to regulate the nuclear industry. Pending that legislation, the Health and Safety Executive had established the Office for Nuclear Regulation as a non-statutory body from 1st April 2011. The ONR would consolidate the regulation of the nuclear industry in a single body.

### **Environment Agency**

- 16 Dr MacGregor presented a report from the Environment Agency, drawing particular attention to the following:
- (i) The Agency had reviewed the proposals for the re-merger of Magnox North and Magnox South. Discharge authorisations issued under the Radioactive Substances Act were being replaced by permits issued under the Environmental Permitting Regulation (2010).
  - (ii) The Agency was working together with ONR on the application to surrender the nuclear site licence and associated permits for part of the Oldbury site.
  - (iii) Liquid and gaseous discharges to the environment had been reported to the Agency as required. All discharges from the site had been at levels well within the authorised limits.
  - (iv) On 7 February the Site had reported to the Agency that a seal oil cooler had failed resulting in the loss of around 350 litres of oil to the River Severn via the cooling water discharge system. Following its investigations the Agency had issued a "warning letter" to the Site. Actions to improve arrangements as a result of this event would be monitored by the Agency during routine inspections.

### **Launch of NDA Strategy II**

- 17 Cllr Hawkins reported on his attendance at the launch of the NDA's revised strategy document. He outlined the main purposes of the document. He commented that sections were difficult to read and made a plea for the use of clear language in such documents.

### **RADIOLOGICAL WASTE MANAGEMENT UPDATE**

- 18 Mr Dalton provided an update on issues relating to the long term management of radiological wastes, particularly the development of a geological disposal facility. He said that no site had yet been identified for a geological disposal

facility but it was still open for communities to express an interest in hosting such a facility. Generic safety case documents had been published; details were made available for members. Mr Dalton said the working assumption was that the facility would be available to accept first deliveries in 2040.

- 19 Mr Dalton said that in view of the length of time during which wastes remained hazardous it was generally accepted that the creation of a deep geological facility was the appropriate means of disposal. He said that there were established arrangements for exchanges with those in other countries involved with the management of radioactive wastes.

#### **UPDATE ON NEW NUCLEAR BUILD AT OLDBURY**

- 20 Mr Proudler provided an update on plans for the construction of a new nuclear plant at Oldbury. He explained the organisation of Horizon Nuclear Power as a joint venture between EON and RWE and emphasised their commitment to safety.
- 21 Mr Proudler described the need for investment in new power stations in the UK and the contribution which nuclear plant was expected to make. He said that Horizon was committed to developing plants both at Wylfa and Oldbury but would focus on establishing the plant at Wylfa first. Both plants were expected to be in operation by 2025. He pointed out that two reactor types were currently being assessed for possible licensing in the UK; Horizon had not yet made a decision on which plant they would wish to build.
- 22 Mr Jackson asked whether if the existing cooling water reservoir was to continue to be used it would be possible to incorporate turbines within that structure to provide additional hydro generation. Mr Proudler said there were no such plans and he felt it was appropriate for the focus to be on establishing a new nuclear station.
- 23 In response to a question from Cllr Mrs Parsloe, Mr Proudler outlined the process of consultation and approvals necessary before decisions were taken on building a new plant.

#### **CIVIL NUCLEAR INDUSTRY IN GLOUCESTERSHIRE**

- 24 Cllr Mrs Wride described an event which had been held at Berkeley on 11 March to publicise the nuclear industry skills and resources available locally and explore the scope for the development of those resources in facilities at Berkeley.

#### **ANY OTHER BUSINESS**

No business

## **DATE TIME AND PLACE OF NEXT MEETING**

25 It was noted that the next meeting of this Group was scheduled to be held on 20 July 2011 at Oldbury Conference Centre.

MJD  
27 April 2011