

Bradwell Site

Minutes of the 59th Local Community Liaison Council (LCLC) Meeting to discuss proposed Magnox Waste Strategy options

Mundon Victory Hall
Wednesday 4th March 2015

Present:

LCLC Executive:

Brian Main
Cllr John White
Lisa Reece-Ford
Dr Louise Franks

LCLC Chairman
Deputy Chairman
LCLC Secretariat
LCLC Clerk

LCLC Members:

Cllr Brian Beale
Cllr Roy Bryant
Cllr Tim Drain
Stephen Dickson
Cllr Heather Glynn
Patrick Haley
Paul Hetherington
Peter Ireland
Jonathan Jenkin
Cllr Ivan Joslin
Karl Littlewood
Tony Moore
Cllr Michael Pudney
Cllr Tony Pluckrose
Scott Raish
Cllr Gavin Rowsell

Maldon District Council
Tillingham Parish Council
Bradwell Parish Council
Essex Civil Protection & Emergency Management
Rochford District Council
Magnox Ltd
Magnox Ltd
Magnox Ltd
Nuclear Decommissioning Authority
St Lawrence Parish Council
Environment Agency
Magnox Ltd
Steeple Parish Council
Tillingham Parish Council
Magnox Ltd
Mundon Parish Council

Bold type - denotes voting members

Members of the public in attendance:

Andrew Blowers
Varrie Blowers
Dina Bott
Ian Clarke
John Harrison
Judy Lea
Coral Newton
Ian Newton
Valerie Scott
Barry Turner



1. INTRODUCTION

2590 The Chairman opened the meeting by welcoming those present and advising that, as this was an extra meeting, there was no agenda and that the key focus was to consider the proposed Magnox Waste Strategy.

2. APOLOGIES FOR ABSENCE

2591 The following apologies were received:

Cllr Robert Boyce	Essex County Council
Rosanna Briggs	Essex County Council
Kathy Brown	Braintree District Council
Michelle Curtis	Tollesbury Parish Council
Cllr Adrian Fluker	Maldon District Council
Cllr Bryan Ledger	Asheldham & Dengie Parish Council and Chair of Dengie Hundred Group of Parish Councils
Cllr Moore	Latchingdon Parish Council
Averil Price	Chelmsford City Council
Pam Riley	Member of the Public
Cllr Robinson	Latchingdon Parish Council
Cllr Tony Shrimpton	Maldon Town Council
Cllr Noelle Urquhart	West Mersea Town Council
Paul Walker	Essex County Council
Sylvia Wargent	West Mersea Town Council

3. MAGNOX WASTE STRATEGY UPDATE

2592 Scott Raish asked to provide an update following a request at a previous LCLC to know when the Fuel Element Debris (FED) outage was completed. He confirmed that discharges from the FED dissolution process had recommenced the previous day.

2593 Peter Ireland introduced himself as part of the Magnox Waste Decommissioning Strategy team and provided an update on the 'direction of travel' of the waste management strategy. A leaflet titled "The Impact of the proposed waste strategy at Bradwell Site" was available in hard copy to attendees of this meeting. Mr Ireland provided a comprehensive presentation and the following key points were noted:

- Strategy has evolved from that proposed by the NDA as the preferred option, to include input from the new Parent Body Organisation.
- Safety, security and the environment remain the key priorities
- Waste strategy challenged to provide best value to the UK tax payer
- Review of the following aspects in particular:
 - Intermediate Level Waste (ILW) packaging and storage
 - FED management
 - ILW pond skips (not applicable to Bradwell)
 - IONSIV Cartridges (not applicable to Bradwell)
- Principles applied include:
 - Deployment of most appropriate packaging
 - Best use of regionally available assets
 - Where possible, share assets with adjacent EDF Energy sites
 - Develop new waste route for low level waste (LLW) FED
- Implications for Bradwell include:
 - Continue to use Ductile Cast Iron Containers (DCIC's) – known as Yellow Boxes
 - Potential to use spare capacity within Bradwell's ILW interim store for packages from Dungeness and Sizewell A
 - Continue dissolution for the site's FED
 - Explore potential new waste route for a proportion of FED which is categorised as LLW to go



to LLW repository

- Implications for the Bradwell ILW store are that a reduced number of ILW packages will be stored of which an estimated 170 (down from 183) will be received from Dungeness and Sizewell A sites combined. Receipt of these is likely to be after site has entered Care and Maintenance phase.
- Implications for the fleet:
 - Approx savings of £200million of which £30m saved from not having to construct ILW stores at Dungeness and Sizewell A
 - No increase (possible small decrease) in overall lorry movements
 - Rail to be used for the bulk transport of packages
 - No detrimental impact to safety security or the environment
 - Lessons from previous strategy, including outcomes of 2013 consultation, retained and no significant new development required
 - Significant cost savings to the UK tax payer

2594 Mr Ireland advised that this revised direction of travel has been communicated (Jan – March 2015) via an ongoing programme of initial stakeholder engagement with MP's, LCLC/SSG's and Local Authorities. Looking forward the proposals require internal approval from the Magnox executive and the Nuclear Decommissioning Authority (NDA) prior to permissioning with the regulators. Thereafter, there would be further engagement with stakeholders and Local Authority planners and longer term, transportation planning arrangements agreed.

QUESTIONS AND COMMENTS REGARDING THE WASTE STRATEGY UPDATE

- Q1 Cllr Brian Beale commented that previously there had been repeated reassurance that any waste storage at Bradwell would be for waste exclusively generated by the site. The public are now being told that improvements in processing of waste means that the Bradwell store has capacity to take waste generated by Dungeness A and Sizewell A. He expressed concern that the transfer of incoming waste would be via already congested roads between Southminster railhead and the site. Cllr Beale also sought confirmation of which FED dissolution process would be employed going forward; that using carbonic acid or that using nitric acid.
- A1a Mr Ireland confirmed that the Bradwell store was originally intended for only Bradwell waste and indeed the store has a planning condition that specified exactly this. This means that no other source of waste can be stored there unless due process to change this planning condition is undertaken with a successful outcome. Mr Ireland advised that the NDA strategy changed in 2011 from self-contained waste storage at each site to maximising the use the assets across the country, hence the stakeholder engagement in 2013 to consider how best to respond to this change in strategy. He asserted that the design of the ILW store was to contain Bradwell waste with a 15% contingency based on anticipated inventory adding that at that time, Magnox had very limited operational experience of retrieving and segregating waste. Since that time, Bradwell has succeeded in minimising the waste volumes. Mr Moore introduced himself as the COO for Decommissioning Sites (Berkeley, Bradwell, Dungeness A, Sizewell A and Hinkley Point A), advising that this regional approach was also being applied in the South West to ensure best value for the UK taxpayer.
- A1b Mr Ireland confirmed that the nitric acid dissolution process had been commissioned for use at Bradwell and would continue to be employed there. Mr Moore added that the process had not been operating to full design output and that modifications, particularly to the abatement plant, had been undertaken to increase output going forward.
- A1c Mr Ireland advised that receipt of incoming packages was not expected whilst Bradwell was undertaking decommissioning works. He advised that road transport to from the site to Southminster railhead was currently deployed for the export of low level waste and once the site had completed decommissioning works, the level of congestion would be eased mitigating that caused by the import of packages. Cllr Beale disputed that the site had any impact on current levels of congestion and that import of packages would add to current congestion levels.
- Q2 John Harrison clarified that the presentation described the position between conception and implementation. He questioned whether the proposed packages to be imported would be the same type as those used for Bradwell waste and whether the overall number of packages would increase.



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- A2 Mr Ireland confirmed that the type of packages would be the same and that the overall number would be similar if not less.
- Q3a Ian Clarke speculated that as the overall number of packages to be stored was similar and that this had been achieved by removing any LLW, that the concentration of radioactivity in the waste /m³ was higher.
- A3a Mr Ireland advised that whilst this was possible, that the waste was being packaged in containers that were self shielding. He explained that the level of shielding in the cuboid and cylindrical containers differed and that the waste was segregated and packaged into the container that provided the appropriate level of shielding. This means that the percentages of cuboid and cylindrical containers to be stored may change but that the dose on the outside of the container would always be within safe transport limits. Whilst the amount of radioactivity to be stored may be different, in terms of safety, the impact on the local community would not change.
- Q3b Mr Clarke reiterated that whilst there would be the same volume of stored waste material, the level of radioactivity within that volume would be higher.
- A3b Chair explained that whilst there may be higher density of radioactivity it would be totally shielded and therefore this had no impact.
- Q4a Heather Glynn questioned whether the ILW store would be effectively closed after the import of the 170 containers from Sizewell A and Dungeness A.
- A4a Mr Ireland explained that the NDA strategy was to make the best use of available assets and that this proposal was to use the capacity of the Bradwell ILW waste store to contain all Bradwell ILW plus an estimated 170 containers of ILW waste imported from Dungeness A and Sizewell A.
- Q4b Cllr Glynn sought reassurance that this would then mean the site would return to a 'quiet' state.
- A4b Mr Ireland explained that this was the intent but that this strategy had not been permissioned. He clarified that he could only describe the current position and therefore, the exact number of containers required for Bradwell waste was not yet known so the exact remaining capacity of the Bradwell ILW store was not known. Mr Moore added that there was no intention to bring waste to the Bradwell ILW store from outside the South East region. Mr Ireland reiterated that feedback from stakeholders during the previous engagement had favoured regional and not national basis for the best use of assets.
- Q5 In summary, Andy Blowers made the following points:
- Not a strategy but an incremental change from self sufficiency to regional storage
 - No effective public consultation is planned or occurred previously; only engagement with local authorities and stakeholder groups. This is inappropriate given the high level of public interest.
 - There has been an 8 month outage of the dissolution process which we have just heard finished last night. This dissolution process was planned to be deployed at other sites. Given the new principle of best use of regional assets, can there be a categoric reassurance that waste from other sites will not be imported for dissolution at Bradwell and that the equipment will not be exported for use elsewhere?
 - We cannot trust what we are told as you have changed your minds over the past two/three years.
 - Proposals are reliant upon on Essex County Council agreeing a U-turn to enable the import of waste from other sites.
 - Assumption that ILW waste will ultimately be moved to a Geological Disposal Facility (GDF) but no repository has yet been determined and even if a GDF becomes available the disposal of ILW waste from regional stores will not be a priority. What will happen to the graphite cores is still not known. This means that Bradwell will continue to operate as a waste storage facility. Could EDF Energy materials be imported to Bradwell eventually?
 - The site won't close in 15months time it will remain open as a waste repository.
- A5a Mr Ireland clarified that discussions with EDF Energy were primarily about adjacent sites sharing waste facilities and described how Hunterston A site were liaising with Hunterston B station to establish a single shared store. This does not apply to Bradwell currently and if there was to be new



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build at Bradwell then it is hoped that the principle of working together would prevail.

- A5b Mr Ireland explained that it would not make economic sense to keep Bradwell site operational and that moving the site into a quiescent state with no operations would enable significant cost savings. He reminded attendees that the NDA required the PBO/Magnox to reduce expenditure as the decommissioning programme moves forwards.
- A5c In terms of regional FED dissolution, Mr Ireland reminded attendees that the site had exported some Bradwell FED to Dungeness for dissolution and that the process at Dungeness was nearing completion. He advised that there was a small inventory of Sizewell A FED of which the majority was LLW and, subject to appropriate permissions, this would be sent to the LLW repository. Jonathan Jenkin added that current Magnox strategy for FED management is dissolution, which has all appropriate permissions and was based on the best practical environmental option at that time. Cavendish Fluor Partnership (CFP) have a preference for encapsulation and storage of FED and subject to completion of appropriate permissioning stages, this will become the Magnox strategy going forward meaning that no other sites will process via dissolution.
- A5d Mr Jenkin sought clarification of the question about the GDF and, after explaining changes to the siting process, commented that the planning assumption remained that a GDF would be available from 2040. He advised that thereafter, there would be a schedule of movements to the repository but that the priorities for this had yet to be decided. Mr Ireland added that the design life of ILW stores at Bradwell and other sites was up to 150years.
- Q6 Barry Turner asserted that the availability of a GDF within the next 100years was extremely unlikely and that the local community were being asked to accept waste from other sites. He said that the local community did not want this. He commented that dissolution was enabling a concentration of the radioactivity and questioned why the process was continuing given that the store had capacity to store a higher volume of waste. He questioned how dissolution had been allowed to commence here suggesting that there were far more suitable locations than the Blackwater estuary. He asserted that monitoring was not fully in place and that there were no guarantees of safety. He questioned how the site could be deemed safe if waste was imported from other sites. He asked that elected representatives learn from the past and prevent this from happening. [At this point Chair intervened and asked Mr Turner to curtail his speech and formulate a question - no question was forthcoming].
- Q7 Ivan Joslin questioned what capacity the ILW store will hold. The estimated number of containers of ILW waste that Bradwell will generate was also questioned.
- A7 Mr Ireland explained that although the final proportion of cuboidal and cylindrical containers was not yet determined, an example of the capacity of the store was 50 cuboidal and 340 cylindrical containers. An estimated 200 containers of Bradwell ILW will be generated.
- Q8 Cllr Beale expressed concern that County Councillors were not at this meeting and were not hearing the information, questions and concerns. He asserted that Essex County Council would have a significant input in terms of the future for the site and should attend this meeting.
- A8 Chair advised that Essex County Council were invited to attend LCLC meetings but were not in attendance. Cllr Beale stated that an invitation was insufficient and that County Council representation should be required to attend, as if for a scrutiny committee. Chair concurred.
- Q9 Tony Pluckrose sought clarification of the new waste routes and whether this referred to the physical treatment of waste.
- A9 Mr Ireland stated that the new waste route was for the LLW proportion of the FED which would be appropriately packaged and sent to the LLW repository. Chair added that for Bradwell FED this was only a small proportion of the FED that could be treated this way and Mr Ireland advised that this route would not make much difference to Bradwell but would have an impact at other sites.
- Q10 Judy Lea questioned what other planning changes would need to be approved, other than the consent to import waste from other sites.
- A10 Mr Ireland explained that there were other planning changes required across the fleet but that the only one applicable to Bradwell was the change to enable waste to be imported to the ILW store. Mr



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Ireland took an **ACTION** to check that this was definitely the case.

- Q11 John White commented that several attendees had been involved over a number of years in considering ILW storage and FED management. His understanding was that once Bradwell dissolution was complete that the dissolution plant would be moved to Hinkley Point A.
- A11 Mr Ireland advised that the original optimisation plan was to build a FED dissolution plant at Hinkley Point A that re-used some of the plant from Bradwell. Further analysis has shown that FED waste at Hinkley Point A site is ILW. It is proposed that encapsulating this in 6m³ concrete boxes will be more cost effective than processing by dissolution as, despite the environmental advantages of significantly reducing waste volume, the technical challenges posed by dissolution mean that it is a higher cost option. The plant at Bradwell will be recycled but not re-used as per the original design intent.
- Q12 Mr Clarke questioned whether a package of community benefits was being offered for hosting the storage of waste from other sites.
- A12 Mr Ireland explained that any compensation or community benefit package would be made by the NDA via the normal planning process section 106. He added that this has not been progressed as yet, as no agreement has yet been sought for this strategy to proceed. Mr Ireland countered the suggestion that there was no alternative strategy by reminding attendees that this proposal required permission from the NDA, Magnox, regulators and the local authority and that the plans currently in place would continue until these permissions were achieved, despite the current plans costing more and not making best use of available assets.
- Q13 Prof Blowers asked what consultation with the public would be undertaken. He disputed that this meeting was part of that process by stating that there was no invitation to respond to the proposals. He argued that Essex County Council was not represented, that this strategy was a complete change from self-sufficiency to regional storage and that the LCLC should formally say what it thinks. He asserted that this was an information event that ticked a box and that there was an inevitable outcome that was predetermined. He reiterated the need for categorical assurance that the nitric acid dissolution process would not be redeployed at other sites.
- A13a Chair asserted that assurance had been given regarding the dissolution plant and other matters and that this meeting was being held in addition to the regular meetings to enable a full discussion and that there would be further opportunity for input and discussion at the next scheduled LCLC meeting.
- A13b Cllr Glynn reminded attendees that she was the Rochford District Council representative and as such was representing 75,000 people. She advised that she had attended these meetings since the LCLC was first established and that she reported the outcomes of LCLC meetings to Rochford District Council. She asserted that she and other elected representatives had challenged and questioned the operators and regulators during her tenure to ensure the best outcome for the local community. She commented that Prof Blowers and his associates had only attended the last few meetings and seemed to only want to cause trouble. [There was a heated exchange at this point and the Chairman reminded all attendees to speak via the Chair].
- Q14a Cllr Beale asserted that the reason why storage of ILW on the site was even being discussed was because of the failure to secure a GDF. He asked why the process for siting a GDF had failed previously and for an indication of progress.
- A14a Mr Jenkin explained that under the previous siting process, Allerdale and Copeland Borough Councils both agreed to proceed, however, Cumbria County Council had voted against proceeding to the next stage, causing the process to halt. The Department for Energy and Climate Change paused and, after consultation, have now published an alternative siting process that involves a high level geological survey at an earlier stage, clearer community benefits, a revised definition of the 'hosting community' and a campaign to raise public awareness about what disposal means. He confirmed that the principle of volunteerism remains.
- Q14b Cllr Beale sought confirmation that the intention was still to remove ILW waste from the Bradwell store and dispose of this in the GDF.
- Q14b Mr Jenkin confirmed that this remains the plan and that the uncertainty was when this would happen.



- Q15 Gavin Rowsell questioned the timescales for the savings involved in the new strategy.
- A15 Mr Ireland advised that the savings are against the lifecycle costs of the original strategy – so would be achieved over the period through until the waste would go to the GDF.
- Q16 Valerie Scott asserted that Prof Blowers was responsible for the principle of volunteerism for the GDF. She declared that the Essex geology was very suitable for a GDF.
- Q17 Mr Harrison reminded attendees that approx 20tonnes of FED had been exported to Dungeness A for dissolution. He questioned whether any of the resulting waste had been returned to the Bradwell site.
- A17 Mr Ireland confirmed that 20 tonnes of FED had been exported and that no waste had been returned. He added that Magnox did ship waste between sites and that Bradwell had exported a large volume of radioactive waste to other locations, including Sellafield for reprocessing and to the low level waste repository. He reiterated that this revised waste management strategy enabled best use of regional resources and offered significant cost savings.
- Q18a Mr Clarke suggested that as dissolution reduced the volume of waste to one twentieth of the original, that this proposal was for the ILW store to accommodate 20 times the radioactivity for which it was originally intended. He questioned how much additional radioactivity was to be brought for storage on the Bradwell site.
- A18a Mr Moore reiterated that as all the waste was shielded that the net impact on exposure to the public was nil. Mr Ireland advised that when the store was originally planned, it was considerably larger to enable encapsulated ILW to be stored. The current Bradwell ILW store was designed to accommodate the anticipated reduced volume of radioactive waste produced by processing Bradwell FED through dissolution, with subsequent packaging in appropriately shielded containers.
- Q18b Mr Clarke sought confirmation that the quantity of radioactivity to be stored was not 20 times that originally planned.
- A18b Mr Ireland confirmed this. Chair added that his concern was for the safety of the ILW store rather than how the radioactivity was compacted within the packages.

4. ANY OTHER BUSINESS

- 2595 Mr Raish provided a brief update about the site and the following points were noted:
- Cladding is now 38% (prev. 25%) complete
 - Removal of eight portacabins complete, with associated wind down of administrator levels
 - Four of the vaults have been decontaminated
 - 100% of ILW waste has been retrieved and 15% has been conditioned and packaged
 - 15 of the 18 vaults have now been cleared of all FED
 - £2m worth of assets have now left the site for re-use at other locations

5. DATE AND TIME OF NEXT MEETING

- 2596 10am on Wednesday 3rd June at Mundon Victory Hall.

16. CLOSE

- 2597 Chairman encouraged participants to feedback to the bodies they represent and to liaise with the local community as widely as possible, reminding attendees that there were hard copies of a leaflet summarising the strategy available by the exit. Chairman closed the meeting at 12.00.