

## **NuLeAF: NUCLEAR LEGACY ADVISORY FORUM**

### **LGA SPECIAL INTEREST GROUP ON RADIOACTIVE WASTE MANAGEMENT AND NUCLEAR DECOMMISSIONING**

**Minutes of the Steering Group held on 24 July, 2014,  
County Hall, Fishergate, Preston**

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**Present:**

Cllr Richard Smith MVO, Suffolk County Council (Chair)  
Cllr Brendan Sweeney, Barrow-in-Furness Borough Council (Vice-Chair)  
Cllr Mark Hackett, Manchester City Council  
Cllr Marcus Johnstone, Lancashire County Council  
Cllr Matthew Riddle, South Gloucestershire Council  
Cllr Elaine Woodburn, Copeland Borough Council  
Doug Bamsey, Sedgemoor District Council  
Gillian Ellis-King, South Gloucestershire Council  
Richard Griffin, Cumbria County Council  
John Groves, Copeland Borough Council  
Adrian Hurst, Hartlepool Borough Council  
Sean Morris, Manchester City Council  
Louise Nurser, Lancashire County Council  
John Pitchford, Suffolk County Council  
Alistair Stewart, Shepway District Council  
Philip Matthews, NuLeAF  
Catherine Draper, NuLeAF

<b>1</b>	<b>WELCOME AND APOLOGIES</b>	<b>ACTION</b>
1.1	Cllr Smith welcomed everyone to the meeting and participants introduced themselves.	
1.2	Apologies were received from: Cllr David Southward – Cumbria County Council; Lesley Stenhouse – Essex County Council; Cllr Robbie Payne – Hartlepool Borough Council; John Prosser – Kent County Council; Juliet Staples – Liverpool City Council; Phillip Rowson – Maldon District Council; Lucy Atkinson & Bogus Zaba – Merseyside Environmental Advisory Service; Phil Watson – Northamptonshire County Council; Peter Day and Trevor Brown – Oxfordshire County Council; Richard Conway – Purbeck District Council; Guy Robinson – Somerset County Council; Cllr Andrew Nunn and Clive Pink – Suffolk Coastal District Council; James Holbrook – West Somerset Council	
<b>2</b>	<b>MINUTES OF THE MEETING HELD ON 9 APRIL, 2014</b>	
2.1	The minutes were held as a true and accurate record and will be posted on the website.	CD
<b>3</b>	<b>MATTERS ARISING</b>	
3.1	All actions from previous meetings were in hand or completed.	

- 3.2 Actions from previous meeting:
- 3.2.1 Item 3.3. The NDA Business Plan 2014-17 was published on the 15<sup>th</sup> April
- 3.2.2 Items 4.3.2 and 4.3.3. A number of responses from NuLeAF members on the LEP question were received and were incorporated to the paper for Item 4. Unfortunately, neither the Chair nor Vice-Chair of the Lancashire LEP were able to attend the Steering Group meeting due to work commitments.
- 3.2.3 Item 5.2 Regarding the bulk reuse of plutonium, NDA do not believe there has been slippage and that the dates set out in 2011. They state *'In 2011 the earliest deployment of a MOX capable reactor was used to establish the earliest irradiation window for lead test assemblies (LTAs) produced in a new plant. This showed that the earliest MOX fuel would be required was around the 2025 timeframe and the MOX plant was scheduled accordingly with the schedule for subsequent bulk MOX loading being in the late 2020s/Early 2030s. Whilst revised timetables for Hinkley have emerged, new dates will not affect the overall programme logic or timetables, but may well affect the earliest potential deployment date, although the high level lifetime schedule remains broadly the same. The overall timetable for reuse of Pu as MOX depends on a huge range of factors such as reactor types deployed, when they are available, % MOX loading, requirement for LTAs and willingness of the various parties to be involved and this aspect is being focussed on during the current phase of work.'*
- 3.2.4 Item 5.2.1 As NDA believes that there will not be a 10 year delay (see response to 5.2) this issue is moot. NDA has however commented that the proportion of the stockpile that they estimated could not readily be reused as MOX (estimated at 10 - 15%) was mostly defined by chemical or physical material properties as opposed to isotopics etc. Consideration of a range of MOX deployment scenarios as well as consideration of the alternatives of CANMOX/PRISM are being progressed and they will provide a further update in due course.
- 3.2.5 Item 5.2.2 Regarding the reported inclusion of 800kg of Swedish plutonium in the UK stockpile, NDA has responded that *'Sellafield Ltd currently stores plutonium from reprocessing of nuclear fuel for a number of customers including Swedish utilities, and that the government consultation on plutonium 'Managing our plutonium stocks' considered the possibility of the UK taking ownership of European plutonium. Decisions on this are a matter for the UK and Swedish government.'*
- 3.2.6 Item 5.3 NDA advised that although graphite is about 30% on the Intermediate Waste Inventory volume, the overall footprint of the GDF includes significant operational areas which are largely fixed and don't change as the amount of waste changes, and areas for High Level Wastes and Spent Fuel. As they generate heat the HLW and fuel need to be spread out increasing their contribution to the overall footprint.

	<p>7.2 The HAW Strategy will be a standalone document in a similar format to the UK Nuclear Industry Solid LLW Strategy. It is expected that a draft will be prepared by March 2015, with the final version available in August of next year. NDA has indicated they would welcome an opportunity to discuss the HAW Strategy with NuLeAF Steering Group later in the year.</p> <p>It was proposed that James McKinney should be invited to give the afternoon presentation at the meeting on 29 January 2015.</p>	CD
<b>4</b>	<b>NULEAF ENGAGEMENT WITH LOCAL ENTERPRISE PARTNERSHIPS (LEPs)</b>	
4.1	<p>PM introduced the paper which provided background on the role and purpose of LEPs and gave an assessment of the potential for NuLeAF to engage with LEPs on the Geological Disposal Facility.</p> <p>Key comments and points made during discussion were:</p>	
4.2	Involvement of the LEPs in the MRWS process would engage business with a project which presents economic opportunities.	
4.3	Each LEP is likely to have a different view on the MRWS process and some will not be interested in engaging at all. If a community chooses to engage in the MRWS process, whilst a LEP might be invited to participate it will have no decision making role.	
4.4	The broad composition of a LEP is likely to prove a challenge in itself and NuLeAF should consider this in its approach.	
4.5	NuLeAF should position itself as an advisory body to both DECC and LEPs offering advice to DECC on their approach to LEPs and to LEPs on the issues around MRWS, encouraging engagement and discussion.	
4.6	Given the shortfall of resources in the LEPs, NuLeAF can offer impartial advice on the key questions and economic opportunities.	
4.7	LEPs are now producing new growth plans and are also responsible for the allocation of skills funding. It would be timely to raise their awareness of the opportunities the MRWS process would bring.	
4.8	The appropriate contact level would be Chair and Chief Executive.	
4.9	The Steering Group agreed that the Executive Director, in liaison with the Chair and Vice-Chair should include a proposal on LEP engagement into its proposal on engagement and support for local government to DECC and RWM Ltd.	
<b>5</b>	<b>AN UPDATE ON NDA STRATEGY AND OPERATIONS</b>	
5.1	<p>PM introduced the report which provided updates on:</p> <ul style="list-style-type: none"> <li>• LLW Strategy Review and gap analysis;</li> <li>• NDA Theme Overview Group meetings;</li> </ul>	

	<ul style="list-style-type: none"> <li>• LLWR community benefits package; and</li> <li>• A new online version of the GDF issues register.</li> </ul> <p>Key points made during discussion were:</p>	
5.2	NDA needs to be open and transparent in its approach to site restoration. Communities had previously been promised greenfield sites in a comparatively short time after the power station was closed, but now NDA are talking about storing waste on site for some considerable time. Will any portion of the savings made be passed on to the community?	PM
5.3	NuLeAF should seek clarity from NDA what potential there is for coastal erosion to impact on sites which may now store waste until 2130.	PM
5.4	The review of policy by the new PBO has created uncertainty about the future approach to site restoration.	
5.5	The Steering Group agreed that the Executive Director should ask NDA to clarify why it is seeking the delay to final disposal of boundary wastes – whether it is in order to save money, or because they do not yet know how to dispose of the materials. Details of their planned engagement on site restoration and site end state with sites and local authorities should be sought.	PM
<b>6</b>	<b>UPDATE ON THE MRWS PROCESS</b>	
6.1	PM gave the meeting a verbal briefing following meetings with Rachel Solomon-Williams, DECC, and Roy Payne of RWM, on 23 July. A printed copy of the Executive Summary of the White Paper and press release were distributed.	
6.2	<p>PM had not yet had an opportunity to read the White Paper, which was released at 11am that morning, but based on his discussions with DECC and RWM he understood that key points of the new approach were:</p> <ul style="list-style-type: none"> <li>• Both tiers of local government will be involved in the process, though it is unclear in what form;</li> <li>• Government is keen to highlight the economic opportunity a GDF offers;</li> <li>• Government would like 4 or 5 communities to be involved in the initial stages. Up to £1M would be offered as community investment over and above engagement funding;</li> <li>• The shortlist would comprise 2 potential sites which would receive up to £2M in community funding;</li> <li>• Community Funds for the recipient site would be in the region of £100Ms. Distribution would be by an independent body, not the local authority as the public had indicated a lack of trust;</li> <li>• A geological map will be prepared at the beginning of the MRWS process from currently available information. No area will be ruled in, or out but the map will indicate areas that may be more suitable;</li> <li>• International experts will be used to advise on geological</li> </ul>	

	<p>issues as it is thought British experts could be perceived as being too closely associated with the process;</p> <ul style="list-style-type: none"> <li>• The Learned Societies will be asked to act as advisers and arbiters on disputed information/data on other technical issues such as engineering;</li> <li>• The community right to withdraw remains. A consultation of the community will be made late on in the process after the submission of the planning application. It is not yet clear how this will be carried out.</li> </ul>
6.3	<p>PM advised the meeting that DECC and RWM Ltd had underlined the importance of local government to the process and that NuLeAF will have a voice on the proposed advisory bodies. The content of the White Paper would broadly address the areas of concern NuLeAF had highlighted in its consultation response, but there was still a lot of detail to be decided.</p>
6.4	<p>NuLeAF will prepare a Briefing Paper on the White Paper for members.</p>
6.5	<p>Members of the Steering Group noted concern about the following issues:</p>
6.5.1	<p>It was felt that there was a lack of detail in the White Paper.</p>
6.5.2	<p>The opportunity to provide clarity over the issue of the role of local government at district and county level, and where decision making responsibility lay had been missed.</p>
6.5.3	<p>The intention to create an independent body to manage the distribution of the community fund rather than lodge it with the local government would be an obstacle to participation for some local authorities.</p>
6.5.4	<p>The issue of waste being transferred through other local authority areas to the eventual disposal site had not been addressed.</p>
6.5.5	<p>It was not clear how the top tier of local government would be involved in the process, particularly if the application was dealt with under NSIP. This would be a disincentive to participating in the process.</p>
6.5.6	<p>Government was being overly reliant on the attraction of the community fund package, and had not sought to address concerns about safety and security which were of higher priority to any potential host community.</p>
6.5.7	<p>The proposal was a 'one size fits all' approach, and lacked the flexibility to address the concerns of individual communities, whose issues would vary depending on their experience with the nuclear industry and needs as a community.</p>
6.6	<p>The meeting welcomed the reaffirmation of Government's commitment to volunteerism and felt that NuLeAF should work to ensuring this approach was successful.</p>

6.7	In response to a question from LN, PM confirmed that, as he understood it, DECC had received legal advice that it was possible to have a right for the community to withdraw as part of the National Policy Statement Development Consent Order.	
6.8	The Steering Group agreed that they were not in a position to put out a press statement in support of the White Paper as they had had insufficient time to read and digest the contents. A link to the White Paper would be circulated to all NuLeAF members as soon as possible.	
6.9	NuLeAF should encourage Government to work on the definition of a community at the earliest possible stage, as lack of clarity on this will be a disincentive to participation in the process.	
6.10	NuLeAF should consider the content and timing of the proposals and draw up an engagement plan highlighting opportunities for comment and influencing. The ED will ask DECC for clarity on its timeline in order to assist NuLeAF in timetabling internal discussions.	PM
6.11	The Steering Group agreed that it would consider possible actions at the next meeting in October.	PM
<b>7.</b>	<b>REVIEW OF NULEAF MEETINGS AND MEMBER SUPPORT</b>	
7.1	The meeting agreed that, due to time constraints in this meeting, this paper would be carried forward to the AGM.	CD/PM
<b>8</b>	<b>SERVICE PLAN 2013-15 UPDATE</b>	
8.1	PM introduced the paper which gave updates on: <ul style="list-style-type: none"> <li>• The Submarine Dismantling Project (SDP)</li> <li>• NuLeAF seminar 2014;</li> <li>• Potential engagement in European work programme;</li> <li>• Issues around Detailed Emergency Planning Zones (DEPZ); and</li> <li>• Potassium Iodate tablet distribution.</li> </ul>	
8.2	The Steering Group agreed that the secretariat should engage in the STING international project, on the proviso that any costs would be covered. It recognised that one of NuLeAF's strengths was its engagement in radioactive waste issues at an international level.	PM
8.3	The Steering Group agreed that the ED should write to ONR asking for clarification regarding the process undertaken to establish the boundaries for DEPZ.	PM
<b>9</b>	<b>DATE OF NEXT MEETING</b>	
9.1	The next meeting will be held at Local Government House, Smith Square, London on 15 October 2014 and will include the AGM.	

<b>10</b>	<b>ANY OTHER BUSINESS</b>	
10.1	As part of discussions regarding the Duty to Co-operate project, LLWR Ltd had proposed an annual meeting between themselves, Site Licensee Companies and local authorities regarding the proposed shipments of VLLW over the forthcoming year. June had been identified as the most appropriate time for future annual meetings, but they hoped to hold a meeting this year and proposed September or October. PM asked the Steering Group for its views on whether or not it wished to engage in the proposed meeting?	
10.1.1	Members of the meeting commented that they were generally unaware of movements of material and information would be helpful.	
10.1.2	The Steering Group agreed that the secretariat should contact the membership, outlining the proposed meeting and asking for input on questions which should be addressed.	PM/CD
10.2	PM advised the meeting that ONR is currently consulting on its forward strategy. The deadline for response is before the next Steering Group meeting.	
10.2.1	The meeting agreed that a response would be circulated prior to final sign off by the Chair and Vice-Chair.	PM/RS/BS
<b>11</b>	<b>PRESENTATION BY CLIVE NIXON, NDA, THE PLUTONIUM MANAGEMENT AND DISPOSITION PROGRAMME</b>	
11.1	Key points covered during the presentation were: <ul style="list-style-type: none"> <li>• How plutonium is produced and current holdings and material types</li> <li>• Current strategy for the management of the UK plutonium stockpile – long term secure storage</li> <li>• The development of Plutonium Policy and outcome of the 2011 consultation on management of the UK plutonium stockpile</li> <li>• An overview of the Plutonium Management and Disposition Programme, whose aim is: "to plan, develop and implement a management solution for the separated civil plutonium in the UK through reuse, immobilisation and disposal until the stockpile has been reduced to zero and is put beyond reach"</li> <li>• The role of NDA and programme approach</li> <li>• Conclusions reached at Phase 4 of the programme (see 11.2 below)</li> <li>• An outline of the scope of Phase 5 which is expected to run for 12 – 18 months.(see 11.3)</li> </ul>	
11.2	Conclusions reached at Phase 4 were: <ul style="list-style-type: none"> <li>• NDA reviewed the option to reprocess the plutonium for use as MOX fuel and developed positions on alternative reuse proposals (as fuel in CANDU or PRISM reactors).</li> <li>• NDA concluded that reuse remains the preferred option and that there are three credible reuse options: <ol style="list-style-type: none"> <li>1. As MOX fuel in light water reactors.</li> </ol> </li> </ul>	

2. As fuel in CANDU EC6 reactors.

3. As fuel in PRISM fast reactors.

- There is currently insufficient understanding to confidently move into implementation and significant further work must be undertaken to enable DECC and UK Government to select and implement its preferred reuse option.
- All options require further understanding of technical aspects, including licensing, to be developed.
- Proposals are being led by technology vendors and commercially there are many ways to implement them.
- Three distinct technical solutions are being proposed so the plan is to use a competitive process to secure the best outcome although NDA will establish approaches to cover both a competitive and sole provider market condition until market positions are better understood.
- The exact timing of decision making will be established once the above work has progressed sufficiently.

11.3 Scope of work for Phase 5 of the programme is:

- Improve understanding of the technical aspects of each credible reuse option to establish the licensability of the lifecycle solution;
- Further underpin the costs and revenues of each credible reuse option including contingencies, risks and uncertainties;
- Further develop understanding of all primary options, including continued storage and immobilisation.
- Obtain an in-depth understanding of the potential commercial structures by which the options could be financed and delivered through active market engagement with suppliers of technology, equity or funding.
- Develop a view on the level of direct or indirect support government could give to secure a reuse solution and the mechanisms by which this could be realised.
- Gain a full appreciation of the options available to select and acquire the solution based on the market conditions and an understanding of the means by which this process and a subsequent procurement would be run.
- Develop the schedule and likely costs of implementation, to enable timely inclusion into NDA and government spending rounds.

11.4 Questions raised during discussion:

11.4.1 *How would the introduction of a Thorium based reactor programme affect the plans?*

NDA has looked at a range of fuel cycles has no preferences. The onus is on the market to be able to deliver a workable solution.

11.4.2 *Given that no community has committed to taking MOX fuel at a new build site how would use its use be justified? For example if it was proposed to use MOX fuel at Hinkley Point C there would need to be a considerable review of work already carried out.*

Use of MOX in new reactors would be negotiated as part of the strike price. It is proven technology, but the market would not

	<p>build a manufacturing facility unless there was a market for the fuel.</p>	
11.4.3	<p><i>What considerations had been given to transporting fuel from the manufacturing site to the reactors?</i></p>	
	<p>Costs of transporting MOX are well known and can be factored in to the business case.</p> <p>PRISM reactors have quite a small integrated footprint and could be managed on the Sellafield site.</p>	
11.4.4	<p><i>What happens if plans for reprocessing the plutonium fail? Do we have the technology to put it safely into the Geological Disposal Facility?</i></p>	
	<p>Plutonium can be immobilised using a technology call hot isostatic pressing. This makes it into a ceramic form which is then canned for storage. However, we do not currently have a facility which can carry out this process.</p>	
11.5	<p>The Chair thanked Mr Nixon for his presentation and closed the meeting.</p>	

## ACTION LIST

<b>Steering Group, 24 July 2014</b>			
	Post minutes for meeting of 9 April on website	CD	Done
5.2	Ask NDA for clarification if any of the savings incurred by long term storage of wastes on site will be passed on to the host community	PM	Anna Clark emailed 13 <sup>th</sup> August. Follow up emails and phone calls. NDA has indicated it would like to discuss but has not yet set a time
5.3	What considerations have been given to the impact of coastal erosion on sites where it proposed waste will be stored until 2130	PM	As above
5.5	Seek clarification from NDA on the reason for the delay for the disposal of boundary wastes.	PM	As above
5.5	Write to NDA asking for the timetable for their stakeholder engagement with local government and communities regarding site restoration and site end states	PM	As above
6.10	Ask DECC for clarity on its timeline (GDF) in order to assist NuLeAF in timetabling	PM	Raised with DECC. Timeline not yet

	internal discussions		agreed
6.11	Submit a paper to the October Steering Group on possible actions re the GDF White Paper proposals	PM	Done
7.1	Carry forward the paper on NuLeAF meetings and engagement to the October AGM	CD/PM	Item 6 AGM
8.2	Contact STING secretariat regarding engagement in project	PM	Done. Awaiting further information.
8.3	Write to ONR for clarification on process for determining DEPZ	PM	Letter sent 9 <sup>th</sup> September. No response as yet
10.1.2	Contact membership re proposed meeting with LLWR/SLCs re VLLW shipment.	PM/CD	Meeting scheduled for 14.11.14
10.2.1	Circulate ONR Strategy response to meeting participants and agree final sign-off with Chair and Vice-Chair.	PM/RS/BS	Done. Response submitted.