Site Stakeholder Group

HUNTERSTON SITE STAKEHOLDER GROUP

The Seventieth Meeting of the Hunterston Site Stakeholder Group will take place on Thursday 7 December 2023 at 1330 Hrs

Venue – The Waterside, Ardrossan Road, West Kilbride, KA23 9NG

Light Refreshments will be served from 1245 prior to the meeting

AGENDA

13.30 Chairman's Opening Remarks and Declarations of Interest

13.35 Chair and Vice Chair Updates and Correspondence

13.45 Actions and approval of previous Minutes

13.50 Hunterston B Site Reports

Hunterston B Report – Joe Struthers
ONR Report – Steve Saunders
SEPA Report – Keith Hammond

Members Question and Answer Session
Public Forum

14.25 Hunterston A Site Reports

Hunterston A Site Report – Mark Blackley
ONR Report – Peter Hughes
SEPA Report – Melanie Hayes

14.55 Ayrshire Civil Contingencies Team Update

Members Question and Answer Session
Public Forum

15.00 Update from NDA

David Wallace

Update from Magnox

Bill Hamilton

Update from Scottish Government

Diane Hamilton

Members Question and Answer Session
Public Forum

15.30 Any Other Business

Next Meeting Thursday 7 March 2024

HUNTERSTON SITE STAKEHOLDER GROUP
SUMMARY OF KEY POINTS FROM THE SIXTY NINTH MEETING
HELD ON THURSDAY 14 SEPTEMBER 2023
AT THE WATERSIDE HOTEL, ARDROSSAN ROAD, WEST KILBRIDE, KA23 9NG

Chair's Opening Remarks and Vice Chair Updates and Correspondence
The Chair reported on various meetings, including monthly updates with both Station Directors; SSG Chairs and Vice Chairs meetings; Scottish Nuclear Sites Stakeholder Group meeting. The next Chairs and Vice Chairs SSG meeting is in Manchester on 22-23 November 2023. The Willie Mackie Skills Hub at Kilwinning College officially opens on 21 September. The Chair hoped for more information on the specialist report issued to Magnox on the findings of how Magnox has dealt with characterisation of Bunker 1 ILW.

Actions and Approval of Previous Minutes
The Minutes of the meeting of 1 June 2023 were approved. There were no actions outstanding.

Hunterston B Report – Mr Joe Struthers
Mr Stuthers was pleased to be back in post and thanked Alison Adamson for deputising. The station had continued its strong safety performance with no significant events. Defueling was 90% completed with 304 / 308 spent fuel stringers safely removed. Mr Stuthers paid tribute to the team effort on site for this phenomenal achievement. Flasking was also going well with spent fuel removed from site slightly ahead of plan. Under Transfer and Deconstruction, collaboration with Magnox colleagues was continuing. 27 joint workshops had been held. While there is still much work to do, there has been a successful relationship to date. 99% of aspirational conversations had taken place and options provided, including remaining with EDF, transferring to Magnox or redundancy. The preference of 59-60% was to transfer to Magnox, 17% were unsure and 72% were keen to pursue retraining, upskilling or reskilling opportunities.

ONR Report – Mr Peter Hughes (on behalf of Mr Stephen Saunders)
Mr Saunders had attended site twice between April-June, during which there were no adverse findings.

SEPA Report – Mr Keith Hammond
Mr Hammond had been on site twice, in July and August, during which no contraventions had been found. Mr Hammond advised that the oil leak appears to be decreasing but this continues to be monitored.

Hunterston A Reports – Mr Mark Blackley
There had been one significant injury since the last meeting involving a Sub Contractor who had been operating a petrol powered hedge trimmer, which made contact with a metal fence and bounced back, cutting the operator's leg, which required 13 stitches. The site is looking at options on how best to deal with this with remaining ageing pump sludge which has a high radioactive dose rate. A variation permit request has been submitted to SEPA in respect of grouting waste packages in the SILWE plant. With regard to Fuel Element Debris (FED) waste in Bunker 1, filled under LOC process, a specialist report had been commissioned by SEPA after concerns on the characterisation. The assessment had now been received and was being reviewed by Magnox. A joint meeting with SEPA and ONR would be arranged to come to a satisfactory resolution. No further information was available at the meeting. Emergency arrangements had been graded adequate. The site hosted a visit from EDF Emergency Team Members. Mr Blackley updated on SILWE and WILRWEP. Reactor roof repairs are progressing and now almost 50% painted. Hunterston A is one of three Magnox sites selected to trial a Volunteering Scheme called Neighbourly.

ONR Report – Mr Peter Hughes
Mr Hughes had attended one site visit between April and June to assess the WILWREP facility prior to acidification activities, during which there were no adverse findings.

SEPA Report – Ms Melanie Hayes
SEPA Inspectors had been on site in August to complete an inspection of bunker waste package records and will consider findings and report back. Ms Hayes updated on the site inspection regarding non-compliance on the process for submitting monthly gaseous discharge returns. Hunterston A and Chapelcross were both found to be reporting incorrectly and therefore deemed incompliant with a number of conditions of EASR 2018. SEPA is considering the site's response. With regard to incomplete reporting information on one of the ventilation systems, SEPA is considering the site's response. SEPA had received a permit variation application relating to operation of the SILWE plant. This also requests an increase to the site gaseous discharge limits due to the operation of this new facility as well as other imminent work on site. SEPA will consider this then begin a public consultation process. The Characterisation Report, which has now been received by Magnox, will be included in consultation documents.

NDA Reports – Mr David Wallace
The new Secretary of State for DESNZ is Claire Coutinho, replacing Grant Shapps now Secretary of State for Defence. Chris Train is NDA's Interim Chair. The Regional Roadshow in Strathclyde was a good event. An online Stakeholder Summit will be held on 21 November. There will be a consultation before Christmas on the Socio Economic Refresh. Mr Oli Smith is on secondment from NDA to Scottish Government. Former Director of Strategy, Adrian Simper, is retiring on medical grounds. It is hoped that SCCORS will be reactivated.

Magnox Update – Mr Bill Hamilton
The NDA Board has been presented with the final paper on Magnox rebranding. Magnox is planning now for how sites will be left in 30 years' time. Working Groups will be created around sites, comprising 50% teenagers. The importance of sites is recognised, particularly affecting the local economy and wages. Concerns include the lack of social housing and employment opportunities. There is a need for clean, green, renewable energy. Conversations are taking place and polls will be drilled down to site specific analysis.

Update from Scottish Government –
A written report was provided with meeting papers. Ms Hamilton was not present at the meeting.

There were many questions asked by members after each presentation, the detail of which can be read in the full Minute of the meeting, available from the Secretariat.

Next Meeting – Thursday 7 December 2023 at 1.30 pm, in person at The Waterside Hotel, West Kilbride.

Site Stakeholder Group

HUNTERSTON SITE STAKEHOLDER GROUP
MINUTES OF SIXTY NINTH MEETING HELD ON
THURSDAY 14 SEPTEMBER 2023 AT 1.30 PM
THE WATERSIDE HOTEL, ARDROSSAN ROAD, WEST KILBRIDE, KA23 9NG

Present

Magnox Ltd
Mr Mark Blackley (Site Director, Hunterston A)
Mr Richard Gibson (Engineering and Infrastructure Manager)
Mr Bill Hamilton (Comms, Stakeholder Relations)
Mr Colin Hargreaves (Independent Site Inspector)
Mr Sean Marshall (Comms Manager / Secretariat)
Mr Alistair Walker (AGR Prog Developmt Manager)

EDF (Hunterston B)
Ms Fiona McCall (External Comms)
Mr Stuart McGhie (SSG Vice Chair)
Mr Joe Struthers (Station Director)

Community Council Representatives
Ms Rita Holmes – SSG Chair (Fairlie CC)
Mr John Lamb (West Kilbride CC)

ONR
Mr Peter Hughes (Hunterston A)

North Ayrshire Council (NAC)
Cllr Eleanor Collier (North Coast)
Cllr Alan Hill (North Coast)
Ms Lesley Jeffery (Civil Contingences Team)

SEPA
Mr Keith Hammond (Hunterston B)
Ms Melanie Hayes (Hunterston A)

NDA
Mr David Wallace (Stakeholder Lead Scotland)

Scottish Government

Civil Nuclear Constabulary
Inspector Paul Gilmartin

NFU Scotland
Mr William Jack

In Attendance
Ms Sheila Adams (Minutes)
Ms Claire Aitken (Member of Public)
Ms Maura Browne (Member of Public)
Mr Stewart Edmond (Member of Public)
Mr Alan Holden (Member of Public)
Mr Douglas McCord (Member of Public)
Mr David Nairn (Member of Public)
Mr Mark Pledger (Jacobs)

Apologies
Cllr John Glover (North Coast)
Ms Diane Hamilton (Scottish Government)
Mr John McHenery (Cumbrae Community Council)
Ms Louise Kirk (North Ayrshire Council)
Cllr Tom Marshall (North Coast)
Cllr Ian Murdoch (North Coast)
Mr Stephen Saunders (ONR, Hunterston B)

Site Stakeholder Group

1. Chairman's Opening Remarks and Declarations of Interest

Ms Holmes, Chair, welcomed everyone to the sixty ninth meeting of the Hunterston Site Stakeholder Group in the Waterside Hotel, West Kilbride. Introductions were made around the table.

Mr Marshall read the apologies as listed above. There were no declarations of interest.

2. Chair and Vice Chair Updates and Correspondence

The Chair reported on meetings that she and the Vice Chair had attended since the last meeting. They continue to receive monthly updates from management at both Hunterston A and B, mostly online. Hunterston A updates report on decommissioning progress, any incidents or issues which arise between meetings and socio economic applications and grants. Hunterston B updates on defuelling and its liaison with Hunterston A, as well as the workforce's wellbeing and aspirations post defuelling.

Ms Holmes attended the Site Stakeholder Groups Chairs and Vice Chairs meeting in London on 20-21 June and a follow-up meeting online on 10 July, where discussions included the Magnox rebranding and Chairs' views on the public's general perception of nuclear issues.

The Chair attended the Scottish Nuclear Sites Stakeholder Group meeting in Edinburgh on 22 August, hosted by Scottish Government's Radwaste Team. It was the first hybrid meeting and enabled the Vice Chair and other Site Stakeholder Group members to join remotely. It was chaired by the Head of the Radwaste Team, Dan Couldridge, and all Scottish nuclear sites, including MOD, were represented and gave updates. Christine Bruce (MOD Rosyth) who has, over several years, led on how to deal with problematic MOD radioactive resins, advised of a suitable treatment path for dealing with these. She also assured the Group that no defence radwaste would be sent to Hunterston. The Draft UK Government Policy consultation on dealing with radioactive substances promotes having one English or Welsh site receiving intermediate level waste (ILW) from all producers, i.e. decommissioning civil nuclear sites, industrial producers, medical and Ministry of Defence establishments. The Scottish Government is currently reviewing its Higher Activity Waste (HAW) Policy Strategy and Implementation. The UK Government consultation on dealing with radioactive substances is still awaiting Government approval before its policy is set. As neither Government has concluded its work on these yet, for all Site Stakeholder Groups, as well as NDA and Magnox, it is still, as it has been for several years now, a 'waiting game'. The UK Government and the Department for Energy Security and Net Zero (DESNZ) (formerly BEIS) has still not produced the final plan from its draft consultation on Radioactive Substances and the Scottish Government has not finalised its review of the Higher Activity Waste plans which have to consider near surface disposal as an option for non-Fuel Element Debris (FED). This means that NDA and Magnox are unable to be specific about plans for progressing decommissioning sites such as Hunterston. This is true for all decommissioning sites but the Chair was unsure of the position for Dounreay, Sellafield and Trawsfynydd.

SEPA and ONR have now issued their report on the findings regarding how Magnox has dealt with the Bunker Intermediate Level Waste (ILW) to Hunterston A, Magnox and NDA. The Chair hoped to be informed of its general findings at the meeting and be given some indication as to what it means, in practical terms, for the way forward on site. Ms Holmes understood the report to be critical of Magnox's inadequate characterisation of the contents of Bunkers 2-5. All the ILW in Bunkers 2-5 is in stainless steel boxes (as yet ungrouted) in the Hunterston A ILW store. Ms Holmes asked the question if all the boxes with contents would be grouted in the new encapsulation facility or only the Fuel Element Debris (FED) waste from Bunker 1.

Site Stakeholder Group

One answer from the Scottish Sites meeting was that if Near Surface Disposal becomes an option then, after reassessing the characterisation of Bunkers 2-5 waste, if deemed suitable, would be left in the ungrouted stainless steel boxes and buried near surface (approx. 800 boxes). Regardless of this, the radwaste FED from Bunker 1 will have to be grouted and go into the ILW store. From an environmental and health perspective, Hunterston Site Stakeholder Group needs to ask if grouting will produce any radioactive discharge from the Encapsulation Facility stacks and, if this is the case, should the volumes that are grouted be limited and only the FED packages grouted. She asked if the Intermediate Level Waste (ILW) store emits radioactive discharges to air? The current level of expenditure on storage or disposal of the legacy radioactive wates is unsustainable. The Government has tasked NDA with finding cheaper sustainable options for waste disposal, so as to reduce costs and the volume heading for any future Geological Disposal Facility (GDF). Recharacterisation of Low Level Waste (LLW) has already diverted some of it to landfill sites which is a much cheaper option. The stumbling block with any Radioactive Waste Management Policy is that whilst communities accept operational power stations, they see no benefit, and multiple pitfalls, from them being designated a national, or in Hunterston's case, Regional Radioactive Waste Storage or Near Surface Disposal site.

The Chair noted that very few Site Stakeholder Group members took up the offer to visit both sites. Only the Chair, Cllr Collier and a Cumbrae representative attended the site visit but it may be that some longstanding members are already acquainted with the sites.

The official opening of the Willie Mackie Skills Hub at Kilwinning College takes place on 21 September. The next Chairs and Vice Chairs Site Stakeholder Group meeting is in Manchester on 22-23 November 2023.

3. Actions and Approvals of Previous Minutes

The Minutes of the Site Stakeholder Group meeting, held on 1 June 2023, were proposed for approval by Mr John Lamb and seconded by Mr Stuart McGhie.

There were no actions from the June meeting and no outstanding actions.

4. Hunterston B Station Reports

Hunterston B Report – Mr Joe Struthers

The report issued with the meeting papers was taken as read. Mr Struthers was pleased to be back in post and thanked Alison Adamson for the great job she had done as Deputy over the last 6-7 months. The station had continued its strong safety performance with no significant events in the reporting period. Defueling was 90% completed with 304 / 308 spent fuel stringers safely removed. Mr Struthers expected this work to be completed within the next couple of weeks and paid tribute to the team effort on site for this phenomenal achievement. Flasking was also going well with spent fuel removed from site slightly ahead of plan.

Commented [MB(1]: Struthers

Commented [MB(2]: Deputy

Commented [MB(3]: Struthers

Under Transfer and Deconstruction, collaboration with Magnox colleagues was continuing with collaboration being facilitated on site and up to 27 joint workshops held. While there is still much work to do, there has been a successful relationship to date.

With regard to People, aspirational conversations had taken place and options provided, including remaining with EDF, transferring to Magnox or redundancy. Mr Struthers stressed that the aspirational conversations were to seek views and were non-binding. 99% of conversations had taken place with 1% on long-term sick leave. The preference of 59-60% was to transfer to Magnox, 17% were unsure and 72% were keen to pursue retraining, upskilling or reskilling opportunities.

Site Stakeholder Group

This had been a useful piece of work whilst also working in parallel with Magnox on numbers and structures. This demonstrated to site teams that the Company was listening, having conversations and planning. Mr Struthers gave credit to the way that the Station had responded which showed the high level of trust with staff.

Members Questions and Answer Session

Mr Lamb noted that the planned completion date for the defuelling of Reactor 3 in the report was September. Mr Struthers confirmed that he expected this work to be completed in the next week, which was 16 months from start to finish and within plan. Mr Lamb asked if defuelling of Reactor 4 would start before the end of the year. Mr Struthers responded that there is a four week window for a maintenance break. During this time, the Station will celebrate the success of the completion of Reactor 3 with staff then focus and reset before starting Reactor 4, improving the plant and learning.

Mr Lamb asked if the Station was still looking for the oil leak referred to at previous meetings. Mr Struthers confirmed that this was the case as the leak is so small and biodegradable that it is proving difficult to locate.

ONR Report – Mr Peter Hughes (on behalf of Mr Stephen Saunders)
On behalf of Mr Stephen Saunders, Mr Hughes took the ONR report issued with the meeting as read. Mr Saunders had attended site twice between April-June, during which there were no adverse findings.

SEPA Report – Mr Keith Hammond
The report issued with the meeting papers was taken as read. Mr Hammond reported on a quiet summer, during which he had been on site twice, in July and August, during which no contraventions had been found. In response to Mr Lamb's earlier question, Mr Hammond advised that the oil leak appears to be decreasing but this continues to be monitored.

Members Questions and Answer Session

Ms Holmes noted that as the power station is not operating, there is no throughput of water. She referred to discharges from treatment and storage plants and asked if there were plans in place for water supply for dispersing discharges. Mr Struthers replied that the arrangements are the same as in generation with circulating water in the system. Longer-term options are being considered, in conjunction with regulators and Mr Struthers undertook to update on this at a future meeting. Ms Holmes noted that Hunterston A goes down the same route and asked if options are being looked at solely for Hunterston B or for both sites. Mr Struthers advised that any system will support Hunterston A as well and the sites are working together. Ms Hayes added that a permit variation would be required regarding the flow rate and that Hunterston A and B sites would have to justify any changes to discharges. Mr Hammond added that there are different ways of getting effluent to a point without using as much energy and that SEPA is currently considering a report.

5. Hunterston A Site Reports

Hunterston A Report – Mr Mark Blackley
The report issued with meeting papers was taken as read and Mr Blackley highlighted key points. There had been one significant injury since the last meeting involving a Facilities Management Sub Contractor who had been hedge trimming with a petrol powered hedge trimmer, which made contact with a metal fence and bounced back, cutting the operator's leg, which required 13 stitches. The operator was able to return to work the following day.

Site Stakeholder Group

A Pond Sludge Pump not used since 2017 has a high radioactive dose rate. The pump is the last remaining item which was thought might be fuel fragment, which was found to be correct. The site is looking at options on how best to deal with this. A permit variation request has been submitted to SEPA in respect of grouting waste packages in the Solid Intermediate Level Waste Encapsulation (SILWE) plant.

With regard to the Fuel Element Debris (FED) waste in Bunker 1, filled under LOC process, a specialist report had been commissioned by SEPA after concerns on the characterisation. The assessment has now been received and was being reviewed by Magnox. A joint meeting with SEPA and ONR would be arranged to come to a satisfactory resolution.

Following a demonstration of our Emergency arrangements they have been graded as adequate. The site also hosted a visit from EDF Emergency Team Members to familiarise themselves with emergency arrangements and how they are managed at Hunterston A site.

Retrievals from bunkers have been slow due to a significant defect, which has now been repaired and allowing retrievals to recommence. 297 3M^3 boxes have been safely exported from Bunker 1, with a total of 1,189 3M^3 boxes exported from all five bunkers. Sludge and water have been removed from one tank in the Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP) and work has begun on the second tank. The acid campaign is getting closer to starting with pumps and pipelines being tested. Good progress is being made on the robot system of the Solid Intermediate Level Waste Encapsulation (SILWE) plant. Recent delays were caused by the contractor going into administration but this has now been resolved and inactive commissioning has restarted. Reactor roof repairs are progressing and now almost 50% painted.

A highlight for the site was being one of three Magnox sites selected to trial a Volunteering Scheme called Neighbourly. Employees can volunteer to work with communities or local charities for a week and Hunterston has a team out volunteering this week. Good news under People was the recruitment of two new Craft Apprentices who have been offered permanent roles. A number of graduates are doing placements and two Radiological Protection technicians from last year now have permanent posts.

ONR Report – Mr Peter Hughes
The ONR report issued with the meeting papers was taken as read. Mr Hughes had attended one site visit between April and June to assess the WILWREP facility prior to acid retrieval activities, during which there were no adverse findings.

SEPA Report – Ms Melanie Hayes
The report from SEPA, included in the meeting papers, was taken as read. Ms Hayes and Mr Fearne had been on site on 22-23 August to complete an inspection of the bunker waste package records that had been initially started in December 2021. SEPA will consider the findings of the inspection and report back to the site in due course. Mr Fearne is leading on this but works part-time. Ms Hayes updated on the site inspection in March 2023 regarding non-compliance on the process for submitting monthly gaseous discharge returns. Hunterston A and Chapelcross were both found to be reporting incorrectly and therefore deemed non-compliant with a number of conditions of the Environmental Authorisation (Scotland) Regulations (EASR) 2018. SEPA requested timelines for a return to compliance as well as confirmation of the status of the data provided in previously submitted data returns, which the site responded to on 10 August and SEPA is now considering.

With regard to the incomplete reporting information on one of the ventilation systems, reported by the site in June 2023, SEPA had issued an Information Notice requesting timelines and further evidence of the programme of work.

Commented [MB(4]: A Pond Sludge Pump, not used since 2017,

Commented [MB(5R4]: The pump is the last remaining item of equipment in the Pond which has a high dose rate. It was thought that a fragment of fuel within the pump body might be the source of the high dose rate and this has been confirmed to be correct.

Commented [MB(6]: Permit variation

Commented [MB(7]: has

Commented [MB(8]: Following a demonstration of our Emergency arrangements they have been graded as adequate.

Commented [MB(9]: Allowing retrievals to re-commence.

Site Stakeholder Group

The site had also responded to this on 10 August, which SEPA is reviewing and will respond in due course. One of the timelines included visual inspections of stacks and ventilation systems, which has been done and SEPA is very impressed with the work undertaken to rectify issues.

SEPA had received a permit variation application from Hunterston A on 21 August 2023 relating to operation of the SILWE plant. The permit variation also requests an increase to the site gaseous discharge limits due to the operation of this new facility as well as other imminent work on the site. SEPA will consider this then begin the public consultation process. The Characterisation Report, which has now been received by Magnox, will be included in the consultation documents.

Members Question and Answer Session

Ms Holmes asked for more information on the Characterisation Report. Ms Hayes clarified that the report on characterisation of waste was subcontracted to a specialist. The report had now been received by Magnox and it was for Magnox to consider the recommendations of the report and to decide how to take this forward, in discussion with SEPA and ONR. Ms Holmes noted, that in Magnox's defence, it was ONR who had insisted that the vaults be emptied through an Improvement Notice. Magnox had not been asked at that time to carry out detailed characterisation, Ms Hayes added that the intention is to make sure that the packages have not been done in such a way that they foreclose any future management. Ms Holmes noted that the waste is already in boxes. Ms Hayes replied that it is for Magnox to decide and make the case for what can be done. Ms Holmes added that if the packages are safe in boxes, they would be safe for a Geological Disposal Facility (GDF). Ms Hayes advised that the report indicates that there is not currently enough information to make this case. Mr Hughes clarified from an ONR perspective, the packages are in boxes and opening up boxes has nuclear safety considerations. It may be that the next step is to do nothing. The regulators are waiting for Magnox to consider the report and propose the way forward, in discussion with the regulators.

Ms Holmes asked if the regulators do not want 800 boxes grouted. Ms Hayes responded that the joint statement from ONR and SEPA was issued on safety grounds. Mr Hughes added that boxes are grouted to stop future contamination of the environment. From a safety perspective, regulators are focussing on Bunker 1 waste currently. Mr Blackley commented that packages need to satisfy waste acceptance criteria. This does not currently exist in Scotland so packages have been designed to meet GDF criteria which apply in England and Wales. Ms Hayes was unable to respond further as it is for Magnox to come up with a plan for the regulators to comment on and it is not yet known what this will say. Ms Hayes did not anticipate the emptying of boxes but more information could be made available in due course. Mr Blackley stressed that the onus is on Magnox to assess the report provided and come back to the regulators with proposals for discussion. All parties would be more comfortable answering questions after meeting. Magnox is currently assessing the report and will then produce proposals to discuss in meetings with regulators before Christmas.

Commented [MB(10]: Have been designed to meet GDF criteria which apply in England and Wales.

Ms Holmes considered that if gaseous discharges come from grouting, it would be better to have less grouting. Mr Hughes explained grouting is one way of passivating the waste. This prevents the spread of contamination in case of degradation of a facility. Passivation applies to all Higher Activity Waste (HAW) – there is no discrimination for Fuel Element Debris (FED). Ms Holmes considered it to be a very expensive Intermediate Level Waste Encapsulation plant if is only dealing with Fuel Element Debris, which could not be cost-effective.

Mr Lamb asked the position with two planning applications relating to non-compliance in 2008/2009, effectively the SILWE and WILWREP buildings which were to be removed by

September 2018. He asked if the Section 42 application was submitted to remove the time limit on the SILWE and WILWREP plants. Mr Blackley did not have the information to hand and would report back on this.

Ms Holmes asked what the options were once all the sludge retention tanks had been emptied and if there would be void filling. Mr Blackley responded that the site would have to consider Best Practicable Means (BPM) but is not that far advanced at this stage. Ms Holmes asked if voids would just be left clean if they are not filled in. Mr Blackley replied that currently policy would see cleaning then demolition. This however would have to be permissioned and justified. Ms Holmes asked if washing down would be done with a super-agent. Mr Blackley responded that it would be processed as active liquor then Effluent Discharge Plant. There would not be new liquor as the materials are already in the facility. Ms Holmes asked if there was a presumption that the waste was low level. Mr Blackley advised that this would have to be characterised at the time then disposal through the appropriate route.

Ms Holmes referred to the Cartridge Cooling Point and asked why temporary ventilation is required. Mr Blackley advised that there is generally temporary ventilation to filter air generated as part of a task. Ms Holmes asked how long temporary is. Mr Blackley explained that there are several temporary ventilation systems, looking at decontamination of surfaces of tanks. The site is targeting the end of the financial year. Ms Holmes asked if the site will require more temporary ventilation if it increases more treatment and activity. Ms Hayes responded that the site permit gives leeway to have temporary ventilation systems. This is useful for sites and has to be regarded as Best Practicable Means or it could not be done that way.

Commented [MB(11]: Delete

Public Forum

Member of the Public A asked why Magnox was allowed to do so much work before this was queried by regulators, which is very expensive. Ms Hayes explained that SEPA's remit changed under the Environmental Authorisations (Scotland) Regulations 2018 (EASR) in respect of solid waste and SEPA can now ask more questions where it previously did not have the same level of input. She was unable to comment on what has happened previously but added that EA(S)R as given SEPA more vires to have more say. Member of the Public A considered this to be unacceptable and suggested that somebody knew and a Station Director would not have carried out this work without regulator knowledge and asked who has responsibility. Ms Hayes was unable to comment further. Mr Hughes added that ONR was a signatory to the Letter of Compliance (LoC) process. There has been a change in environmental strategy and regulations allowing for more conversation. Regulators are well within their rights to ask questions. The waste in question is the current focus but the longer term LoC process is also being discussed. Future work is being planned to invite SEPA to better understand the LoC process. This is part of wider strategic policy to improve everyone's knowledge.

Member of the Public B referred to public concern, particularly those downwind of Hunterston, and the question of confidence if it is not known what is in the boxes and what will be done with them. Ms Hayes confirmed that all necessary detail will be included in the public consultation information. Mr Hughes added that by classifying waste, contamination is being trapped within that. Ms Holmes noted the importance for members to hear about the options. Ms Hayes stressed that SEPA is looking for more information to better inform everyone. Ms Holmes noted the frustration of waiting for two years for the UK Government consultation on Radioactive Substances.

Member of the Public C was concerned that the regulations had been changed in an attempt to retrofit. Mr Hammond replied that regulators are looking for optimised solutions. Twenty years on

there are more options. Mr Hughes added that ONR will be involved in permissioning activity.

6. Update from NDA – Mr David Wallace

The NDA report circulated with the meeting papers was taken as read. Mr Wallace confirmed that the new Secretary of State for Department of Energy Security and Net Zero (DESNZ) is Claire Coutinho, having replaced Grant Shapps who is now Secretary of State for Defence. Andrew Bowie remains Minister for Nuclear. Chris Train started on 1 September as NDA's Interim Chair. The Regional Roadshow in Strathclyde was a good event. There is an online Stakeholder Summit on 21 November. In 2024 the Stakeholder Summit will be in person in West Cumbria. Jamie Reed and his team are undertaking a Socio Economic Refresh, for which there will be a consultation before Christmas. Mr Wallace will discuss with Hunterston A and Chapelcross whether to do a separate or joint consultation. Mr Oli Smith has started working with Scottish Government, on secondment from Magnox. A possible exchange from Scottish Government to NDA/Magnox is being considered as the secondments work well for joint understanding. Former Director of Strategy, Adrian Simper, is retiring on medical grounds. Mr Simper has been a huge contributor to the nuclear industry and is very highly regarded. He is also an adviser to Government and will be a big miss all round. This is sad news and the NDA wishes him well. Matt Shaw is now full-time as NDA Counsel. In Scotland, the Scottish Councils Committee on Radioactive Substances (SCCORS) has been inactive since Covid. Mr Wallace had met with Michelle Campbell, Chair, with a view to reviving SCCORS. The Scottish Government and NDA have an important part to play in this. The NDA has offered resource to get the ball moving and they hope to meet again in October. The SCCORS Terms of Reference will also be addressed.

7. Update from Magnox – Mr Bill Hamilton

Mr Hamilton had worked closely with Mr Simper and was sorry to hear of his deteriorating health and wished him all the best. Mr Hamilton did want to intervene on the debate on waste characterisation but assured members that Magnox has been grouting boxes safely in the UK for decades and this is a truly well-proven process, not an experiment. Mr Hamilton was pleased to be attending the official opening of the new Willie Mackie Skills Hub for Construction Skills at Kilwinning College as he had visited and initiated this years ago, with an MSP. He noted that NDA and Magnox had played a positive role in this new building.

Corporately, Magnox is growing and will have 20 sites, including seven Advanced Gas-cooled Reactor (AGR) fleet. Other sites may also follow. Magnox was known for fuel so it is appropriate now to rebrand. The NDA Board has been presented with the final paper on rebranding. This has been done at minimal cost and many of the changes will be online and inexpensive. Branded PPE will be replaced when required and not wasted. A 'Big Conversation' is held with Chairs every 2-3 years as Magnox is keen to engage as widely and deeply as possible with communities around sites. Magnox is planning now for how sites will be left in 30 years' time. Working Groups will be created around sites, comprising 50% teenagers. Common views appear to be strongly in favour of environment. The importance of sites is recognised, particularly affecting the local economy and wages. Young people are concerned at the lack of social housing and employment opportunities. There is a need for clean, green, renewable energy. Some interesting conversations are taking place and the Polling Company will interview 1,000 people around sites and 1,000 away from sites, with a mix of both younger and older for comparison. The polls will then be drilled down to site specific analysis.

Mr Hamilton backed up the integration between EDF and Magnox and assured members that there are lots of meetings and interactions taking place.

Public Forum

Member of the Public B asked about the future perspective and if there was an oven-baked vision for the Hunterston Peninsula. None of the community groups that he is involved with have asked for their views. The gentleman was concerned at the environmental impact and the oysters, blue

mussels and sea grass which are all being lost and at risk now. He asked that Magnox do not horizon scan for 20 years but address the issues **now.** Mr Hamilton gave the example of Trawsfynydd site in North Wales which had an artificial lake long before the site. A pedestrian bridge was closed and the community was concerned at the loss of the amenity, which was not needed for operational purposes. Magnox listened to community aspirations, different community groups, Site Stakeholder Group, interest groups and brought them together as an independent facilitator. The top ten priorities were identified and discussions had on how they could become real. Socio economic funds is a possibility. Major contractors have a social value. Magnox has introduced a Volunteering Scheme. Examples given were demand for reopening a railway line or painting a Church. Member of the Public B had been talking for eight years and asking for assistance (non-financial) but suggested that the site operators are all talk, consultation and strategies, with no direct action. He noted that the foreshore was a public amenity but the biosphere is deteriorating. He was disappointed in endless consultations that go nowhere and asked that something is done and a meeting arranged.

8. Update from Scottish Government –

The Scottish Government's report was included in the meeting papers and taken as read. Ms Hamilton was not present at the meeting.

Public Forum

Member of the Public D referred to the amount of concrete on sites over the years and asked if it had been inspected for Reinforced Autoclaved Aerated Concrete (RAAC). Mr Gibson responded that Hunterston A has been carrying out inspections and is confident that there are no significant quantities of RAAC on site, if any. There is just one area at height that is still to be examined. Mr Hamilton added that this was true of the whole Magnox fleet. Mr Struthers confirmed that there are no issues with RAAC at Hunterston B station or any other EDF site either.

9. Any Other Business

Ms Holmes noted that this was Mr Sean Marshall's last meeting as he is retiring. As the longest-serving member of the Site Stakeholder Group, she asked Mr Lamb to present Mr Marshall with a memento from the SSG. Mr Lamb paid tribute to Mr Marshall's commitment and attendance over the years, sometimes overcoming difficulties with weather or location but he always made it through. On behalf of the SSG, he presented Mr Marshall with a medal inscribed 'I survived Hunterston SSG'. Mr Marshall thanked members for the medal and recalled one meeting he attended as Vice Chair of Chapelcross SSG, which had lasted 11 hours. He was pleased to say that the meetings had improved over time and were now very effective. Some members travel all over the country representing the SSGs. Mr Marshall had enjoyed his time at Hunterston and thanked members for their support. He also noted his work on socio economics for Magnox and had witnessed some significant investment in North Ayrshire. Mr Marshall wished SSG members all the best for the future.

10. Next Meeting – Thursday 7 December 2023

The next meeting will take place on Thursday 7 December 2023.

The Chair thanked everyone for attending and closed the meeting at 3.10 pm.

Site Stakeholder Group

Hunterston B Station Director's Report

Period: August 2023 to October 2023

1. Safety and Environment

Station Industrial Safety Performance

Safety performance during the reporting period has been good and our Total Recordable Incident Rate (TRIR) sits at 0.

Team monthly safety meetings continue to be a success with topics including COSHH, radiological protection and human performance, generating good discussion amongst all teams and contract partners.

Industrial Safety Engineers have been busy completing Risk Assessment, Manual Handling, and Asbestos & Working at height compliance evaluations in line with the fleet programme.

Our building and fabric group continue to meet on a weekly basis to ensure that improvements to buildings are being carried out in a timely manner.

Asbestos annual re-inspections and legionella checks are being carried out in a timely manner with the support from our contract partners

In August, we had excellent engagement with our topic leads during F2F KRT (Key Risk Tool) review, we continue to drive improvements across the station with all the industrial safety topics and feed the progress directly into the ISAT & SODT meetings.

Radiological Protection

The radiation dose of each worker is assessed individually by an electronic personal dose meter. A computer database keeps records for each worker. Exposure is continuously, monitored and ultimately compared with the levels specified in the Ionising Radiations Regulations (2017) which are the UK Health and Safety legislation that applies to work with radiation.

During the reporting period the Collective Radiation Exposure (CRE) was above plan (see table below). Collective doses are pre-planned for each year based on scheduled maintenance, outages and routine operations. A breakdown of dose received is shown below (along with a comparison of relevant dose statistics).

All work is fully reviewed and justified in order to ensure all doses received were ALARP (As Low As Reasonably Practicable). This involves justifying and optimising the dose, as well as remaining within those dose limits.

Differences between the actual and planned dose can be down to a range of factors including changes to the work programme, development of new techniques for carrying out work that will result in a lower dose and the deployment of new equipment. In this case, an emergent fault in the Irradiated Fuel Dismantling (FD) Cell resulted in the actual dose being higher than predicted.

There were no reportable radiological protection events during this reporting period.

Radiation Dose to workers (August 2023 - October 2023)		
Planned collective dose	7.1man.mSv	
Actual collective dose	13.1man.mSv	
	Employee	**Contract Partner**
Total Dose	11.94man.mSv	1.15man.mSv
Average individual dose	0.037mSv	0.01mSv
Highest individual dose	1.365mSv	0.237mSv
Individuals	326	216

Chest X-ray	Transatlantic Flight	CT scan	Average UK annual dose to public	EDF Energy Dose Restriction Level	UK legal dose limit for radiation workers
0.014mSv	0.08mSv	2.0mSv	2.6mSv	10mSv	20mSv

Explanatory notes:

- mSv: milliSieverts (SI unit of dose received by an individual)
- man.mSv: The collective dose for a group of workers (i.e. the total of the doses received by each member of a group).

Environmental Safety

There have been no significant environmental events in the period Aug 2023 to Oct 2023.

Very low traces of transformer oil from Scottish Power transformers were detected at a field drain, linked to storm drains on site. The transformers will be removed from site early next year and the land will be remediated. In the meantime, mitigations have been deployed to absorb further traces and prevent any from reaching the discharge point. All discharge quality standards continue to be met.

Work continues to record the leak rate of biodegradable insulation fluid from one of the station transformer cables. If the rate increases to a point where a tracer can be detected, further investigation will be carried out. So far the leak rate has been too low to use a tracer. SEPA have been kept fully informed.

Radioactive gaseous and aqueous discharges arising from normal plant operations in defueling remain at levels well below those authorised by SEPA.

The programme of off-site environmental monitoring and radiation surveys in the district has continued throughout the period and demonstrates that the radiological discharges from the station have a negligible impact on the local environment. Reports are provided monthly and quarterly to SEPA, detailing the samples and results of analysis performed.

Work to process and package solid low level wastes has continued in the period as part of normal operations and consignments have been made to our regular partners.

Emergency Arrangements

There have been no issues with the emergency arrangements during this reporting period. Hunterston B continues to work closely with fleet Emergency Preparedness Group as the lead defueling site.

As a company we continue to look to optimise our emergency arrangements in line with the risk profile of the station and following end of generation, the station's emergency arrangements have been under review. While the existing emergency arrangements have been confirmed to be sufficient for defueling phase hazards, it is important to ensure that the emergency arrangements remain proportional to the hazards during defueling so that resources, equipment and facilities can be optimised to support response. As such, a number of resource changes in relation to the station emergency arrangements have been proposed. These changes involve a change to, or removal of, some roles.

On the 6th of September 2023, a Proof of Concept (POC) exercise took place that was observed by both our internal (INA) and external (ONR) regulators. The exercise was a shift exercise and was required to demonstrate our proposed Optimised Defueling Emergency Arrangements. This POC exercise was successful, with strong performances recognised by our regulators across all command centres and deployed teams. Our internal regulators deemed the exercise to be an 'adequate'

demonstration of our proposed arrangements and this is an important step towards implementing the proposed changes.

The proposed Optimised Defueling Emergency Arrangements are subject to Management of Change (MoC) and completion of this exercise is one milestone in a larger package of work. The station are endeavouring to implement the changes with a proposed 'go live' on the 10th of January 2024, subject to the appropriate milestones being completed and a licenced instrument being granted.

During the reporting period we have also completed our second exercise season of 2023 which has allowed our existing role holders and trainees to exercise their roles in defueling and conventional hazard based scenarios. This has helped to facilitate our role succession plan, with several role holders achieving authorisation over the last quarter.

2. Defueling

On 18 September 2023, the last remaining nuclear fuel was removed from Reactor 3, concluding its defueling campaign. The defueling of 308 fuel channels from Reactor 3 was completed safely and on plan. This marks a significant milestone for both EDF and Hunterston B, being the first Advanced Gas-cooled Reactor to complete defueling after many years of preparation.

Following the defueling of Reactor 3, the station embarked on a 5 week Fuel Route outage where defueling operations were paused to undertake planned routine maintenance on key equipment prior to the commencement of Reactor 4 defueling.

To date the station has achieved 100% adherence to the 2023 flasking plan.

Within the reporting period there have been no issues of note.

3. Transfer and Deconstruction

Site Transition

Upon completion of defueling, we will seek to adjust our site arrangements to support deconstruction. This will mean a new safety case, emergency arrangements, security arrangements and organisational structure. The scoping phase of the transition plan has now been completed and we are now moving into the design and development phase. No implementation work will take place until the site is fuel free.

Some highlights for the quarter have been the agreement with NRS on the organisational structure required for deconstruction and the completion of the first draft of the faults and hazard schedule for the post defueling safety case.

Asset Transfer

EDF and NRS are working together to deliver the safest, most cost-effective solution for decommissioning the UK's Advanced Gas-cooled Reactor (AGR) fleet. This involves a seamless transfer of the site to NRS after the completion of defueling by EDF. Work continues to develop the scope of work required to enable Transfer in line with the Blueprint as previously communicated, with both NRS and EDF being fully committed to working together to deliver seamless transfer of the site licence to NRS.

Deconstruction Delivery

Work continues to prepare for deconstruction, which will start following the completion of defueling. Key focus areas are waste strategy, consents and permission (public consultation) and deplanting and demolition strategy. The overall decommissioning strategy remains 'Early Safestore'.

A number of synergy groups have been setup at a working level between key EDF and NRS subject matter experts. They have carried out a series of 'Learning from Experience' workshops to build NRS learning and experience into the Hunterston B site specific deconstruction plans. Some highlights for the quarter have been the dismantling of the Stator Shed and completion of a cable pull that will provide the sites new electrical supplies designed to last for the whole of the decommissioning period.

4. People

After the Leadership forums, which took place in February and March this year, leaders were asked to share thoughts and ideas on any particular support and development that would be beneficial as the station moves towards transfer to NRS. Based on the feedback provided, a Leadership Development Plan for 2023/2024 has been created.

As part of this, leaders wanted the opportunity to come together, ask questions, and discuss topics. In August, delivered by the HR team, the first Leadership Forum on 'Embracing Change' was held. There were a number of sessions available for leaders to attend and it received positive feedback from leaders on having the opportunity to be able to share experiences and discuss topics across the departments. There will be further sessions delivered covering different topic areas.

The Station Director, has held face-to-face meetings with all the teams across the station to provide an opportunity to sit down in small groups to discuss current issues and to give the chance to ask questions on any topics. Similar sessions were held last year and the feedback received from the meetings was really positive and helped shape improvements across site. Similar feedback has been given and it has been appreciated having the time to ask questions directly to the Station Director.

The 9-day fortnight trial, which was introduced to day staff in April to increase positive engagement and provide a better work life balance to employees, has had the trial period extended. This change in working has been under review and it has received positive feedback with improved work life balance and increase in morale. The trial was due to end in September and it has been extended for a further six months to gain further evidence of the effectiveness.

5. Company Update

EDF signs 7-year PPA with onshore wind farm in Scotland

EDF has signed a seven-year Power Purchase Agreement (PPA) with developer Brockwell Energy to purchase renewable energy from North Kyle onshore wind farm, which is currently under construction in East Ayrshire, Scotland.

As part of the agreement EDF will offtake 100% of the renewable wind energy produced by the 220.5MW wind farm once the site becomes commercially operational in early 2025.

Once complete, the wind farm will be capable of delivering approximately 630GWh of clean, green renewable energy each year. This is equivalent to powering 217,000 homes and represents a significant contribution to Scottish Government's targets for renewable energy.

The North Kyle onshore wind farm is to be built on or around a former coal mining site. This will help to deliver investment and regeneration benefits into the area. An important consideration in the project creation was to provide additional funding to assist with the restoration of the former site, improve public access and provide a truly ground-breaking community benefit programme.

EDF announces acquisition of leading heat pump installer

EDF, Britain's biggest generator of zero carbon electricity, has acquired one of the UK's leading air source heat pump installers, CB Heating, in a strategic step towards helping customers transition to zero-carbon heating solutions such as heat pumps.

The acquisition follows on from the strategic investment made by EDF into CB Heating in 2022. Coming at a crucial time for the sector, the announcement follows recent government extension of the Boiler Upgrade Scheme and 50% boost for the air source heat pump grant.

EDF to invest £4.5bn this year in clean, secure and affordable energy as it release progress update

EDF will invest £4.5bn this year as it continues to help build and maintain the country's Net Zero infrastructure.

Britain's biggest generator of zero carbon electricity has released its annual update, showing progress it has made as part of its plan to enable £50bn investment in helping the country be carbon net zero by 2050.

EDF achieved a major milestone this year when its carbon intensity at point of generation reached 0gCO2/MWh, which means that EDF now only generates zero carbon electricity.

6. Contacts

For more information about anything in this report or other station issues, contact:

Fiona McCall, Senior External Affairs Manager
Tel: 07818 232 347 E-mail: fiona.mccall@edf-energy.com

Nikki Thomson, Communications Coordinator
Tel: 01294 826157 E-mail: nikki.thomson@edf-energy.com

Office for Nuclear Regulation

ONR Site Report

EDF Energy – Hunterston B

ONR Site Report

EDF Energy - Hunterston B

Report for period: 1 July – 30 November 2023

Authored by: S Saunders, Nominated Site Inspector

Approved by: M Webb, Delivery Lead Operating Reactors

Issue No.: 1

Publication Date: Nov 23

ONR Record Ref. No.: 2023/59818

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Hunterston Site Stakeholder Group and are also available on the ONR website (http://www.onr.org.uk/llc/).

Site inspectors from ONR usually attend Hunterston Site Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

Contents

1. Inspections

1.1. Date(s) of Inspection

The ONR site inspector and specialist inspectors made inspections on the following dates during the report period 1 July – 30 November 2023:

25 - 27 July

15 - 17, 24 August

5 - 6 September

25 October

1 - 2, 14 - 15 November

The ONR site security inspector made inspections on the following dates:

25 - 27 July

17 - 18 October

2. Routine Matters

2.1. Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- the Energy Act 2013
- the Health and Safety at Work etc Act 1974 (HSWA74); and
- regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring the licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of Hunterston B covered the following:

- Emergency Arrangements
- Fuel Route
- Management of Change
- Operational Records

Emergency Arrangements

On the 26 July 2023, ONR safety and security inspectors evaluated a demonstration of the station emergency arrangements. The emergency exercise was judged to be an adequate and effective challenge to the emergency response arrangements required under Licence Condition 11 and the Nuclear Industries Security Regulations (NISR) 2003 Regulation 4. As with all exercises, some learning opportunities were identified – in this case better use of available resources and the recording of key decisions.

The station is proposing to optimise the on-site emergency arrangements post defueling of reactor 3 to reflect the reducing hazard on the site. This will require a formal approval from ONR. In advance of this request ONR inspectors evaluated a "proof of concept" exercise on the 6 September 2023. This exercise successfully demonstrated that the proposed removal of the defueled reactor desk engineer, a chemist and a response engineer from the on-call emergency rota did not affect the ability to deliver an effective emergency response required under Licence Condition 11.

In addition to attending the proof of concept exercise ONR inspectors also attended site on the 15 November 2023 to review the station's readiness to implement the optimised defueling emergency arrangements. This review sampled the documentation associated with this proposal and included the:-

- quality plans.
- emergency handbook and supporting document updates.
- emergency role holders and their training status.
- associated safety justifications
- lessons learned during training and proof of concept exercise.

Some additional work was identified which needs to be completed prior to ONR granting approval of the revised emergency plan. This was accepted by the station who are working to complete this.

As part of the optimisation of the emergency arrangements on site the station has also reviewed the safety case documents and identified the associated fault

sequences relevant to a defueling station. These have then been used to identify an appropriate exercise matrix for future years training. ONR inspectors reviewed the exercise matrix on site on the 14 November 2023 and judged that it met the legal requirement for compliance with LC11 - emergency arrangements.

Fuel Route

On the 15 and 16 of August 2023 ONR inspectors undertook a system based inspection of the fuel route to judge the adequacy of the implementation of the safety case for the Hunterston B fuel route.

This intervention sampled the training records of a number of fuel route operators, the adherence to the written operating instructions and identified limits and conditions as well as the maintenance of the key safety mechanisms.

From the areas sampled ONR judged that Hunterston B had adequately implemented the off-load depressurised defueling safety case for the fuel route. A number of minor shortfalls were identified during the inspection relating to record keeping and plant condition. These were accepted by the station and will be followed up by the ONR site inspector.

Management of Change

ONR specialist inspectors carried out an organisational capability inspection on the 24 August 2023 to review the proposed organisational changes to reflect the reduction in workload following the defueling of reactor 3.

Some of these proposed changes involve the reduction in the on-call emergency rota discussed above. The station is also proposing to make reductions in the operations department. ONR placed a regulatory hold point on these changes.

Following this inspection ONR judged that Hunterston B had made an adequate justification for the planned reductions in staff following the completion of reactor 3 being defueled and has released the regulatory hold point.

Operational Records

On the 1 November 2023, ONR inspectors carried out an inspection of the operational records associated with the defueling of reactor 3. The inspection sampled the quality plans and records collated by the station to demonstrate that all the fuel elements had been removed from reactor 3.

From the sample inspected, ONR judged that Hunterston B had followed their quality plans and produced suitable and sufficient operational records to demonstrate that the fuel from the channels inspected had been removed. One regulatory issue was raised regarding the adequacy of the storage of these records which the station had recognised and are in the process of addressing. Notwithstanding this, ONR judged that Hunterston B had met the legal requirement for compliance with LC25 – operational records.

Members of the public, who would like further information on ONR's inspection activities during the reporting period, can view site Intervention Reports at www.onr.org.uk/intervention-records on our website www.onr.org.uk.

Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk.

3. Non-Routine Matters

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

There were no such matters or events of significance during the period.

4. Regulatory Activity

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an Enforcement Notice.

- No LIs, Enforcement Notices or Enforcement letters were issued during this period.

Table 1: Licence Instruments and Enforcement Notices Issued by ONR during this period.

Date	Type	Ref. No.	Description

Reports detailing the above regulatory decisions can be found on the ONR website at http://www.onr.org.uk/pars/.

5. News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter ‘ONR News’ at www.onr.org.uk/onrnews.

6. Contacts

Office for Nuclear Regulation
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS
website: www.onr.org.uk
email: Contact@onr.gov.uk

This document is issued by ONR. For further information about ONR, or to report inconsistencies or inaccuracies in this publication please visit http://www.onr.org.uk/feedback.htm.

For published documents, the electronic copy on the ONR website remains the most current publicly available version and copying or printing renders this document uncontrolled.

Hunterston Site Stakeholder Group

SEPA Update- Hunterston B

7 December 2023

Regulation

Environmental Authorisations (Scotland) Regulations 2018 (EASR)- radioactive substances

We have continued telephone communication with the station throughout the period, including formal weekly call-downs with the station's Environmental Safety Group and corporate Generation Environment Management as well as monthly updates from the EDF internal regulator on site. We have also attended routine meetings with corporate EDF, Nuclear Restoration Services (formerly Magnox), ONR and EA on strategic issues, including defueling, transfer and decommissioning, including a face-to-face meeting in Gloucester in early October to discuss deconstruction issues.

Site Inspection

We have visited the station twice since the last SSG meeting. On 25 October 2023, SEPA attended a meeting on site to update the regulators on the status of the Site Specific Decommissioning Plan. In addition, the inspection looked at the internal governance undertaken to approve the refurbishment of the Decommissioning Waste Processing Facility as well as the status of the Alternative Active Effluent Discharge Line project in preparation for the expected permit variation application in 2024. No contraventions were identified.

The station was visited again on 9 November 2023 for the regulators to be presented with the proposed deconstruction staffing structures for the station. The visit was also used to further discuss the requirements for the proposed permit variation application for changes to the Active Effluent Discharge Line and to monitor the succession plan for the station's Radioactive Waste Adviser body through to transfer. No contraventions were identified.

Pollution Prevention and Control (PPC)

We continue monitoring the station's actions to locate and repair the small non-radioactive leak from an oil-filled cable onsite. The oil is biodegradable and breaks down within a month of escape. Otherwise, there have been no issues relating to the station's PPC permit for its non-radioactive emissions from the emergency diesel generators, auxiliary boilers and waste oil burner since the last scheduled SSG meeting.

Control of Major Accidents and Hazards (COMAH)

It has been identified that the EDF AGR fleet has not accounted for the presence of zinc bromide, used in the windows of Irradiated Fuel Dismantling Cells, in their COMAH inventories for the stations, including Hunterston B. Further work in the form of risk assessments is being undertaken by the corporate centre to determine if the layers of protection/mitigation are sufficient to prevent a major accident to the environment.

Controlled Activities Regulations (CAR)

There have been no other issues relating to the stations' non-radioactive liquid discharges to the water environment since the last scheduled SSG meeting.

Fluorinated Greenhouse Gase Emissions (F-Gas)

The station completed the SEPA questionnaire on hydrofluorocarbon usage on site and provided follow up information.

UK Emissions Trading Scheme (ETS)

There have been no issues relating to the ETS since the last scheduled SSG meeting.

Environmental Events

There were no reportable incidents, complaints or non-compliance events affecting SEPA's interests at either site known to have occurred since the last meeting of the SSG at the time of drafting this report.

Radioactivity in Food & the Environment (RIFE)

RIFE is a collaborative report on work carried out by SEPA, the other UK environment agencies, Food Standards Scotland and Food Standards Agency on the radiological monitoring of food and the environment. The RIFE reports aim to provide an in-depth assessment of radioactivity in food and the environment in the UK and the public's exposure to radiation, including in the vicinity of Hunterston B. The RIFE report incorporates the results from the analysis of a wide range of samples and key information on local habits to demonstrate both that food remains safe and that the public's exposure to ionising radiation is within legal limits.

The latest edition (RIFE 28) covering 2022 has been published and can be obtained from SEPA's website along with previous year's reports. RIFE 28 reports that the total dose for the representative person (most exposed) around the Hunterston site, which includes both Hunterston A and Hunterston B, for 2022 was less than 0.005 millisieverts, which is well below the legal annual dose limit of one millisievert as set out in paragraph 26, Schedule 8 of EASR18.

Scottish Pollutant Release Inventory (SPRI)

The Scottish Pollutant Release Inventory (SPRI) is a publicly accessible electronic database of releases of pollutants to all environmental media and transfers of non-radioactive waste. We intend that, as far as practicable, SPRI be the principle means by which information on Scottish pollutant releases and non-radioactive waste transfers is collected and made public. Wherever possible, such information will be collected and presented by this one system. The data for 2022, including that from Hunterston A and B, have been published and are available on SEPA's website under "*Environment/Environmental data/SPRI"*.

Mr Keith Hammond

Radioactive Substances Specialist/*Speisealach Stuthan Reidio-beo*

15/11/2023

Nuclear Decommissioning Authority

NRS Nuclear Restoration Services

HUNTERSTON A

SITE STAKEHOLDER GROUP REPORT

SITE DIRECTOR – MARK BLACKLEY

DECEMBER 2023

HUNTERSTON A
SITE DIRECTOR'S REPORT TO THE SITE STAKEHOLDER GROUP
DECEMBER 2023

Hunterston A continues to address the nuclear liabilities at Hunterston A in a safe, secure manner with care for the environment.

1 SITE DIRECTOR OVERVIEW

There were no significant new Nuclear, Radiological, Environmental or Security issues over the reporting period.

A site operative received an injury whilst lowering a security camera mast on site. The operative received grazes to wrist, shin and a hairline fracture to his left ankle. This type of injury is identified under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) as a specified injury. The operative is recovering at home and should return to work in December. This event is currently being investigated via a Root Cause Investigation (RCI) being undertaken by Head of Safety from Magnox centre. All work relating to the lowering of camera masts have been stopped and a review of the safe systems of work has been undertaken.

The site Accident, Emergency and Security Contingency Arrangements are tested frequently and remain suitable and sufficient. This was recently demonstrated during Exercise "Neptune" where the site along with the support of Police Scotland (Counter-Terrorism and Uniformed Officers) and Explosive Ordnance Disposal (EOD) Search Regiment successfully demonstrated our Security Contingency Arrangements.

On 31 October 2023, Magnox rebranded to Nuclear Restoration Services (NRS). The new brand strategy represents the joining together of Magnox and Dounreay and prepares us to welcome the seven advanced gas-cooled reactors sites for decommissioning and other future missions.

NRS (formerly Magnox) has submitted a Permit Variation Request to SEPA to enable the grouting of waste packages in SILWE. NRS had a constructive meeting with SEPA and ONR regarding the appropriateness of the characterisation of the bunker wastes. SEPA re-iterated that they do not consider that NRS has demonstrated that it has used BPM to characterise the bunker waste, or the individual packages of waste, as required by the EASR Standard Conditions for radioactive substances activities and are unable to sign a Permit Variation for Bunkers 2 - 5 based on the information provided to them so far. It was agreed at the meeting that NRS will prepare a report, with supporting evidence, which examines all options for final package measurement, and options to refine the package inventories.

We continue to retrieve waste from SAWB Number 1. To date, the SAWBR team have safely exported a cumulative total of 306 3M³ boxes from Bunker 1 to the ILW Store

equating to 183.3 Tonnes of Bunker 1 waste. **1200** 3M³ boxes have been exported from SAWBR (all 5 bunkers).

Activities associated with Inactive Commissioning of the Acid stream in WILWREP have progressed well over the past few months. The physical activities on the plant are now complete. We aim to permission a move into Active Commissioning in December / January

Good progress continues to be made with the Dumper Bot (a small remote control vehicle used to corral the material to a single area). The Operations team have cleared the contents from SRT3, and the Dumper Bot has now moved to SRT2 where residual sludge recoveries and waste sorting is progressing towards completion.

The SILWE Project continue with preparations for the commencement of Phase 2 Commissioning. Issues continue with the Kuka robots.

The Reactor roof repairs works are drawing to a close on the SRU roofs. Handrails are 100% complete across both reactors and 2,800m of Sarna bar repairs have been carried out from the total of 5,000m.

In terms of people, we currently have 16 roles at various stages of the resourcing process. In the period from September to November we have had 7 new starters join the site. We have recently agreed that we will recruit 2 graduate apprentices in Engineering within the 2024 apprenticeship intake. We are working with Hunterston B to develop a joint programme which will provide shared experience across both sites.

More details on some of these highlights are within the appropriate sections of this report.

2 SAFETY OVERVIEW

2.1 Safety Review Performance

On the 25th October 2023 a site operative received an injury whilst lowering a security camera mast on site. The operative received grazes to wrist, shin and injury to his ankle. It was later confirmed after attending A&E that he had received a hairline fracture to his left ankle. This type of injury is identified under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) as a specified injury, therefore must be reported to the Health and Safety Executive (HSE). The operative is recovering at home and should return to work after a period of recovery. This event is currently being investigated by Magnox, via a Root Cause Investigation (RCI), which is being undertaken by Head of Safety from Magnox centre, supported by Magnox trained investigators and Safety Representative. All work relating to the lowering of camera masts have been stopped and a review of the safe systems of work has been undertaken. This Lost Time Accident has been included in the site safety performance statistics below.

Due to this event and for assurance purposes, the site has commenced dip checks on work instructions and risk assessments to ensure they are suitable and sufficient for tasks being undertaken on site by Magnox staff. Any shortfalls identified will be rectified prior to work commencing.

The Total Recordable Incident Rate (TRIR) & Day Away Case Rate (DACR) for Hunterston A Site is now 1.41. This figure will reduce on the anniversary of the last Lost Time Accident on site which occurred in November 2022. During this reporting period, there has been two First Aid Case injuries on site. Both events required the site to send responders to provide first aid.

Both these first aid injuries were quite minor in nature, being a very small graze to operatives' arm and pain in lower back. The operative had slipped on a step as he left a building. The second first aid case event was relating to a member of staff who took unwell during a routine medical being undertaken by our occupational health nurse. First aid was provided to both individuals and they returned to work.

Target Zero campaigns continue to be rolled out. The topics were; *Lifting* in September, *Electricity* in October and Personal Protective Equipment (PPE) in November. There was another short pause during the planned target Zero campaign during November to raise awareness of Mens Mental Health and promotion of boys and men mental health webinar. The Target Zero campaigns are proactive in raising awareness and help to enhance Safety, Health, Wellbeing, Security, and the Environment.

Reporting of events on site remains consistent which approximately 100 Q Pulses raised each month. These Q Pulses are discussed at the daily Safety and Compliance meeting to ensure they are suitably managed and prioritised.

The Site Event review team continue to meet weekly to review Q Pulse reports, events, investigations and trending and make challenge or change where required.

The safety representatives (Magnox & Contractor) continue to meet fortnightly and have recently attended the site HESAC meeting. The safety representatives have arranged a PPE awareness campaign to be held in the Safety and Learning Drop-in Centre and is available to all person on site to attend.

2.2 Emergency Arrangements

The site Accident, Emergency and Security Contingency Arrangements are tested frequently and remain suitable and sufficient. This was recently demonstrated during Exercise "Neptune" where on 3rd October 2023 the site along with the support of Police Scotland (Counter-Terrorism and Uniformed Officers) and Explosive Ordnance Disposal (EOD) Search Regiment successfully demonstrated our Security Contingency Arrangements to the Company Internal Assurance Inspectors and ONRCNS.

The site continues to exercise both our Emergency and Security arrangements on a regular basis with several live and tabletop exercises being undertaken in the last 3 months involving both site staff and contractors. Additionally key functions within the site Accident and Emergency Arrangements recently attended bespoke Tactical Emergency Management training delivered by the Cabinet Office to further develop knowledge, skills and tools needed to effectively apply Emergency Management on site.

As part of our Emergency Preparedness cycle of improvement and succession planning the site has recently appointed a new Duty Manager taking our compliment to 4 and 2 new Duty Accredited Health Physicist (Duty Acc Hp) who will be available to support the site during an emergency if required. 9 new Contingency Team members have now successfully completed Rescue from Height and Nuclear Occupational First Aid training and will soon join the Contingency Team to further enhance our capability. Additionally, the site is currently in the process of supplementing emergency supporting staff roles by actively recruiting additional site Fire Marshals and female Nuclear Occupational First Aiders who will shortly be attending training.

The site continues to seek new areas to work in partnership and develop shared learning with Local Resilience Partners. During the November Emergency Planning Consultative Committee (EPCC) meeting with EDF Energy and Category 1/ 2 responders the appetite to explore opportunities for joint training, emergency exercising, and site familiarisation visits were discussed and widely supported. Future discussions are planned before the end of the year to discuss and agree an emergency exercise programme for 2024 to ensure maximum involvement and participation from external partners, further develop interoperability among all responding services and neighbouring sites and ensure a fully integrated response to credible accidents and emergencies which have the potential to impact the site.

3 DECOMMISSIONING PROGRESS

3.1 Solid Active Waste Bunker Retrieval (SAWBR) Project

The SAWBR facility was constructed to recover solid HAW (Higher Activity Waste) from within the site's five HAW bunkers. This is achieved by using remotely operated vehicles (ROV's) to fill hoppers that are then tipped into RWM (Radioactive Waste Management Ltd) approved 3M³ stainless steel boxes. The initial breakthrough into Bunker 5 was achieved in March 2014 and Bunkers 5, 4, 3 and 2 have been sequentially emptied to date.

To date, the SAWBR team have safely exported a cumulative total of **306** 3M³ boxes from Bunker 1 to the ILW Store equating to 183.3 Tonnes of Bunker 1 waste.

1200 3M³ boxes have been exported from SAWBR (all 5 bunkers) and it is forecast that the bulk retrieval of waste from Bunker 1 will be completed December 2023 - which will be a significant milestone for the site.

The plant had a routine planned, maintenance outage in November which has now completed, and the facilities have returned back into service.

Picture opposite of Bunker Waste Recovery Operations showing fuel assy/skip guide and part of the De-splitter machine.

3.2 Wet Intermediate Level Waste Retrieval & Encapsulation Plant (WILWREP)

The WILWREP facility was designed and constructed to recover and encapsulate Intermediate Level Waste (ILW) sludges, resins and acids stored in site tanks. Having completed the first stage of bulk sludge recoveries the plant was being reconfigured to retrieve and encapsulate radioactive Nitric acid before being paused in Summer 2022 due to other site priorities.

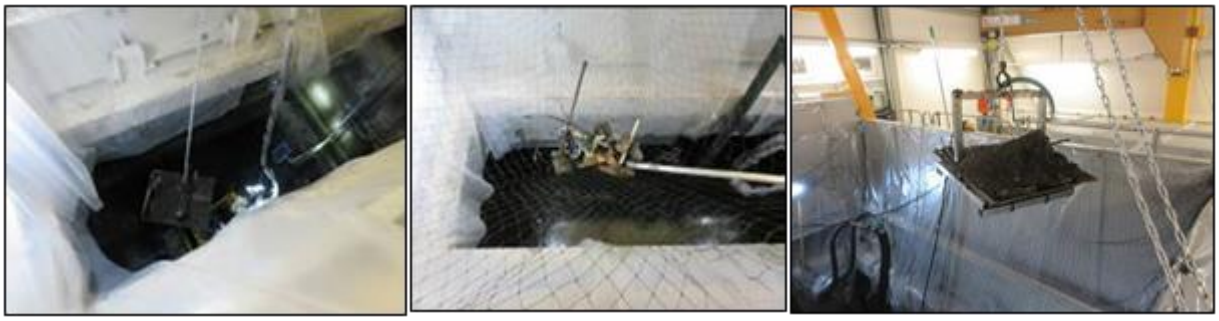
<u>WILWREP Acid Reconfiguration</u>

Activities associated with Inactive Commissioning of the Acid stream have progressed well over the past few months and the team remain hopeful of demonstrating appropriate evidence to permission a move into Active Commissioning in December / January. The activities involved in establishing the necessary arrangements are

challenging but good progress has been made with all physical activities on the plant now complete. A significant level of effort is being employed by many colleagues to ensure readiness and it is expected that a Design Authority Review to permission Active Commissioning will be successful soon.

Good progress continues to be made with the Dumper Bot (a small remote control vehicle used to corral the material to a single area). The Operations team have cleared the contents from SRT3, and the Dumper Bot has now moved to SRT2 where residual sludge recoveries and waste sorting is progressing towards completion.

The pictures below show a sludge skip being hoisted clear of the Dumper Bot, being emptied over SRT1's catchment net and the solid waste separated with the net.



3.3 Solid Intermediate Level Waste Encapsulation (SILWE) Project

The SILWE facility exists purely to encapsulate the 3M^3 packages containing the solid waste retrieved/recovered from SAWBR with a grout mix. Once encapsulated, the packages will be in their disposable state.

The SILWE Project continue with preparations for the commencement of Phase 2 Commissioning. Issues continue with the Kuka robots.

3.4 Ponds Programme

Cartridge Cooling Pond (CCP) Delay Tanks

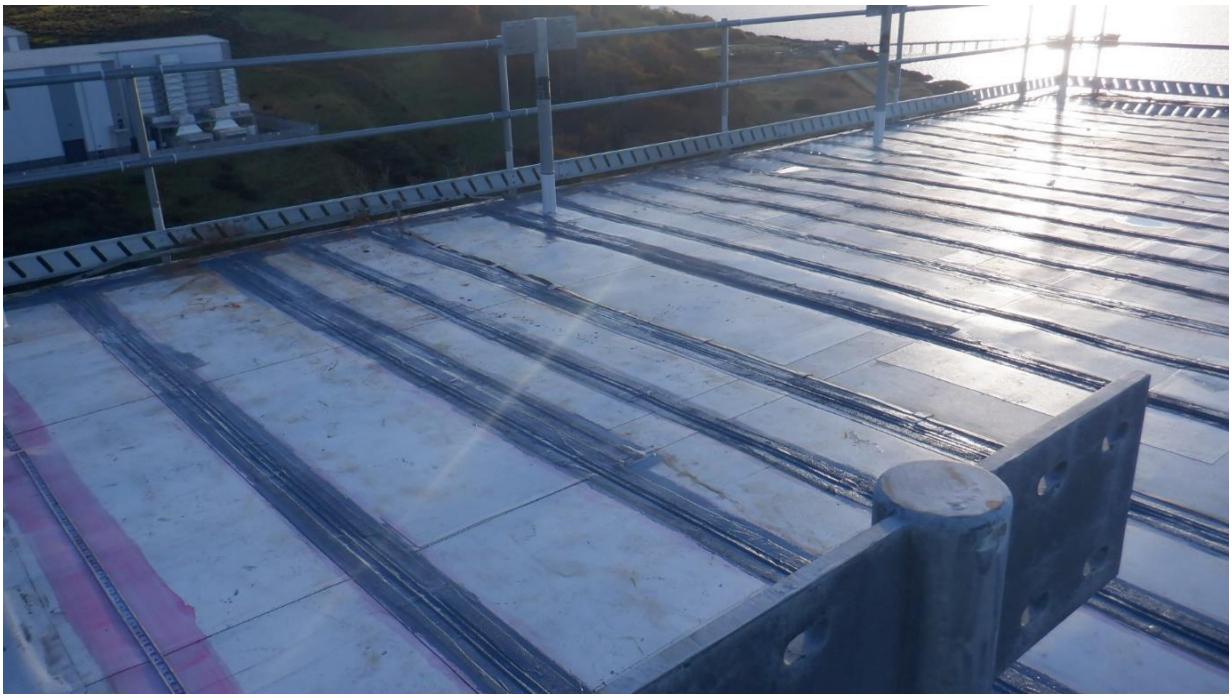
The CCP and Miscellaneous Delay Tanks formed part of the site's legacy Active Effluent Treatment Facility and received treated effluent from previously decommissioned effluent treatment plants. The tanks stored treated effluent whilst awaiting planned discharges to sea. Currently the tanks are isolated from historical inlets from the Pond Water Treatment Plant and Active Effluent Treatment plant. They are also dewatered and de-sludged and there is a live project within the pond programme to decontaminate the tanks.

The project team having already made good progress with Radiological surveys, options assessments and temporary ventilation design.

3.5 Hunterston Reactor Project / Plant & Structures

Reactor Roof Remedial Works

The roof repairs works are drawing to a close on the SRU roofs and moving onto the SMB roofs. Handrails are 100% complete across both reactors and 2,800m of Sarna bar repairs have been carried out from the total of 5,000m. A long-range MEWP is being used to complete the roof repair works on the roof fascia. The Contractor is continuing to find the existing Sarna bars to be in a corroded state and requiring full replacement. Pull tests are then conducted on a section of the Sarna bar to confirm the integrity of the repair works.



<u>De-planting Steam Raising Units</u>

The project team are preparing to remove redundant services and re-route existing services in preparation for de-planting in the Steam Raising Unit (SRUs) Halls. This work

to prepare this area will eventually allow access for contractors to carry out de-planting. The project is required to complete a study of waste characterisation by taking samples from all pipework systems in the SRU halls before starting de-plant works. Currently the characterisation is complete in R2 and on-going in R1. So far 154 cores of a total of 174 have been taken from primary systems. The project now has sanction to place the contract for the lab analysis works. The lab analysis will produce a report on the current activity levels within the primary system which will allow site to update the fingerprint for the reactor buildings and provide information for the waste management plan for the de-planting works in future years.

4. PEOPLE

4.1 Site HR

Work has recently been completed to finalise the site staffing forecast which will be incorporated into the Business Plan for 2024/25. Meanwhile, progress on recruitment continues against the remaining vacancies which were agreed in the 2023/24 Business Plan. We currently have 16 roles at various stages of the resourcing process from advertising and interview to offer and onboarding stages. In the period from September to November we have had 7 new starters join the site. We have recently agreed that we will recruit 2 graduate apprentices in Engineering within the 2024 apprenticeship intake. We are working with Hunterston B to develop a joint programme which will provide shared experience across both sites. These opportunities will be included within the NRS apprenticeship advert which will be issued during December.

We continue to progress a number of HR initiatives across the business including the roll out of the new competency framework to support succession, talent management and the performance review process and a company-wide review of broad roles (post profiles). We recently hosted a Pensions Roadshow where members of the NRS Pension Team delivered a presentation on the changes that are being proposed to the final salary pension scheme as a result of the government pension reforms. In terms of wellbeing, Flu vaccine vouchers have recently been made available to staff and the site has been supporting International Men's Day, which had a topic this year of "Zero Male Suicides." This included a webinar from a guest speaker, displays around site and a "Ten Hats" awareness campaign to raise awareness of the number of suicides within the Construction Industry each week.

4.2 Occupational Health

Our sickness levels have remained fairly static over recent months, although these do continue to remain higher than the Company average as a result of multiple long term sickness cases. We continue to support employees through case management support from Line Management, Occupational Health and HR to enable them to successfully return to work. The Company, with support from the Hunterston Mental Health First Aiders and Wellbeing Group members, is currently promoting the support provisions which are available to staff to help them manage their mental and physical wellbeing.

The group also continues to promote health and wellbeing initiatives, including further monthly webinars. Recent webinars have been on the subjects of "World Menopause Day", "Suicide Awareness", "AIDS Awareness" and "International Mens Day".

5 ASSET MANAGEMENT

To enable safe operation, we proactively review our systems, processes and facilities via our Systems Engineering Department. This enables us to look at future investment requirements to maintain a safe operational status.

Following the difficulties experienced last year with a previous sub-contractor to supply safety information with relation to planned improvements to line markings, a new sub-contractor has been engaged and this work has commenced recently with external car parks line markings being renovated and plans for general site line markings to be upgraded in the near future.

Initial specifications for the replacement RCA shower facility have been produced in conjunction with Engineering, these specifications will then follow the procurement process to engage suitable contractors. Similarly, the specification for the removal of the fire damaged facility which is beyond economical repair has entered the procurement process.

Difficulties were experienced when engaging with contractors to provide a suitable sealing product suitable to apply to the Cartridge Cooling Pond roof to further mitigate potential water ingress issues. These options were progressed through the preferred procurement route of using our incumbent Access Solutions Contractor. Options supplied through this route have been discounted and we are now progressing direct to market ourselves to ensure a suitable solution is procured and installed in a timely manner.

Minor welfare upgrades are planned for the remainder of this financial year with further welfare facilities upgrades continuing next financial year.

Progress of this year's work packs is ongoing and a portfolio of work packs for 2024/25 and 2025/26 are being developed.

6 RADIOLOGICAL SAFETY

Explanatory note: The maximum permissible dose to a radiation worker in the UK is 20mSv (milliSieverts) in a calendar year. The average annual radiation dose to the UK population from all sources is 2.6mSv. Collective dose is usually measured in man.milliSieverts. For example, if ten people were each to receive 0.1milliSieverts during a particular task, then the collective dose for the task would be 10 people x 0.1mSv each = 1 man.milliSievert.

Doses for the calendar year 2023, to the end of October, are as follows:

- Approximately 248 employees and visitors received a total collective dose of 7.780 man.mSv between them.
- Approximately 382 contractors received a total collective dose of 6.255 man.mSv between them.
- The highest individual dose received by an employee was 0.743 mSv.

- The highest individual dose received by a contractor was 0.995 mSv.

The majority of dose accrued in 2023 has been from a combination of the pond decommissioning project and other site projects. All doses in these projects have been prior assessed, planned and are tracked throughout the project duration to ensure that no limits are exceeded and that doses are kept as low as reasonably practicable.

7 ENVIRONMENT

7.1 Radioactive Discharges (October 2022-Sept 2023)

Solid

Low Level Waste (LLW) disposals to the Low Level Waste Repository (LLWR) continue. 31.43 m^3 of LLW and VLLW with a total activity of 0.44 GBq was disposed of during the twelve-month period from October 2022-Sept 2023. There is no limit on the volume or radioactivity content of LLW and VLLW being disposed of under the site EA(S)R Permit. The main contribution to these waste consignments was decommissioned plant, equipment, and materials generated during decommissioning operations.

Liquid

The main sources of liquid radioactive discharges during the period October 2022-Sept 2023 were liquors generated through wet waste recovery and encapsulation processes and routine waste water arisings from the site active drain system.

Radionuclide or Group of Radionuclides	Annual Limit	Activity discharged (October 2022-Sept 2023)
Tritium	30 GBq	0.005 GBq
Caesium-137	160 GBq	0.036 GBq
Plutonium-241	2 GBq	0.000 GBq
All alpha emitting radionuclides not specifically listed taken together	2 GBq	0.002 GBq
All non-alpha emitting radionuclides not specifically listed taken together	60 GBq	0.035 GBq

Gaseous

The main contributions to gaseous radioactive discharges were ventilation systems operating in contamination controlled areas and reactor vessel 'breathing'.

Authorised Outlet, Group of Outlets or other discharge route	Radionuclide or Group of Radionuclides	Annual Limit	Activity discharged (October 2022-Sept 2023)
All authorised outlets taken together.	Tritium	100 MBq	0.3 MBq
	All other radionuclides (excluding tritium)	3 MBq	0.249 MBq
Discharges made as a consequence of reactor breathing	Tritium	3000 MBq	410.55 MBq
	Carbon-14	200 MBq	56.12 MBq

7.2 Non-radiological Environmental update (October 2022-Sept 2023)

Treated sewage effluent from the plant is currently being independently assessed by SEPA on a quarterly basis. Results from an independent off-site laboratory analysis verify that the sewage treatment works reed beds continue to work efficiently to maintain good quality effluent in compliance with the sites CAR discharge licence.

Monitoring and trending of data for resources such as water, electricity and fuel continues to determine where use can be minimised, in line with the site Environmental Management System. Over the period October 2022-Sept 2023, the site used 12.66 Terra Joules (Tj) of energy; 11.89 Tj attributed to electricity consumption and 0.77 Tj attributed to fuel use in site vehicles, equipment, and generators. In the same 12-month period the site water consumption was 5,439m^3. The site continues to report carbon equivalent emissions data as per the new company process.

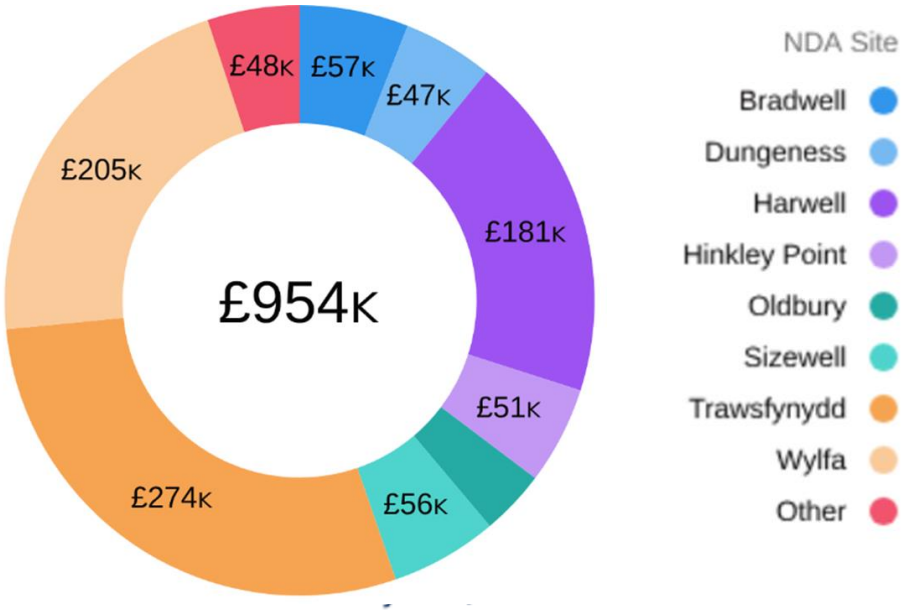
Waste disposal and recycling is recorded in the company unified dashboard. Over the period October 2022-Sept 2023, a total of 102.5 tonnes of waste was collected for consignment from site (75.4 tonnes for re-use, recycling, recovery, or composting, 24.0 tonnes sewage waste and 3.1 tonnes for disposal to landfill). This gives a recycling rate of approximately 74%.

7.3 Environmental Events (August 2023-November 2023)

There were no significant events at Hunterston A between 7th August and 27th November 2023.

8 SOCIO-ECONOMIC / STAKEHOLDER UPDATE

Nuclear Restoration Services (NRS) socio-economic scheme spend 2023-24



- NRS soc-ec funding remains at £1,020,035 annually available across all 12 NRS sites, with £954,380 funding already committed.
- £35,491 remaining within the £72,000 Good Neighbour allocation. This is up to £2,000 per application, with £6,000 allocation per site. If you are applying for funding, you must be a constituted organisation and provide quotes for the items you are requesting.

NRS funding objectives remain the same, for more detail please visit:
https://www.gov.uk/government/collections/nrs-working-with-our-communities

Good Neighbour level

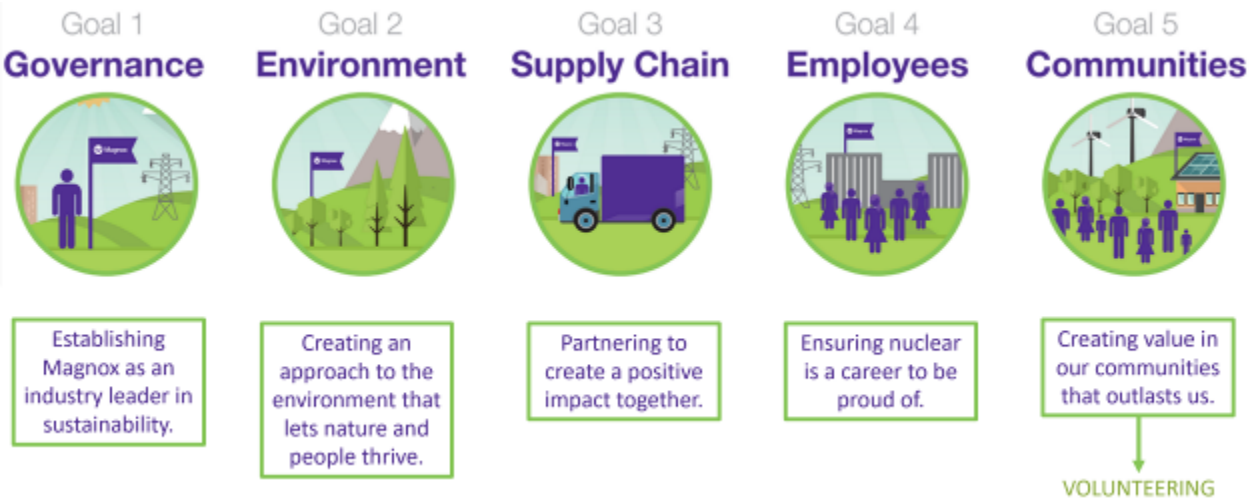
This year, for Hunterston A site, £1,000 has been awarded to West Kilbride Colts Football Club for the 'mini kickers' juniors to purchase a new training kit and equipment for the 25 members.

9 SUSTAINABILITY

9.1 Sustainability Strategy

Magnox's sustainability strategy centres around five goals: governance, environment, supply chain, employees, and communities. Goal 5 recognises Magnox's responsibility

to deliver value to its communities and this goal aims to strengthen local engagement, invest in local community assets and share our expertise.



9.2 Volunteering Portal

A key target under Goal 5 is the introduction of a trial of the 'Neighbourly portal' at Hunterston, Trawsfynydd and Berkeley. It formalises the process of identifying, promoting, monitoring & reporting volunteering opportunities for employees. Key benefits include:

- Targeting activities to organisations that share our values and bring **benefits to our communities.**
- Improving employee **skills and wellbeing**
- Supporting **equality and diversity** by providing skilled support to groups from marginalised communities
- Building stakeholder confidence

Several volunteering opportunities for Magnox staff located near Hunterston are now on the Neighbourly platform and participation is actively being encouraged. A number of staff have shown interest and are planning to sign up. In addition to the new platform, there are also several people that have been active volunteers in the locality for a wide variety of good causes for many years.

10 SITE VISITS AND KEY DATES

Hunterston A Site continues to attract the right kind of interest through our good safety and business performance. Below is a selection of visitors / key dates during the period.

DATE	EVENT/VISIT
14th September	Breast Cancer Awareness fundraiser on site
19th September	HNA Reactor Building Weather Protection - Management Analysis
21st September	Willie Mackie Skills Hub visit
27th September	Nuclear Safety committee
28TH September	John Grierson - Nuclear Operations Director Hunterston quarterly Performance review
3rd October	Regulator Evaluated Demonstration Exercise
3rd October	Cross Site Meeting with EDF (HNB station)
5th October	Alan Cumming - Group Chief Assurance and Performance Officer NDA
17/18 October	Reactor Dismantling Feasibility Workshop
25th October	Paul Winkle - Chief Operating Officer
30/31 October	Pension Roadshow
31 October	Site Stand downs NRS brand launch date
15th November	SEPA/ONR Meeting Inverness
6th December	Business Plan Review - Warrington

Office for Nuclear Regulation

ONR Site Report

Hunterston A

ONR Site Report

Hunterston A

Report for period: 1 July – 30 September 2023

Authored by: P Hughes, Nominated Site Inspector

Approved by: I Phillips, Delivery Lead Decommissioning, Fuel, and Waste

Issue No.: 1

Publication Date: October 2023

ONR Record Ref. No.: 2023/54973

Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed to members for the Hunterston Site Stakeholder Group and are also available on the ONR website (http://www.onr.org.uk/llc/).

Site inspectors from ONR usually attend Hunterston Site Stakeholder Group meetings where these reports are presented and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

Contents

1. Inspections

1.1. Date(s) of Inspection

The ONR site inspector and specialist inspectors made inspections on the following dates during the report period 1 July – 30 September 2023:

12 September 2023

The ONR site security inspector inspected the site on the following date:

18 July 2023

2. Routine Matters

2.1. Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- The conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- The Energy Act 2013;
- The Health and Safety at Work etc Act 1974 (HSWA74);
- Regulations made under HSWA74, for example the Ionising Radiations Regulations 2017 (IRR17) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99);
- The Fire (Scotland) Act 2005;
- The Nuclear Industries Security Regulations (NISR) 2003; and
- The Nuclear Safeguards (EU Exit) Regulations 2019 (NSR19).

The inspections entail monitoring the licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the conditions attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of (Hunterston A) covered the following:

- Reactor Building Ageing Management – On 12 September 2023 the site inspector carried out a joint inspection with the Scottish Environment

Protection Agency (SEPA) into the licensee arrangements regarding ageing management of the reactor building. ONR determined that the site did have adequate arrangements to provide for maintenance to the facility structures and repair work to the reactor roofs was being undertaken at the time of the inspection.

- Physical Protection System – On 18 July 2023 the site security inspector carried out an inspection to determine whether the site has designed and implemented a physical protection system that builds defence in depth and meets the required security outcome. ONR considered that the site has arrangements that builds defence in depth and meets the required security outcome.

Members of the public, who would like further information on ONR's inspection activities during the reporting period, can view site Intervention Reports at www.onr.org.uk/intervention-records.

Should you have any queries regarding our inspection activities, please email contact@onr.gov.uk.

2.2. Other Work

Throughout this reporting period, ONR's nominated site safety inspector has held regular telephone meetings with Hunterston A leadership team representatives to maintain situational awareness of matters related to nuclear safety.

The site inspector held a periodic meeting with safety representatives, to support their function of representing employees and receiving information on matters affecting their health, safety and welfare at work.

3. Non-Routine Matters

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

Matters and events of particular note during the period were:

- A high radiation dose rate was identified from a pump in the Cartridge Cooling Pond (CCP) during decommissioning operations. This pump is being stored underwater and the CCP Programme are now in the process of dealing with this pump. ONR will follow up on the findings as part of normal interactions with Magnox Ltd.

4. Regulatory Activity

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed ‘Licence Instruments’ (LIs) but can take other forms. In addition, inspectors may take a range of enforcement actions, to include issuing an enforcement notice.

No LIs, enforcement notices or enforcement letters were issued during this period.

5. News from ONR

For the latest news and information from ONR, please read and subscribe to our regular email newsletter ‘ONR News’ at www.onr.org.uk/onrnews.

6. Contacts

Office for Nuclear Regulation
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS
website: www.onr.org.uk
email: Contact@onr.gov.uk

This document is issued by ONR. For further information about ONR, or to report inconsistencies or inaccuracies in this publication please visit http://www.onr.org.uk/feedback.htm.

For published documents, the electronic copy on the ONR website remains the most current publicly available version and copying or printing renders this document uncontrolled.

Hunterston Site Stakeholder Group

SEPA Update- Hunterston A

7th December 2023

Regulation

Environmental Authorisations (Scotland) Regulations 2018 (EASR)- radioactive substances

Telephone communication with the site continued throughout the period since the last SSG in September, including formal monthly staying in touch telephone calls. Routine teleconferences with Hunterston A on local issues, and the corporate Magnox Ltd team on strategic issues have also continued as before.

Site visits continue in order to ensure compliance with the site permit.

SEPA Site Inspection 31st October 2023

SEPA undertook an inspection of the temporary process employed by Hunterston A to submit the monthly gaseous discharge returns to ensure that the future submissions are compliant with EASR.

It was found that the measures put in place are likely to ensure the future discharge returns are being submitted compliantly, until a permanent process can be put into place. This will be confirmed by assessing the data used to compile the November 2023 gaseous discharge return when it is submitted at the end of December.

SEPA and ONR joint Site Inspection 12-13th September 2023

SEPA joined ONR during an inspection on 12-13th September which looked at he HNA site's compliance with Licence Conditions 28 and 34. This was lead by ONR. SEPA was interested in seeing the condition of the reactor buildings during a walk down of the plant, and also the discussions around asset management on the site.

SEPA Inspection 14th September 2023

SEPA inspected the work instructions for the new visual inspections of the site discharge ventilation systems and stacks.

A high standard of work has gone into putting in place processes for the visual inspections, and the high quality of the work instructions was noted as part of the inspection findings.

The first stack visual inspections have been completed and the information contained in the completed work instructions appears to be of a high standard. The vent system inspections are scheduled for 2024, therefore SEPA will inspect the quality of the information obtained at that time. Prior to those inspections beginning there is some outstanding work to be undertaken to repair issues found during the work completed following the SEPA investigation completed last year (see update on Vent Systems below).

Ventilation system defects – **update November 2023**

Upon finding the holes within the ventilation ductwork in the Low-Level Waste Processing Facility in October, along with SEPA recommendations at the site inspection in October, Magnox began a scope of work to undertake visual inspections of the gaseous containment systems. SEPA was subsequently made aware of a number of defects associated with these systems and visited site as part of an investigation on 21st – 23rd November.

In April 2023 SEPA issued Magnox with a Final Warning Letter outlining a number of non-compliances with the Hunterston A site EASR permit associated with the findings of the investigation into the gaseous ventilation system defects.

In June 2023 Magnox HNA were issued with an Information Notice requiring timelines for site to provide further evidence of the programme of work that Magnox is undertaking to ensure that the gaseous discharge systems are compliant with the conditions of the site EASR permit.

SEPA received a response from Magnox HNA on 10th August which gives timelines for the provision of the requested information.

SEPA have received Magnox responses for almost all the information requested, with one action outstanding which is due on 21st December 2023. The information received by Magnox is being reviewed to assess whether the site has returned to compliance with regards to the ventilation system defects.

Permit Variation Application

SEPA received an EASR permit variation application from Magnox HNA on Monday 21st August 2023. This application is primarily for the operation of the SILWE plant, which requires a permit variation in order to include the SILWE gaseous discharge stack within the site permit. In addition, the permit variation requests an increase to the site gaseous discharge limits due to the operation of this new facility as well as other imminent work on the site. Note that SEPA will consider the encapsulation of bunker 1 wastes only at this time due to the ongoing discussions around the appropriateness of the characterisation of the bunker wastes. The

timely encapsulation of bunker 1 wastes is deemed necessary by ONR, and is outlined in the Joint Statement provided to Magnox HNA by ONR and SEPA last year.

Review of Characterisation of ILW Bunker Waste

SEPA received an optioneering report from Magnox on 28th March 2022 entitled "Review of Options for Managing Waste from The Hunterston A Solid Active Waste Bunkers Given its Status at May 2021 WD/REP/0032/21".

Having initially reviewed the information sent, SEPA considered there needed to be a review of the underpinning characterisation work and whether this is sufficient to underpin the optioneering decisions.

SEPA procured a specialist contractor to review the model and associated work undertaken by Magnox with regards to the characterisation of the SAWB waste. The review commenced in December 2022 and SEPA received a final version of the report in June, which was shared with ONR prior to being sent to Magnox shortly afterwards.

SEPA, ONR and Magnox had a joint meeting to discuss the findings of the report and a way forward on 15th November 2023.

Non-Rad Regulation

There have been no issues relating to non-rad regulation since the last scheduled SSG meeting.

Environmental Events

EASR

There were no reportable incidents or non-compliance events affecting SEPA's interests at Hunterston A known to have occurred since the last meeting of the SSG at the time of writing this report.

Pollution Prevention and Control (PPC)

There were no reportable incidents, complaints or non-compliance events affecting SEPA's interests at Hunterston A known to have occurred since the last meeting of the SSG at the time of writing this report.

Controlled Activities Regulations (CAR)

There were no reportable incidents, complaints or non-compliance events affecting SEPA's interests at Hunterston A known to have occurred since the last meeting of the SSG at the time of writing this report.

Radioactivity in Food & the Environment (RIFE)

RIFE is a collaborative report on work carried out by SEPA, the other UK environment agencies, Food Standards Scotland and Food Standards Agency on the radiological monitoring of food and the environment. The RIFE reports aim to provide an in-depth assessment of radioactivity in food and the environment in the UK and the public's exposure to radiation, including in the vicinity of Hunterston A. The RIFE report incorporates the results from the analysis of a wide range of samples and key information on local habits to demonstrate both that food remains safe and that the public's exposure to ionising radiation is within legal limits.

The latest edition (RIFE 28) covering 2022 has been published and can be obtained from SEPA's website along with previous year's reports. RIFE 28 reports that the total dose for the representative person (most exposed) around the Hunterston site, which includes both Hunterston A and Hunterston B, for 2022 was less than 0.005 millisieverts, which is well below the legal annual dose limit of one millisievert as set out in paragraph 26, Schedule 8 of EASR18.

Scottish Pollutant Release Inventory (SPRI)

The Scottish Pollutant Release Inventory (SPRI) is a publicly accessible electronic database of releases of pollutants to all environmental media and transfers of non-radioactive waste. We intend that, as far as practicable, SPRI be the principle means by which information on Scottish pollutant releases and non-radioactive waste transfers is collected and made public. Wherever possible, such information will be collected and presented by this one system. The data for 2022, including that from Hunterston A and B, have been published and are available on SEPA's website under "Environment/Environmental data/SPRI".

Melanie Hayes
Radioactive Substances Specialist
November 2023

Update for Hunterston SSG

NDA

December 2023

Contents

NDA Stakeholder Update

Please find below a brief update on main points of interest since the last meeting.

- NDA's sponsoring department, the Department for Energy Security and Net Zero (DESNZ), has a new **Secretary of State** following Grant Shapps' move to the Ministry of Defence. Claire Coutinho previously held roles as Parliamentary Under Secretary of State at the Department for Education, and Department for Work and Pensions.
- The Department's dedicated **Minister for Nuclear and Networks**, Andrew Bowie visited some of the NDA estate at Sellafield and Barrow in September.
- NDA's **new Interim Chair**, Chris Train OBE, replaced Roz Rivaz whose term of office ended in August. Chris has over 38 years' experience in the Energy, Utilities, Regulation and Infrastructure sectors. He has held chief executive, and other senior roles at Cadent, National Grid, Transco and Lattice. He has also sat on various European and international committees.
- Chris Train and David Peattie met with the **SSG Chairs and Vice-Chairs** in Manchester on 16-17 October. This is an annual meeting and enables senior NDA management to better understand the issues facing communities around the NDA sites.
- Chris and David also hosted the NDA annual briefing with **Scottish Government Cabinet Secretary** for Just Transition and Net Zero, Mairi McAllan MSP on October 26th.
- After the successful in-person stakeholder summit in Edinburgh last year, preparations are underway for the next in-person event in Cumbria in 2024. We continue to promote both in-person and online events, and intend to host a **virtual summit** on December 12th 2023. We will update you on the full agenda over the next couple of weeks.

- NDA took part in the Nuclear Industry Association's **'Week in Parliament'** this September. It is an opportunity for MPs and other parliamentarians to gain a better understanding of the contribution that nuclear – including decommissioning – makes to the economy both nationally and at a constituency level. It is estimated that businesses in nearly 75% of

parliamentary constituencies contribute to the supply chain that supports delivery of the NDA's mission.

- NDA hosted a **Scottish Supply Chain** event in Dunblane on November 8th. Around 465 supply chain companies work for NDA Group in Scotland.

- Through the National Decommissioning Centre/University of Aberdeen, a report highlighting the **NDA's Economic Impact in Scotland** has been produced. This compliments the recent local SE impact studies published last year. Full details on this report be issued over the next few weeks.

- On November 9th, NDA attended the **SEPA VIBES Awards** 2023 in Glasgow. The event celebrated the environmental credentials of companies large and small around Scotland. NDA sponsored the Medium-Sized Business Category.

- **Nuclear Restoration Services (NRS)** has been announced as the new name for Dounreay/Magnox.
- Preparations have continued for the NDA and NRS to take on decommissioning of the fleet of **Advanced Gas-cooled Reactors (AGRs)** from EDF Energy. The first site to transfer is expected to be Hunterston B in 2026. The first reactor at Hunterston B has now been fully defueled.

- The NDA has developed a draft **code of practice** to provide guidance to sites and site licence companies (SLCs) on how timing and pace of decommissioning could be assessed in a more structured, consistent and transparent manner. The proposed Codes of Practice for Determining Pace and Timing of Decommissioning will be in line with Strategy 4 and DESNZ policy and has so far been discussed with the sites, regulators and Nuleaf but will also be discussed with SSGs in advance of publication.
- Every year, NDA publishes its **Mission Progress Report** which details the work that has been going on over the past year and how that contributes to the completion of our mission. This year's edition is expected to be published in November.

- Every three years, NDA reviews its **socio-economic strategy** to check that it is fit for purpose and updated where necessary. The last one was published just as the pandemic took hold and much has changed since then. A consultation process on the new strategy will go-live on GOV.UK towards the

end of November 2023 and last 12 weeks. An advance copy will go to SSG Chairs no later than Friday 17th November.

- In November, NDA were delighted to announce the sale of CPX land (6 hectares) to South of Scotland Enterprise for re-development. In October, the CPX site hosted a visit from the **Scottish Government Hydrogen Team** – CPX has been identified as a SG Hydrogen Hub.
- The search for a suitable site for a **Geological Disposal** Facility (GDF), to permanently dispose of the UK's higher activity waste, continues. Two key parameters are that the geology must be suitable and that the community itself is willing to host the facility. We have been working with three communities in Cumbria and one in Lincolnshire. It is now clear that the geology around one of these – Allerdale in Cumbria – will not support a GDF and Nuclear Waste Services (NWS) has decided to wind down the project there. The programme continues with the other communities and NWS is still looking for other communities that might be interested in participating.

Thank you for taking the time to read our update. If you have any questions, please feed-back through the Secretariat.

Nuclear
Decommissioning
Authority

SCOTTISH GOVERNMENT UPDATE TO HUNTERSTON SITE STAKEHOLDER GROUP – 7TH DECEMBER 2023

SCOTTISH GOVERNMENT RADIOACTIVE SUBSTANCES AND NUCLEAR DECOMMISSIONING POLICY TEAM

Four Nations Policy Consultation on UK Radioactive Substances and Nuclear Decommissioning Policy Framework

Scottish Government are continuing to work with the UK Government and other devolved administrations to develop the revised framework document following on from the consultation earlier in the year, with an aim to bring forward a revised document in 2024. We will provide further information as this work develops.

Annual NDA meeting with Cabinet Secretary for Transport, Net Zero and Just Transition

The annual meeting between the Cabinet Secretary for Transport, Net Zero and Just Transition, the NDA Chair and NDA CEO, as set out in the NDA Framework document, took place on the 26th of October. This was a positive meeting covering the NDA's strategy, priorities, performance, its current and future activities, and any policy developments relevant to those activities. In particular, progress of the defueling and the eventual transfer of Hunterston B to NDA were highlighted.

Scottish Government Higher Activity Waste Policy

We are continuing to work with the NDA on the final version of the initial technical research project around Scottish near surface disposal concepts, to consider how elements of the Scottish policy might be taken forward. Due to delays in receiving the first draft of the project, we do not have the final outputs of the project to share with the SSG at this time. We are aiming to be able to share further information regarding the outputs of this work in early 2024.

Secondment

Following on from Oli's secondment from Nuclear Restoration Services (NRS) to SG, and to continue improving our working relationships and aid development of our technical knowledge, Martin MacDonald from the SG Rad Subs Team has taken up a secondment with NRS for the next 12 months. He started his new role on 23rd October.

Diane Hamilton

Scottish Government