



HUNTERSTON SITE STAKEHOLDER GROUP

The Sixty Seventh Meeting of the Hunterston Site Stakeholder Group will take place on
Thursday 2 March 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

13.40 Actions and approval of previous Minutes

13.45 Hunterston B Site Reports

Hunterston B Report – Allison Adamson / Joe Struthers

ONR Report – Stuart Fannin

SEPA Report – Keith Hammond

***Members Question and Answer Session
Public Forum***

14.40 Hunterston A Site Reports

Hunterston A Site Report – Mark Blackley

ONR Report – Stuart Fannin

SEPA Report – Melanie Hayes

***Members Question and Answer Session
Public Forum***

15.25 Update from NDA

David Wallace

Update from Magnox

Bill Hamilton

Update from Scottish Government

Diane Hamilton

***Members Question and Answer Session
Public Forum***

15.55 Any Other Business

Next Meeting Thursday 1 June 2023

**HUNTERSTON SITE STAKEHOLDER GROUP
SUMMARY OF KEY POINTS FROM THE SIXTY SIXTH MEETING
HELD ON THURSDAY 1 DECEMBER 2022
AT THE WATERSIDE HOTEL, ARDROSSAN ROAD, WEST KILBRIDE, KA23 9NG**

Chair's Opening Remarks and Vice Chair Updates and Correspondence

Monthly updates are received from site. The Chair and Vice Chair attended two main meetings – the NDA's 'Keeping the Conversation Going' on 7/8 September and the annual Magnox SSG Chairs' and Vice Chairs' meeting on 2 November. Mrs Holmes attended a third meeting - the first meeting of the newly formed NDA / NGO Forum. Mr Blackley hosted a site tour of Hunterston A.

Actions and Approval of Previous Minutes

The Minutes of the meeting of 1 September 2022 were approved and an update on actions received.

Hunterston B Report – Mr Andy Dalling, Ms Allison Adamson (on behalf of Mr Joe Struthers)

Defueling activity is going to plan. 66 flasks of 350 have been dispatched to date. Statistics are included in written report. Asset capability is being increased. Procedural changes have been made to plant rods and flasks have been tested. There were learning opportunities from two issues with the skip manipulator which is used to move fuel skips as part of the defueling process. The Transfer and Deconstruction Preparation is in the early stages with a plan in place involving three streams – site transition; transfer; deconstruction preparation. EDF is working together with Magnox and NDA on a transfer blueprint. Health and safety performance remains good with the Total Recordable Incident Rate (TRIR) being maintained at 0 for 12 months. The site continues to work with specialist contractors to try and locate the source of the oil leak using tracers as the leak is so small. A Counter Terrorism demonstration exercise was overseen by ONR, which was graded adequate. Work is progressing well to update off-site and on-site emergency plans in line with the agreement with the local authority. A Transfer and Deconstruction Team has been established.

ONR Report – Mr Stuart Fannin

Mr Fannin updated on a number of inspections on site, on LC10, LC25, LC22, LC35. Decommissioning plans are being developed and arrangements on site are robust with ONR satisfied with the management. There was however non-compliance with governance and oversight and as it is fundamental that this is properly implemented, an enforcement letter was issued to EDF Corporate Centre, not Hunterston B station.

SEPA Report – Ms Melanie Hayes (on behalf of Mr Keith Hammond)

New Chief Executive Officer, Nicole Paterson, is now in post. An inspection took place on 25 October to close out actions on the radioactive oil loss event in February. No contraventions were identified. RIFE27 (Radioactivity in Food and the Environment) has been published for 2021 and is available on SEPA's website. The total dose for the representative person around Hunterston for 2021 (including A and B sites) was 0.006 millisieverts, which is well below the legal annual dose level of 1 millisievert.

Hunterston A Reports – Mr Mark Blackley

Mr Richard Gibson, Engineering and Infrastructure Manager, and deputy for the Site Director, was introduced. There had been a significant hand injury on site caused by a moving container of water on a pallet truck. This was a reportable event under RIDDOR and the person injured was still off work. A safety campaign and enhanced observation has been undertaken across the Magnox estate. A site security exercise was successfully demonstrated to regulators. The site hosted a positive visit from senior safety representatives from each Magnox site and executives of Magnox (HESAC). An inspection of ventilation stacks did not find any more holes but there were a number of defects internally in ducts, for which a programme is in place to repair them. 161 tons of waste has been retrieved from bunker one. Magnox and EDF continue to work collaboratively and a number of workshops have been held. The focus on resources continues, in an attempt to reduce the vulnerability of the site and strengthen resources.

ONR Report – Mr Stuart Fannin

The systems based inspection of WILWREP resulted in a green rating. The notifiable event involving a significant injury is serious. ONR has instructed a preliminary enquiry by the Health and Safety Inspectorate on the extent of the injury and early findings. This is still ongoing and ONR will decide on any future ONR action after the health and safety investigation has concluded. Mr Fannin noted that Magnox has taken robust and early corrective actions.

SEPA Report – Ms Melanie Hayes

A site visit in October concentrated on an inspection of arrangements for maintenance of equipment, further to the warning letter in March regarding the gaseous discharge stack and systems. Findings from the site visit are still being considered.

Update from Magnox –

Mr Hamilton was not present at the meeting. There was no written report from Magnox.

NDA Reports –

Mr Wallace was not present at the meeting. The NDA's written report was circulated with meeting papers.

Update from Scottish Government – Ms Diane Hamilton, Ms Laura Hogg

Ms Hogg gave a presentation on the Scottish Higher Activity Waste Programme of Work and the direction of travel. A series of assumptions were made on the Near Surface Disposal project and 'near site' was not clearly defined. This is now assumed to be taken literally to mean current licensed sites and 2km adjacent to these sites. The review will not make decisions but determine what the strategic project could look like. This is likely to be a multi-year or even multi decade project, with the final strategy being decided in July 2023. Ms Hogg will end her secondment at Scottish Government and revert back to the NDA in January 2023 but she will remain the NDA's lead on this and Martin Macdonald will be Scottish Government lead.

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 2 March 2023 at 1.30 pm, in person at The Waterside Hotel, West Kilbride.

Other meeting dates for 2023: Thursday 1 June, Thursday 14 September, Thursday 7 December 2023.



**HUNTERSTON SITE STAKEHOLDER GROUP
MINUTES OF SIXTY SIXTH MEETING HELD ON
THURSDAY 1 DECEMBER 2022 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 Sean Marshall (Magnox Communications)

EDF (Hunterston B)

Ms Allison Adamson (Technical and Safety
Manager)
Mr Andy Dalling (Transfer and
Deconstruction Preparation Manager)
Ms Fiona McCall (External Comms)
Mr Stuart McGhie (SSG Vice Chair)

Community Council Representatives

Mr Jamie Black (Largs CC)
Mrs Rita Holmes – SSG Chair (Fairlie CC)
Mr John Lamb (West Kilbride CC)

SEPA

Mr Andrew Gallagher
Ms Melanie Hayes

North Ayrshire Council (NAC)

Cllr John Glover (Kilwinning)

ONR

Mr Stuart Fannin

Hunterston Estate

Mr Angus Cochran-Patrick

Scottish Government

Ms Diane Hamilton
Ms Laura Hogg

NFU Scotland

Mr William Jack

In Attendance

Ms Sheila Adams (Minutes)
Mr Graham Buckley (Member of Public)
Mr Alan Holden (Member of Public)

Apologies

Mrs Jill Callander (Magnox, SSG Secretariat)
Mr Bill Hamilton (Magnox, Communications and Stakeholder Relations Director)
Mr Keith Hammond (SEPA)
Ms Lesley Jeffery (Ayrshire Civil Contingences Team, North Ayrshire Council)
Cllr Tom Marshall (North Coast)
Mr Reuben Phillips (Waste Manager, Hunterston A)
Mr Joe Struthers (Station Director, Hunterston B)
Mr Alastair Walker (Magnox, Programme Delivery Manager)
Mr David Wallace (NDA, Stakeholder Lead Scotland)

1. Chairman's Opening Remarks and Declarations of Interest

Mrs Holmes, Chair, welcomed everyone to the sixty sixth meeting of the Hunterston Site Stakeholder Group in the Waterside Hotel, West Kilbride. All present introduced themselves.

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

Mrs Holmes advised of a change to the running order of the agenda to allow Ms Hogg, Scottish Government, to present between the Hunterston B and Hunterston A reports, prior to another meeting commitment at 3.00 pm.

2. Chair and Vice Chair Updates and Correspondence

The Chair and Vice Chair had received regular monthly updates from Mr Blackley at Hunterston A on progress and events since the September meeting. Mr Marshall had also updated on socio economics. The Chair and Vice Chair had attended two main meetings – the NDA's 'Keeping the Conversation Going' on 7/8 September and the annual Magnox SSG Chairs' and Vice Chairs' meeting on 2 November, which should have been in Manchester but was online due to train strikes. This was not quite the same as being in person but useful nevertheless. The NDA event in Edinburgh lived up to its title, with many conversations, panel discussions, stalls and mini presentations by talented people within the industry. The keynote speech was given by Mairi McAllan MSP and Mr Marshall's sister, a champion bagpiper, gave a dynamic musical welcome and address to the haggis. Mrs Holmes attended a third meeting, being the first meeting of the newly formed NDA / NGO Forum. The meeting was co-chaired by Paul Vallance, NDA Director of Communications and Stakeholder Relations and Mrs Holmes. Professor Andy Blowers described the meeting as disciplined, informative and respectful. Topics on the agenda included the AGR transition and the NDA and the Energy Security programme. Mr Blackley hosted a site tour and light lunch for SSG members able to attend. Mrs Holmes, Cllr Collier, Mr John McHenery and Mr Graham Buckley were shown round the site and visited the Solid Intermediate Level Waste Encapsulation (SILWE) Plant.

There were no questions on the Chair and Vice Chairs' report. Mrs Holmes added that the next SSG Chairs and Vice Chairs meeting would be on 9 December online.

3. Actions and Approvals of previous Minutes

Mr Marshall updated on the Actions in the Minutes:

- Mr Hammond to arrange circulation of the SEPA report on the leak of radioactively contaminated oil through the Secretariat, if there are no sensitivity restrictions on doing so – the SEPA report had been circulated to Site Stakeholder Group members and the final warning letter had been included in meeting papers.
- Mr Struthers to include defueling statistics in his reports going forward – statistics were included in the Hunterston B report circulated with meeting papers.
- Mr Blackley to check and advise Site Stakeholder Group members if planning permission for weather envelope has expired – Mr Blackley confirmed that representatives of North Ayrshire Council had been on site in January 2022 to discuss this and hear about the potential change in care and maintenance strategy. They asked to be kept informed and Mr Blackley confirmed that the site is in regular dialogue with North Ayrshire Council, pending a decision by UK Government.
- Ms Hamilton to provide a response from Scottish Government to Mr Black's question – does the Scottish Government have a stated policy on Care and Maintenance and Continued Decommissioning?

Mr Marshall read the response from the Scottish Government:

'The Scottish Government is supportive of the NDA's plan for continuous decommissioning of sites in Scotland and set out in its Strategy IV and its Business Plan for 2022/23.'

- Ms Hamilton to provide a response from Scottish Government to Mr Black's further question - has Scottish Government given consideration to the use of Hunterston B site and what are the options?

Mr Marshall read the response from Scottish Government:

'As work to defuel / decommission Hunterston B in its very early stages, no decisions have been made regarding the use of the land that Hunterston B sits on. Consideration will be made as this work progresses, including engagement with stakeholders.'

The Minutes of the Site Stakeholder Group meeting, held on 1 September 2022, were proposed for approval by Mr Stuart McGhie and seconded by Mr Jamie Black.

4. Hunterston B Station Reports

Hunterston B Report – Ms Allison Adamson, Mr Andy Dalling

The report issued with the meeting papers was taken as read. Mr Dalling and Ms Adamson reported on behalf of Mr Struthers. Defueling activity is going to plan and is done in two halves, firstly being removed into the pond, then from the pond on to the train. 66 flasks of 350 have been dispatched to date. Statistics are included in the written report. Asset capability is being increased. Procedural changes have been made to plant and flasks have been tested. There were learning opportunities from two issues with the skip manipulator which is used to move fuel skips as part of the defueling process. The Transfer and Deconstruction Preparation is in the early stages with a plan in place involving three streams – site transition; transfer; deconstruction preparation. EDF is working together with Magnox and NDA on a transfer blueprint. Deconstruction preparation includes moving hazards off site to enter care and maintenance state (estimated to take 12 years) and waste characterisation.

Health and safety performance remains good with the Total Recordable Incident Rate (TRIR) being maintained at 0 for 12 months. Safety engineers carry out regular compliance inspections. The site engaged with European Safety Week and was supported by the Occupational Health Team. Under radiological protection, the collective dose values remain low. There have been no significant events under environmental safety. With regard to the oil leak reported at the last meeting, the site continues to work with specialist contractors to try and locate the source of the oil leak using tracers as the leak is so small. There were no issues to report under emergency arrangements. A Counter Terrorism demonstration exercise was overseen by ONR (CNS) on site security arrangements, which was graded adequate. Arrangements for a level one safety exercise are underway, at which ONR will be on site. Work is progressing well to update off-site and on-site emergency plans in line with the agreement with the local authority.

Under people, a Transfer and Deconstruction Team has been established. The station was very pleased to help fundraise for a local cancer charity and a team from the site completed the Great Scottish Run for Ayrshire Cancer Support.

SEPA Report – Ms Melanie Hayes

The report issued with the meeting papers was taken as read. On behalf of Mr Hammond, Ms Hayes highlighted key points. New Chief Executive Officer, Nicole Paterson, is now in post. Weekly status updates are given on progress and priorities after the cyber-attack. The Compliance Assessment Scheme Registry is still not up and running. Formal weekly calls with the station continue, including Environmental Safety Group and corporate Generation Environment

Management.

Routine meetings are held with EDF and others on strategic issues, defueling and decommissioning. An inspection took place on 25 October to close out actions on the radioactive oil loss event in February. No contraventions were identified. SEPA has been monitoring the station's actions to locate and repair the small non-radioactive leak from an oil-filled cable on site. There have been no other issues in respect of the regulations.

RIFE27 (Radioactivity in Food and the Environment) has been published for 2021 and is available on SEPA's website. The total dose for the representative person around Hunterston for 2021 (including A and B sites) was 0.006 millisieverts, which is well below the legal annual dose level of 1 millisievert.

ONR Report – Mr Stuart Fannin

The ONR report for July-September 2022 issued with the meeting papers was taken as read. Mr Fannin updated on a number of inspections on site, the principal purpose of which is defueling safely. An inspection took place on LC10 Training to ensure appropriate training of new staff. LC25 Safeguards was also the subject of an inspection on records for fuel management, which is important for fuel free verification. An LC22 Modification or Experiment on Existing Plant inspection was done to ensure that there is a programme in place to ensure that plant no longer required is properly controlled and isolated. A number of inspectors undertook the above inspections and all were satisfied and entirely happy that the station is meeting these licence conditions. Processes from Hunterston B are to be applied at Hinkley Point B.

Mr Fannin explained a number of events with the pond manipulator crane. When the pond crane was lifting the skip, it was lifting beyond the position that it was meant to go to. This caused minor impacts with adjacent plant. Increased utilisation of the pond crane has led to extra wear on the limit switches. The station responded appropriately and robustly.

Mr Fannin and a colleague carried out an inspection of LC35 arrangements for governance of the decommissioning planning. Decommissioning plans are being developed and arrangements on site are robust with ONR satisfied with the management. There was however non-compliance with governance and oversight and as it is fundamental that this is properly implemented, an enforcement letter was issued to EDF Corporate Centre, not Hunterston B station. ONR will work with Corporate Centre to ensure adequate implementation going forward.

Members Question and Answer Session

Ms Hogg asked if the 66 flasks have been dispatched during the calendar year or financial year. Mr Dalling confirmed that this was during the calendar year.

Mr McGhie asked if EDF would be allowed to sell the deconstructed plant or if this would become NDA property. Mr Dalling advised that the plant is not currently in use and it might be transferred to other sites but there is not that much of it. Serious deplanting will not happen for another 3.5 years as it is mostly preparation work currently being done.

Mr Lamb asked about EDF's involvement in the shielding of the Peel Ports loading facility. Mr Dalling advised EDF is supporting Peel Ports with visual screening of the rail head with a fence. Mr Lamb asked if Peel Ports could refuse access to the loading facility. Mr Dalling confirmed that this could potentially be the case but aesthetic arrangements are being undertaken to make it look better and support continued access through to completion of defueling.

Mr Black asked who is responsible for the railway line between the main line and the transfer station. Mr Dalling confirmed that this is Peel Ports' responsibility. Mr Black asked how often this line is inspected. Mr Fannin clarified that this is not within ONR's vires.

Mr Black asked what would happen if a flask became stuck on the line or came off the line and suggested that Network Rail should also be on the Site Stakeholder Group. Mr Fannin suggested that this was a question for the Office for Rail Regulation as it not within ONR's remit.

- Action – Mr Dalling to feed this concern back to Peel Ports and make further enquiries regarding the integrity of rail line for flask movements. .

Mrs Holmes added that whilst improbable, there was more risk with the increased transportation of flasks which was a concern for locals. She had been asking for years what the impacts and effects of a breached flask would be and over what distance. Mr Fannin clarified that there is a safety case for the flasks and the flasks are incredibly robust and it would be extremely unlikely that they would be breached but should this be the case, emergency plans would be put in place over a 50m exclusion zone. Mrs Holmes asked where such plans could be accessed as any request for information normally sees most information blocked out. Mr Fannin responded that contingency arrangements are the responsibility of the local authority. Mrs Holmes asked what would be released if flasks were breached and if it would be liquid spillage or airborne. Mr Fannin replied that the potential for airborne is very low. He was unable to speak for the local authority and suggested that Mrs Holmes ask the question of North Ayrshire Council if required. Mr Black was surprised to hear that the railway line was in use as he had previously read that it was disused. He would like a response to the above questions.

- Action – Chair, Rita Holmes to write to North Ayrshire Council regarding Emergency Plan for fuel transportation.

Mr Lamb asked for clarification that there would be no risk if the pond manipulator crane did not stop. Mr Fannin clarified that the crane is 20ft down in the pond and moves extremely slowly so the worst impact would be a minor collision. Mr Dalling added that the operator was watching and looking at other controls and there was no risk as the operator intervened.

Mr Black asked again about readiness for power outages and if diesel tanks are ready. Mr Dalling confirmed that the station takes this seriously and there are diesel tanks ready in the case of power outages.

Mr Black referred to the findings of the inspection of LC35 and the disconnect between the site and EDF Corporate Centre which he found worrying. He noted that the relationships between other parties have to work and it is concerning if there is disconnect within the same organisation. Mr Fannin explained that collaborative working between Magnox, NDA and EDF on one site is novel as usually there is one licensee. This arrangement makes it more complicated which is the reason that Mr Fannin is ONR Site Inspector for both Hunterston A and B sites, to work out how collaborative working can be achieved. Mr Fannin assured members that he speaks to all parties concerned to ensure absolute clarity on who the licensee is and all other parties are aware of their responsibilities. Mr Dalling added that Hunterston B site and EDF Corporate were not misaligned.

Mr Black asked if there should be a specific update on collaboration going forward. Mr Fannin replied that this will be alluded to in future ONR reports for Hunterston B station.

Mr Black asked when there will be an output from Hunterston B's consultation exercise. Mr Dalling responded that feedback is being gathered, which will be submitted to ONR formally in quarter 3. Mr Dalling was unsure of the timescale for the next consultation but undertook to find out.

- Action – Mr Dalling to advise Site Stakeholder Group members of the timeline for the next Hunterston B consultation exercise.

Mrs Holmes asked for more information on the removal of 10,000 litres of fire resistant fluid from site. Mr Dalling responded that this related to lubricating oil from the hydraulics of a turbine. As this is in a now redundant system, the turbine was drained down to remove the oil. The station has been proactive in removing this to reduce the inventory and reduce the minimal hazard posed to staff, the public and the environment. This was dealt with off-site by a specialist contractor. Mrs Holmes asked where fluid went and how it is dealt with. Mr Dalling was unable to answer this at the meeting and undertook to report back.

- **Action – Mr Dalling to advise Site Stakeholder Group members of where the fire resistant fluid from the turbine hydraulics goes to and how it is dealt with.**

Mrs Holmes asked about the compliance evaluations on lead and compressed gas cylinders. Ms Adamson responded that this was picked up routinely while working through a programme of routine suite of compliance evaluations.

Mrs Holmes asked more about the tritium oil leak. Ms Adamson clarified that the oil leak referred to in the meeting papers is different to that discussed at the last meeting and refers to a small leak of non-radioactive biodegradable oil, the source of which is still trying to be located, with the assistance of specialist contractors. Mr Holden asked for assurances that there is no potential for a repeat of the tritium oil leak. Ms Adamson confirmed that agreed actions have been completed and the station is satisfied that this event will not recur.

Mrs Holmes asked if the waste oil burner referred to in the SEPA report had ever been used. Ms Hayes was not familiar with this but Mr Dalling confirmed that it is unlikely that this will ever be used.

Ms Hayes asked if the fire resistant fuel was contaminated or clean. Mr Dalling replied that this was clean.

8. Update from Scottish Government – Ms Diane Hamilton, Ms Laura Hogg

The Scottish Government report, circulated with the meeting papers, was taken as read. Ms Hamilton invited questions on the report. There were no questions from members.

Ms Hogg proceeded with her presentation on the Scottish Higher Activity Waste Programme of Work and the direction of travel. Ms Hogg reminded members that the Scottish Government Higher Activity Waste Strategy was approved in 2016. A programme of work was developed with work streams for delivery. A series of assumptions were made on the Near Surface Disposal project and 'near site' was not clearly defined. This is now assumed to be taken literally to mean current licensed sites and 2km adjacent to these sites. This will affect Dounreay, Chapelcross, Hunterston and Torness. Ms Hogg clarified that this review will not make decisions but determine what the strategic project could look like. This is likely to be a multi-year or even multi decade project, with the final strategy being decided in July 2023.

Ms Hogg confirmed that she will end her secondment at Scottish Government and revert back to the NDA in January 2023 but she will remain the NDA's lead on this and Martin Macdonald will be Scottish Government lead.

Members Question and Answer Session

Mr McGhie asked if planning permission would be required to extend the 'near site' area to 2km adjacent to sites. Ms Hogg responded that potentially this would mean licensing and planning permission. Mr McGhie asked why the area was not kept within the ringfence of the licensed

nuclear sites.

Ms Hogg responded that some of the sites are exceptionally small and the reality is that a facility would not fit within some of the licensed site areas. Mr McGhie asked if sites had been discussed. Ms Hogg replied that all four sites mentioned above are being considered.

Mr Black referred to his question at the last meeting on Scottish Government's consideration on the use of Hunterston B site and the options and suggested that the answer given above contradicts what Ms Hogg has reported on. Ms Hogg clarified that the work currently being undertaken involves a strategic level study of the land. There is physically insufficient space at Hunterston for a disposal facility. Mr Black did not understand why the Scottish Government is looking at a Higher Activity Waste Strategy when the Advanced Gas-cooled Reactor (AGR) fleet is winding down. Mr Hogg advised that the policy in the UK is different to Scotland, where it is a devolved matter. Decades ago, all waste would have gone to a Geological Disposal Facility (GDF). In 2011, Scotland withdrew from GDF and made 'near surface, near site' its policy. Scotland is part of the Low Level Waste (LLW) repositories but has a different Higher Activity Waste (HAW) policy. The strategy will determine how the Higher Activity Waste policy will be implemented.

Mrs Holmes noted that higher activity waste at Hunterston is contained in flasks and drums in the Intermediate Level Waste store and encapsulated. Before the Solid Intermediate Level Waste Encapsulation (SILWE) plant existed, EnergySolutions decided to put cement in the waste in the drums. This was a research project called Graphite Pathfinder, which was held up for two years and came to nothing. Hunterston now has a very expensive encapsulation plant which is not yet commissioned, waiting for cement to be put into drums. There are approximately 150 drums in the store concreted in. If Scotland changes its policy, the drums would be suitable for GDF as they are but Scottish Government is now looking again at near site, near surface. Ms Hayes advised that SEPA needs to be assured that waste has been properly characterised. An independent contractor will make a decision on whether the waste has been properly characterised. A permit variation request can now be made for gaseous outlet on the SILWE plant. While waste from Bunker 1 will be allowed to be encapsulated, a decision will not be made on bunkers 2-5 until an independent piece of work has been carried out. In order to provide the information required for the permit to be granted, this information is required. SEPA and ONR need to know that Magnox is confident of what is in bunkers 2-5.

Mr Fannin added that a letter has been processed by ONR and was being sent to Mr Blackley, Hunterston A Site Director that day. This will be the subject of future discussion at Site Stakeholder Group meetings. Mr Blackley added that Magnox needs to submit a permit variation for the discharge stack at SILWE. It is estimated that this process will take two years. The estimated date for bunker one packages is 2025. Ms Hayes agreed that it is likely to take two years for a permit to be granted as a public consultation exercise would likely be required, which is a lengthy process.

Mrs Holmes noted that Chapelcross and Dounreay are large sites whereas Hunterston is very small. The geology within the 2km area would also have to be looked at. She recalls being told by geologists years ago that Hunterston is totally unsuitable for near site, near surface disposal. Ms Hogg advised that as the process develops, there will be multi years of consideration by geophysicists etc.

Mr Black asked if there would be one facility per site, i.e. four facilities. Ms Hogg emphasised that no decisions have been made and this is the assumption made for this project alone.

Mr McGhie noted that this decision was devolved to Scotland and Scottish Government had changed from the UK's GDF policy to near site, near surface. This would involve four sites in Scotland at four times the cost. The UK as a whole would have one deep repository, which Scotland may have at some point in the future. He could not understand the politics or sense in incurring so much cost and thought that there should be one agreed solution. Mrs Holmes noted that even the GDF is decades away and England and Wales will also need interim storage. Ms Hogg replied that there was significant work involved in Scottish Government's decision in 2007 and this is still the policy in Scotland. Wales is now also looking at near surface, near site. Mr Marshall added that all Site Stakeholder Groups were fully involved in the process in 2007. The consensus then was that Scotland would look after its own waste and each site keep their own and sites did not want waste from elsewhere.

Mr Black asked what land is earmarked in the Hunterston area as there is sea on one side and cliff on the other. Ms Hogg clarified that it will be from the middle of the licensed site and 2km out from there. Mr Black asked what the budget was. Ms Hogg replied that the Near Site project has a budget of £300k for 12 months. Mr Black asked the whole cost of the Higher Activity Waste policy. Ms Hogg replied that not all work streams have been developed yet and work streams have to be developed before they can be costed.

Mr Black reiterated that he considered the response to his question at the last meeting to be inaccurate and asked if Scottish Government would reconsider its response. Ms Hogg will take this back to Scottish Government.

- Action - Ms Hogg to consider if another response is to be provided to Mr Blacks question from Scottish Government - has Scottish Government given consideration to the use of Hunterston B site and what are the options?

Ms Hayes advised that Magnox has a person at strategic level looking at graphite.

6. Update from Magnox -

Mr Hamilton was not present at the meeting and no report had been provided.

7. Update from NDA –

The NDA report circulated with the meeting papers was taken as read. Mr Wallace was not present at the meeting. Any questions for the NDA can be fed back through the Secretariat.

Members Question and Answer Session

Mr Black felt that the Site Stakeholder Group needed to push and ask Ministers and policymakers what the strategy is for Hunterston A and B. This will take years to pursue after a decision is made. Mrs Holmes replied that the NDA would have reported if a response had been received from BEIS. Mr Fannin reminded members that the current Magnox strategy for Hunterston A is decommissioning, which is currently under review. There is a different mechanism and different funding for Hunterston B, with EDF having a Safe Store Strategy. A strategy is currently being developed for a Safe Store Envelope. When Hunterston B comes under NDA ownership, this strategy will continue, unless a revised strategy is agreed.

The Chair paused the meeting at 3.00 pm for a 10 minute comfort break. The meeting resumed at 3.10 pm.

5. Hunterston A Site Reports

Hunterston A Reports – Mr Mark Blackley

The Hunterston A report issued with the meeting papers was taken as read. Mr Blackley introduced Mr Richard Gibson, Engineering and Infrastructure Manager, and deputy for the Site Director. Under Safety Performance, unfortunately there had been a significant hand injury on site caused by a moving container of water on a pallet truck. This was a reportable event under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) and the person injured was still off work. An independent senior manager is investigating. Across Magnox, there has been a spate of hand injuries and a safety campaign and enhanced observation has been undertaken across the estate.

A site security exercise was successfully demonstrated to regulators. The site hosted a positive visit from senior safety representatives from each Magnox site and executives of Magnox (HESAC). There were no significant nuclear, radiological safety or security issues during the reporting period. Environmental safety performance was disappointing. Holes in ventilation stacks had been reported previously. An inspection did not find any more holes in stacks but there were a number of defects internally in ducts, for which a programme is in place to repair them.

The site continues to retrieve waste from bunker one with 161 tons/waste or 1,161 boxes retrieved at the time of the report from all five bunkers. Subject to approval of permit variation, bunker one waste will be able to be encapsulated. The robot on the SILWE facility still has issues. A magnet screen has been retrieved from the pond, which is a significant piece of intermediate level waste to be removed from the pond. Magnox and EDF continue to work collaboratively and a number of workshops have been held.

The focus on resources continues in an attempt to reduce the vulnerability of the site and strengthen resources. There have been six new starts and 16 positions recruited. Over £1,000 was raised for charity during a McMillan Coffee Morning. There has been no decision or forward announcements in respect of the care and maintenance / rolling programme of decommissioning but the NDA is due to publish its Business Plan imminently and Mr Blackley looked forward to clarity on this.

SEPA Report – Mrs Melanie Hayes

A written report had been issued with the meeting papers and was taken as read. Ms Hayes confirmed that communications continue between corporate Magnox and the site on local and strategic issues. A site visit in October concentrated on an inspection of arrangements for maintenance of equipment, further to the warning letter in March regarding the gaseous discharge stack and systems. Findings from the site visit are still being considered. While on site, SEPA was informed of a number of issues with ventilation systems and notified of holes in ventilation ducts. An inspection of potential non-compliance actions took place and an inspection of all gaseous systems and potential non-compliance with Hunterston A's site permits. SEPA is still considering the findings.

ONR Report – Mr Stuart Fannin

The ONR report for July-September 2022 issued with the meeting papers was taken as read. Mr Fannin reported on one systems based inspection of the Wet Intermediate Level Waste Retrieval and Encapsulation Plant (WILWREP). The plant has been built to modern standards and ONR was looking at the implementation of the safety case, focussing on LC34 maintenance, training, adequacy of containment etc. This resulted in a green rating, with ONR satisfied at its findings.

Outwith the reporting period, the notifiable event involving a significant injury is serious. ONR has

instructed a preliminary enquiry by the Health and Safety Inspectorate on the extent of the injury and early findings. This is still ongoing and ONR will decide on any future ONR action after the health and safety investigation has concluded. Mr Fannin noted that Magnox has taken robust and early corrective actions. ONR took part in some of the SEPA investigations into the gaseous discharge stacks and ONR fully supports SEPA and its early conclusions. Mr Fannin will work with Ms Hayes to ensure that appropriate actions are progressed.

Members Question and Answer Session

Mrs Holmes noted that an email on Future Missions had been received from the NDA earlier that day.

Mr Black noted that ONR invited the Health and Safety Executive to Hunterston A following the significant hand injury and asked if North Ayrshire Council also had a responsibility. Mr Fannin clarified that ONR's purposes include conventional health and safety and ONR's standards are identical to that of Health and Safety Executive and the same standards on a licensed site.

Mr Black asked if there was corrosion all over the site as this appears to be in every report and the sites appears to be battling against the tide. Mr Blackley responded that the plant is old and degraded with age and environmental conditions. Asset degradation is common and work is also currently being done on reactor roofs and steelwork. Mr Black further asked if there was sufficient investment to prevent serious degradation in ten years. Mr Blackley confirmed that there is a programme of maintenance and significant investment to combat asset degradation.

Mr Lamb asked for an update on levels in Compound 7 as a result of increased rainfall between September and November. Mr Blackley responded that this is regularly monitored and no issues had been reported.

Mrs Holmes asked if the hand injury was a result of equipment failure. Mr Blackley clarified that this equipment had been fully tested in July and the injury was not attributable to equipment fault. The results of the investigations are awaited.

Mrs Holmes asked how successful the camera is in the Miscellaneous Receiving Tanks (MRTs). Mr Blackley replied that cameras can access and provide surveys and reports which confirm that there are no radiological conditions in the tanks any more.

Mrs Holmes referred to excavations and is aware how jam-packed everything is on site. From speaking to people on site from years ago, when conditions were more lax, she asked if anyone has an overall view of the site and what lies underneath the concrete. Mr Blackley responded that there are records of what has been built and demolished which are the baseline, but these are not treated as 100% accurate and radiological protection measures are taken when demolishing as a precaution.

Mrs Holmes asked if containment after the problem with the ducts is a big job and if it is underground. Ms Hayes replied that most liquid containment systems – tanks and bunds – are above ground but some tanks and pipework is below ground. SEPA is awaiting a response from the site on how it satisfies itself of integrity and that adequate containment has been provided.

A high percentage of gaseous containment can be seen in ductwork and stacks. The site is virtually inspecting all gaseous containment and notifying SEPA of the results. There will be a programme of maintenance and repair. The point of EASR is to ensure that there are no implications on the environment or people.

Mrs Holmes asked how a decision on the treatment of spent fuel will progress. Mr Blackley advised that Hunterston B will be defueled at the point of transfer and optioneering was taking place for the fuel found in Hunterston A Bunkers and no decision had yet been made and this was expected in the first quarter of 2023.

9. Any Other Business

Mr Black raised a point of order and noted that Cllr Todd Ferguson had advised North Ayrshire Council that he had resigned from the Site Stakeholder Group but had not advised the Site Stakeholder Group. He considered that it would have been courteous to notify the Site Stakeholder Group before North Ayrshire Council. Mr Marshall noted that there had been correspondence between the Secretariat and North Ayrshire Council.

Mr Black has been involved with Locality Partnership work in Largs and noted that North Ayrshire is the fifth most deprived area in Scotland, with an employment and energy crisis. He asked if the Scottish Government would reconsider its non-nuclear policy. Ms Hamilton responded that Scottish Government is moving towards renewables and renewable energy.

Mrs Holmes was pleased to see Cllr Glover at the meeting. Cllr Glover pointed out that he has some difficulty in hearing. He noted that the devolved Scottish administration is totally opposed to nuclear and he considered that windfarms cost too much.

10. Next Meeting – Thursday 2 March 2023

The meeting dates for 2023 had been scheduled for:

Thursday 2 March

Thursday 1 June

Thursday 7 September – changed to Thursday 14 September due to availability of venue

Thursday 7 December

The Chair thanked everyone for attending the meeting and brought it to a close at 3.38 pm.

Actions from Hunterston SSG – 1 December 2022

Action – Mr Dalling to feed this concern back to Peel Ports and make further enquiries regarding the integrity of rail line for flask movements.

Response - Monthly Inspections are carried out by Pearson's Engineering Services who identify and plan maintenance and upkeep of the rail track. This is a HNB cost as sole user (defined condition of the lease with Peel Port). Additional bi-annual inspections are carried out by Jacobs as independent verification. This is in accordance with a site specific Risk Assessment carried out by Pearson's and reviewed and agreed by station. The track is managed by Peel Port and costs are back charged to the station through the lease. Station review and approve the reports and work plans and request any additional work or inspections as required by either the annual report or arising concerns.

Action – Mr Dalling to advise Site Stakeholder Group members of the timeline for the next Hunterston B consultation exercise.

Response - The second round of consultation is expected to take place in late spring/early summer 2023. An indication of the findings from the first round will be shared before the second round takes place.

Action – Mr Dalling to advise Site Stakeholder Group members of where the fire-resistant fluid from the turbine hydraulics goes to and how it is dealt with.

Response - Fire Resistant Fluid (FRF) is a non-radioactive fluid used in turbine systems and is chemically treated to tolerate the elevated temperatures found in this equipment without combusting. Now the turbines are no longer operating there is no need for the FRF to stay at site and we have been working to drain the fluid and remove it. The FRF was initially taken by a sub-contractor to Livingston. It was then transported to Kent for high temperatures incineration. The facility in Kent has an environmental permit in place to undertake such activities.

Action - Ms Hogg to consider if another response is to be provided to Mr Blacks question from Scottish Government - has Scottish Government given consideration to the use of Hunterston B site and what are the options?

Response - The Near Surface Disposal project that Scottish Government and the NDA are currently undertaking is to consider the technical issues involved in the delivery of Scottish Higher Activity Waste Policy. It might be helpful to explain that while there will be some broad scenario's considered, including around the Hunterston site as well as others, these are to inform our understanding of the technical issues and the project will not be making any decisions about future use of the Hunterston B site as per the previous answer.

Action – Chair, Rita Holmes to write to North Ayrshire Council regarding Emergency Plan for fuel transportation.

Response – Rita has written to North Ayrshire Council – *(see copy of letter on the next page)*.

Hunterston Site Stakeholder Group 9/2/23

Regarding Action from Dec 2022 HSSG meeting

Dear Mr Hatton,

An action was placed upon me, as Chairwoman of Hunterston Site Stakeholder Group, to contact North Ayrshire Council about the Emergency Plan for the Hunterston Nuclear Sites and, specifically, about the plans, if any, for a breach of the Spent fuel flask which is loaded on Peel Ports' land from the Hunterston B Station's road transporter onto the rail transport and, then, onto Sellafield for storage,

A question was asked at the December meeting, about what would happen. in the unlikely event, where the robust flask is breached and what radionuclides would be released and whether these would be liquid or airborne. I have asked at SSG meetings before about consequences of the flask being breached and have had little by way of answers to that question. I do not expect an answer to that specific question from you or even from the Civil Contingencies Team, however, Stuart Fannin the Stations' Nuclear Inspector, said that airborne radioactivity would be unlikely and that it was the responsibility for the Local Authority's Contingency Team to have Emergency Plans in place to deal with this.

He added that there would be a 50 metre exclusion zone.

So, we have had a partial answer to the question, but by no means much detail of the consequences, which, I suspect, would probably be deadly for anybody in the vicinity.

So, with the hope of getting answers about the Emergency Plan in relation to the low probability, spent fuel flask scenario, I would like to ask that the Civil Contingencies Team refer us to the part of the Emergency Plan dealing with this, and perhaps give verbal feedback at the next Hunterston SSG on the 2nd of March at 1:30pm, in the Waterside Inn, Seamill. The team does on occasion attend.

I have copied in Environmental Health and the Civil Contingencies Team.

Yours sincerely,

Rita Holmes (Chairwoman HSSG)

Site Stakeholder Group

Hunterston B Station Director's Report

Period: November 2022 to January 2023

1. Defueling

Defueling activities at the site are progressing well and the focus is on progressing the operational defueling campaign on Reactor 3 in a safe, reliable and efficient manner.

We have reached an important milestone in the defueling of Reactor 3, half of the spent fuel stringers have now been safely removed and the average time taken per stringer has progressively improved over the reporting period.

In 2022, the station safely dispatched 72 spent fuel flasks, achieving 96% adherence to the station's operational plan of 75 flasks. The plan was impacted by rail strikes. This was the most flasks dispatched by any station in 2022 and was achieved safely and error free. To date the station have 100% met the 2023 flasking plan with 15 flasks dispatched to Sellafield.

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

Over the next period, the station will continue to focus on the safe and efficient defueling of Reactor 3 whilst progressing preparations for the defueling of Reactor 4, expected to commence late 2023.

2. 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, new emergency arrangements, new security arrangements and a new organisational structure. We are at the early stages of design work in these areas and will carefully work through the steps required to approve any change over the coming years.

Asset Transfer

EDF and Magnox 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 Magnox after the completion of defueling by EDF. To do this we need to have a shared understanding of what the stations will look like at the point of transfer. A joint blueprint has now been approved which sets out the design of Hunterston B at the point of transfer and represents a shared ambition for both organisations to work towards. The Blueprint describes latest aligned positions across a broad range of topics and will be updated to reflect further work, decisions and new information. Transfer activities will culminate in an application from Magnox to hold the Site License for Hunterston B which will be assessed and approved by ONR before transfer can take place.

Deconstruction Delivery

Work continues to prepare for deconstruction activities, 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' and will take approximately 11 years, from now, to complete.

3. 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 and have generated good discussion. Topics have included risk assessment, chemistry and radiological protection.

In January, our monthly safety meeting supported our SafeStart campaign which refocuses on Safety for Winter conditions and return to work following the holiday period. This campaign also included paired walk downs and meet & greet sessions with senior leaders on safety fundamentals, workplace transport and pedestrian safety. The Occupational Health and HR team also presented mental health and wellbeing sessions in the station canteen.

Feedback from the SafeStart campaign will be reviewed by our Industrial safety Action Team to inform our improvement plans and communications strategy.

Industrial Safety Engineers (ISEs) have been busy completing compliance evaluations on our codes of practice. All of our working groups which include, COMAH, vibration, working at height, building and fabric, asbestos, rail head crane continue to report directly into our Industrial Safety Action Team meeting which takes place on the third Wednesday of every month.

The annual ONR (Conventional Health and Safety) inspection took place in December. This was a positive visit which focussed on asbestos management, work equipment (machine guarding) and Construction Design Management.

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 below 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, the reduced work programme resulted in the actual dose being lower than the predicted.

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

Radiation Dose to workers (November 2022 – January 2022)		
Planned collective dose	9.3man.mSv	
Actual collective dose	5.5man.mSv	
	Employee	Contract Partner
Total Dose	4.7man.mSv	0.8man.mSv
Average individual dose	0.02mSv	0.01mSv
Highest individual dose	0.82mSv	0.11mSv
Individuals	344	240

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 November 2022 to January 2023.

Work is continuing to locate a slow, low-level leak of non-radioactive oil from a transformer cable. The oil, which is used for insulation in the cable, is light, clear and fully biodegradable. A tracer has been added to the oil in the cable to help establish the leak site, however the leak is small and identification has not been successful so far. The site are considering the longer term plans. SEPA have been kept fully informed and have been very supportive.

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 group, we have been working on developing defueling scenarios and fault events that will exercise our Emergency Arrangements.

During the reporting period we completed a Level 1 demonstration exercise with oversight from the ONR and Hunterston provided an “adequate” demonstration. We continue to work on embedding the learning and addressing identified areas for improvement from our

previous defueling fault scenario demonstration exercise. We have also completed a planned 2022 shift exercise season to allow existing role holders and trainees to exercise their roles in defueling based scenarios.

Exercises will continue throughout 2023 to allow staff to maintain knowledge and experience. The 2023 exercise plan will comprise of two shift exercise seasons as well as demonstrating our arrangements with oversight from the Office of Nuclear Regulation on areas of site security and fault scenarios.

On the 16 January, we made changes to the emergency arrangements based upon Hunterston B's move into defueling. The on & off-site emergency plans were updated in conjunction with the Local Authority. This reflects the change in site based hazards and plant state; the update reduces the Detailed Emergency Planning Zone (DEPZ) and removes the requirement for stable iodine tablets. These changes have been conducted using an implementation plan to track the tasks associated with Radiation (Emergency Preparedness and Public Information) Regulations (REPPiR 2019) compliance, LC11 Optimisation and stable iodine removal activities.

4. People

Following their appointments Andy Dalling (Transfer and Deconstruction Preparation Manager) and Graeme Campbell (Project Controls Manager), have been undertaking recruitment for these new departments. Internal and external appointments have been made and they are starting exciting work to deliver activities associated with seamless transfer and deconstruction preparation.

Following the success of the Pre-Retirement Seminar last June, Origen Financial Services ran another day in January with two of Origen's specialist 'Planning for Retirement' advisers providing the presentations and supported EDF's Pension Liaison Manager. Origen is a leading adviser firm in the UK, providing presentations and seminars covering all areas of financial planning for the employees of major employers. Those who attended learnt about the key areas for consideration from both a financial planning side, pre and post retirement and also from a 'life after retirement' perspective.

5. Company Update

Kind donation from Hunterston B



During the height of the pandemic, the station procured a supply of sleeping bags, inflatable beds, pillows and bedding. These were for emergency circumstances where some essential staff may have been required to stay at site. These supplies have been in storage since 2020. It was decided that these items would be much better utilised by people or charities that needed them.

On Friday 23 December, Angela McKinney and Nikki Thomson visited Simon Community, a homeless charity based in Glasgow, to deliver over 100 sleeping bags, inflatable beds, pillows and bedding. Simon Community provide information, advice, care, support, accommodation and homes to people

experiencing, or at risk of, homelessness. You can find out more about the charity by [click here](#).

Elaine Barrett a Service Lead at the charity said, “The difference that this will make to the people we support is incredible. Although numbers of rough sleepers are relatively low at the moment, over the past week we prevented 42 people from rough sleeping by providing appropriate support. Sleeping bags are a huge cost for us and as a charity, this cost comes from donations/reserves, so to be able to have a stock is amazing.

“We also support a number of people to move into accommodations and on a number of occasions, they have absolutely nothing and have to wait for their white goods package or Scottish Welfare fund to come through before they can purchase anything. Having the sleeping bags, bedding and blow up beds means, we can provide someone, something to sleep on until we can get things organised. The people we support sometimes get a matter of hours to accept and move to a property. This donation will make a huge difference to someone and is greatly appreciated.”

EDF Group issues 2022 financial results

Please follow [this link](#) to the EDF Group media release relating to the Group's Annual Results for 2022. These relate to the consolidated performance of EDF Group and include a summary of EDF's performance in the UK.

With a strong operational performance by our nuclear fleet, our overall financial performance has improved from the very challenging results we experienced in 2021.

Key points for the UK

- EDF continues to invest strongly in bolstering the UK's current and future energy security, investing over £2.6billion in 2022 in its nuclear, renewables and customer businesses.
- Planned investment in the UK across 2023-25 is over £13bn, largely in Hinkley Point C; around £2billion is due to be invested in the existing nuclear fleet and renewables projects.
- EBITDA for 2022 recovered to £1,124 million (vs. -£21 million in 2021), due to stronger operational performance in the nuclear fleet and higher realised prices; operating profit (EBIT) remained in negative territory at -£998 million, (vs -£1.7billion in 2021) due to depreciation and one-off impairments.
- The Customers (energy supply) business made a loss of over £200million, as the cost of buying the energy for our residential customers was higher than the prices set under the caps imposed on Standard Variable Tariffs.
- The Nuclear fleet performed well, with output up 1.9TWh at 43.6TWh – despite Hunterston B and Hinkley Point B ending generation.

6. Contacts

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

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Hunterston Site Stakeholder Group

SEPA Update- Hunterston B

2 March 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, Magnox, ONR and EA on strategic issues, including defueling, transfer and decommissioning.

Site Inspection

We have visited the station once since the last SSG meeting. On 7 December 2022, SEPA staff carried out a wash up visit to take stock on a number of outstanding compliance items well as follow up on a number of on-going deconstruction projects. No contraventions were identified.

The station will be inspected on 22/02/2023 with a focus on radioactive waste management and waste transfers. A verbal update of the outcome of this inspection will be given at the meeting.

Pollution Prevention and Control (PPC)

We have been monitoring the station's actions to locate and repair the small non-radioactive leak from an oil-filled cable onsite. 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)

There have been no issues related to COMAH since the last scheduled SSG meeting.

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.

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 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 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 27) covering 2021 has been published and can be obtained from SEPA's website along with previous year's reports. RIFE 27 reports that the total dose for the representative person (most exposed) around the Hunterston site, which includes both Hunterston A and Hunterston B, for 2021 was 0.006 millisieverts, which is well below the legal annual dose limit of 1 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 2021, including that from Hunterston A and B, have been published and are available on SEPA's website under "*Environment/Environmental data/SPRI*".

Cyber-Attack

SEPA continue to update our service status on a regular basis so that we're clear on what those we work with can expect and how we'll prioritise progress. The latest update is available on SEPA's website (www.sepa.org.uk).

Scottish Flood Forecast

Developed by SEPA and the Met Office, the Scottish Flood Forecast provides the earliest indication possible of when and where flooding is expected over the next three days, and whether the source is from rivers, surface water or the sea.

In addition, the colour coded map on SEPA's website describes the potential impacts on communities and links to advice and information on what protective action people can take if required. It also offers reassurance when significant flooding is not expected.

The forecast is produced every morning, 365 days a year, and published on SEPA's website. It is an additional tool for the public to use alongside the current Floodline service, which issues shorter notice Regional Flood Alerts and Local Flood Warnings to those signed up, 24 hours a day, seven days a week.

The Scottish Flood Forecast can be viewed at
<https://scottishfloodforecast.sepa.org.uk/public>

Scotland's Deposit Return Scheme

If you make, import, buy or sell drinks in Scotland you may have legal responsibilities (obligations) under The Deposit and Return Scheme for Scotland Regulations 2020.

Scotland is introducing a deposit return scheme (DRS). This means when you buy a drink in a single-use container you will pay a 20p deposit, which you get back when you return your empty bottle or can. The scheme is designed to encourage the return of empty single-use containers for collection for recycling. It will help to tackle climate change, increase quantity and quality of materials collected for recycling, and decrease litter.

The Deposit and Return Scheme for Scotland Regulations 2020 set out the legal requirements of the scheme. They apply to drink producers, drink importers and anyone marketing or offering for sale drinks in Scotland packaged in a single-use container made from PET plastic, glass, steel or aluminium sized between 50ml and 3 litres.

For further information, please see SEPA's website (www.sepa.org.uk).

Mr Keith Hammond

Radioactive Substances Specialist/*Speisealach Stuthan Reidio-beo*

16/02/2023



HUNTERSTON A

SITE STAKEHOLDER GROUP REPORT

SITE DIRECTOR – MARK BLACKLEY

MARCH 2023

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

Hunterston A continues to make good progress on our programme of work to Care and Maintenance. We continue to be adequately funded by the NDA and remain committed to addressing the nuclear liabilities at Hunterston A in a safe, secure manner with care for the environment.

1 SITE DIRECTOR OVERVIEW

NDA have proposed new end state dates for Magnox Sites in the latest NDA Business Plan which was published for consultation in December 2022. The end state dates are now presented as "date ranges" rather than a single year and are best estimates of earliest dates. All dates are subject to site specific strategy development and approval which will be adjustable to reflect opportunities and constraints as they emerge. These plans will form part of our rolling programme of decommissioning and the end state date for Hunterston is in the 2050's.

There were no significant Nuclear / Radiological Safety or Security issues over the reporting period.

At the last SSG I reported that further inspections had led to the discovery of a number of defects on ventilation ductwork within buildings and that these defects were subject to Investigation by SEPA. We subsequently received a second Warning Letter from SEPA regarding these defects on internal ventilation systems. We do not believe that these defects caused harm to the environment or to anyone. Good progress is being made on repairs and many of the ventilation systems have been returned to service.

We also received a second Warning Letter from SEPA when we did not complete the 6 monthly F-Gas leak tests on the air conditioning systems, within the Administration Building and Intermediate Level Waste Store, due to unavailability of an air conditioning contractor. The leak check was subsequently completed, and no defects were found.

During an inspection of the LLW Processing Facility vent extract system prior to its return to service it was identified that the drain line from the stack is connected directly to a local storm drain downpipe. This drain line is fitted after the filtration system and it appears that this may have been like this since the system was installed. The LLW Processing Facility vent system has been isolated since October 2022. The drain line has now been cut and a valve fitted. A sample of rainwater was then collected from the drain line and no radioactivity above background levels was detected in the water. An investigation into the circumstances of this event is ongoing.

We have received a joint SEPA / ONR letter on grouting of Bunker waste. This states that 'SEPA will advise Magnox that, if it wishes to proceed with submitting an application to vary its permit to authorise gaseous discharges from the SILWE stack, that it does so

for the purposes of encapsulation of the waste from Bunker 1 only'. SEPA want to assess the characterisation that was done for the Bunker waste before they make any decision about grouting of waste from Bunkers 2 – 5. This joint Regulatory Statement is welcomed by Magnox since it gives clarity on a way forward with this issue.

During December the site demonstrated our Accident and Emergency Contingency Arrangements. The exercise response was deemed as adequate by the ONR assessors.

The Solid Active Waste Bunker Retrieval (SAWBR) Project team have safely exported a cumulative total of 281 3M³ boxes from Bunker 1 to the ILW Store, this equates to 167.8 Tonnes of Bunker 1 waste. This brings the total of 3M³ boxes exported from SAWBR (all 5 bunkers) to 1174 Boxes. It is forecast that the bulk retrieval of waste from Bunker 1 should be completed by April 2023 – this has been extended because there is more waste in the bunker than was forecast and because of key resource unavailability and equipment failure.

The Kuka robot issues in the Solid Intermediate Level Waste Encapsulation Plant (SILWE) have continued to delay the Project, but the issues are now generally better understood. It is expected that Kuka will return to site in March to continue with preparations for a complete re-run of the robot system performance demonstrations.

Significant progress has been achieved within the Cartridge Cooling Pond facility by exporting approximately 10 bags of miscellaneous bagged ILW to the Solid Active Waste Bunker in a well-planned and safely executed operation in January 2023. This transfer marks a significant milestone in hazard reduction

The reactor roof repair project will recommence Spring 2023. Whilst the overall objective of the project remains the same, surveys of the roof structure have identified that more remediation is required to address the partial delamination of the roof membrane before applying a final protective coating.

We are currently replacing the sites two 11kv transformers which have been in service for over 25 years. This work is going to plan and will be completed by the end of March.

As mentioned previously, Magnox / NDA committed £499,999 towards creating a sector leading Future Skills Hub on the North Ayrshire Kilwinning Campus. Work is progressing well, and the Hub is due to open in time for the September 2023 intake.

During the run up to Christmas the Site ran various fund raising activities and I am pleased that an amazing sum of £600 has been raised for West Sounds Cash for Kids appeal.

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

2 SAFETY OVERVIEW

2.1 Safety Review Performance

Safety performance on site since the last Lost Time Accident (LTA) in November 2022 is good. The Total Recordable Incident Rate (TRIR) and Day Away Case Rate (DACR) is 0.45 and three months have passed since the last LTA.

The injured person has still to return to work and is making progress in his recovery. The investigation into this event has been completed and the site is assessing the recommendations and placing actions to eliminate this type of event from reoccurring.

The Site did have an event that required the Scottish ambulance service to attend the site. This was due to an individual taking unwell within a contamination-controlled area. The individual received appropriate first aid and the site contingency arrangements were enacted, resulting in the desired outcome and the individual was handed over to the paramedics and transferred to A&E. The individual has since returned to work.

Covid 19 remains in circulation, though impact to site delivery is negligible.

The Company Target Zero topics change monthly and continue to raise awareness, stimulate discussion whilst building everyone's knowledge of the specific topics presented. During December the subject matter was *Winter Travel / Adverse Weather*, January was *Safe Start / Return to Work and OEF* and February was *Environment / Sustainability*. The topics are discussed at the start of meetings and Pre job briefs. The Target Zero campaign is well supported and received by all on site from management level through to work face personnel including contracting partners.

The site consistently receives over 100 Q Pulse reports per month for events on site which include including positive reports. This a good indicator of our positive reporting culture on site. Hunterston A is one of the highest producers of Q Pulse reports in the Magnox fleet. All Q Pulse reports are screened at the daily Safety and Compliance meeting and appropriate action taken to ensure the events are effectively managed.

The site Event Review Meeting (ERM) continue to meet weekly to review events and challenge categorisation of events to ensure accuracy and consistency. The ERM also review progress of any investigations and open actions. The ERM is well supported by management and safety representatives.

The Fire Safety Management Group continue to meet bi-monthly to monitor and ensure the fire life safety general arrangements are maintained and effective.

The site safety representatives meet fortnightly at the Local Safety Forum and bi-monthly HESAC meetings. These meetings are well supported by Magnox and contractor Safety Representatives.

2.2 Emergency Arrangements

During December the site demonstrated 'Exercise Thunderbolt' to the ONR. This exercise was a test of the sites Accident and Emergency Contingency Arrangements. The exercise scenario was an operative received a cut to his wrist whilst using an angle Grinder in a contamination-controlled area and on top of a mobile aluminium scaffold tower. The exercise response was deemed as adequate by the ONR assessors.

The Site Contingency Team were called on in response to a real event, where an individual took unwell within a contamination – controlled area. The response by the site contingency team members was effectively implemented and appropriate care provided to the individual who had taken unwell.

A new Programme of Accident and Emergency Contingency Arrangement training exercises has been produced that will see the site Contingency team and supporting functions tested throughout the coming year.

Contractors and self-perform teams will also be rehearsing and demonstrating their contingency capabilities throughout the coming year.

We have a new Emergency Preparedness Officer starting with Magnox soon.

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.



Retrievals across December and January were limited due to a combination of key resource unavailability and equipment failure leading to a reduced number of packages exported over the Quarter, with the facility stood down since 11 January. To date, the SAWBR team have safely exported a cumulative total of 281 3M³ boxes from Bunker 1 to the ILW Store equating to 167.8 Tonnes of Bunker 1 waste.

The plant underwent a routine planned, maintenance outage in SAWBR commencing 1 February for a duration of two weeks with expected return to retrievals on 13 February. Unfortunately, a component failure led to no operational or emergency lighting across the facility and has impacted this expected restart date. At time of writing, repairs are being carried out and the Plant expects to return to service on 21 February

1174 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 in April 2023, which will be a significant milestone for the site.

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.

In late December, agreement was reached for the Nitric Acid reconfiguration to be restarted with a collaborative team across Waste Operations, Waste Projects and other site functions. Work has been progressing in January to understand the current condition of the facility and a plan formalised to take it forward. Install and initial testing is scheduled for Spring 2023 moving through inactive and active commissioning phases across the Summer months and into Operations late 2023.



During the reporting quarter, the Operations team has continued to consolidate some residual sludge remaining from the first bulk recovery stage within the three Sludge Retention Tanks in WILWREP into one tank, to make future retrievals easier.

3.3 Solid Intermediate Level Waste Encapsulation (SILWE) Project

The SILWE facility exists purely to encapsulate the 3M³ packages containing the solid waste retrieved/recovered from SAWBR with a grout mix. It is expected to take up to three years to encapsulate approximately 1500 stainless steel packages. Once encapsulated, the packages will be in their disposable state.

The SILWE Project continue with preparations for the commencement of Phase 2 Commissioning mid-June of 2023. Following this phase of the project, plant operations will be managed via the SILWE control room.

The Kuka robot issues are now generally understood and it is expected that Kuka will return to site in March to continue with preparations for a complete re-run of the robot system performance demonstrations.



The project plan is to transition into Phase 3 (Inactive Commissioning) in August of 2023, with active commissioning forecast to commence in quarter three of 2025.

3.4 Ponds Programme

Pond Free of Miscellaneous Intermediate Level Waste (ILW)

Within the period the Pond team in collaboration with High Active Waste (HAW) made significant progress in achieving radiological hazard reduction within the Cartridge Cooling Pond facility by exporting a final volume of miscellaneous bagged ILW from the West Stop Log Harbour Workshop to the Solid Active Waste Bunker. Approximately ten bags of ILW, which had previously been sorted and segregated within a dedicated C4 containment within the SRP were handed over to the HAW team for depositing into the bunker in a well-planned and safely executed operation on the 26 January 2023.

This transfer marks a significant milestone in hazard reduction and compliments the good work which was undertaken in 2022 where the SAW flask left the Pond for the last time and the Magnet screen was transferred to High Active waste. Looking forward the only high dose item remaining under the remit of the Pond Programme is the Monomix pump for which options studies for disposal are scheduled for March 2023.

Picture opposite shows SRP C4 sorting and segregation containment



New Effluent Treatment Plant (NEffTP)

The New Effluent Treatment Plant within the Low-Level Waste Transfer Facility was installed and inactively commissioned in April 2022. This system will facilitate the eventual diversion of current miscellaneous effluent streams, which will in turn enable wider decommissioning of site by creating redundancy in the systems and tanks currently still in use.

Since inactive commissioning was completed the Project team have been focused on developing the maintenance schedule and procedural documentation which will facilitate active commissioning. Within the reporting period all Plant Operating Instructions have been drafted, reviewed, and approved.

The focus has now shifted onto developing Work Instructions and Maintenance Inspection and Testing routines in readiness for bringing the plant into operational service later in the year.

Picture opposite of New Effluent Treatment plant within the Low-Level Waste Transfer Facility



Miscellaneous Receiving Tank decommissioning

The Miscellaneous Receiving Tanks (MRTs) form part of the wider Active Effluent Treatment Facility (AETF) and are concrete underground tanks approx. 25m³ in capacity. The access to these tanks is within an external C2 area in the AETF.

The tanks are currently operational and used in the treatment of miscellaneous effluent. They receive miscellaneous arisings which are passed through to the Miscellaneous Cartridge Filtration Plant (MCFP) providing removal of suspended solids.

The Pond programme is responsible for diverting the existing effluent streams away from the MRT's thus facilitating the decommissioning of the tanks which will comprise of desludging, decontamination and deplanting.

Within the reporting period an options study was conducted to explore the preferred methodology for retrieval of sludge from the MRTs and conditioning/disposal of that sludge.

The study sought to determine Best Practicable Means (BPM) of desludging by assessing the options against criteria including volume and activity of waste generated and discharged to the environment.

The options study is currently out for review and comment by subject matter experts and the team are now focused on developing the decontamination options study to support the next phase of the project.

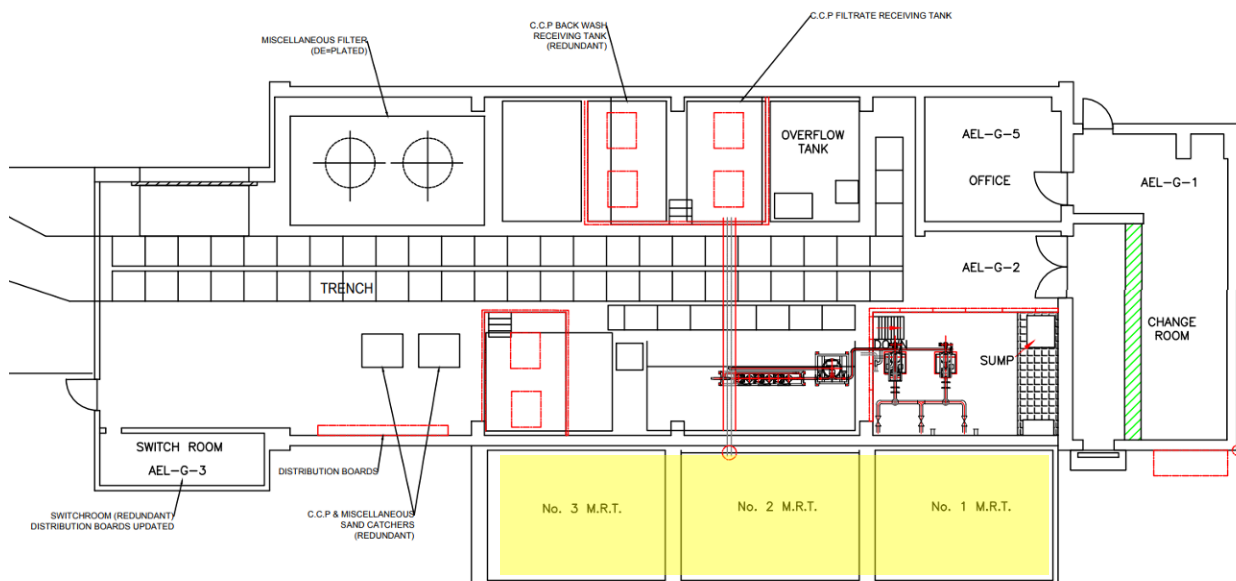


Diagram above shows Miscellaneous receiving Tanks (highlighted yellow)

3.5 Hunterston Reactor Project / Plant & Structures

Reactor Roof Remedial Works

The reactor roof repair project will recommence Spring 2023. Whilst the overall objective of the project remains the same, surveys of the roof structure conducted by the contractor with Magnox oversight have identified a more extensive course of remediation required before applying a final protective coating. The contractor shall now also address partial delamination of the roof membrane by replacing a number of fixings and installing additional “Sarnabar” intermediate members to the roof. This will make-good the roof membrane and secure it to the current specifications required by waterproofing specialist SIKA before the protective coating is applied.



The focus on the contractors return to site will be the completion of the handrails on the Exit Bay roofs and Service Machine Building to provide safe working access to the roof areas for the protective coating. The protective coating will be applied in two coats to all reactor roof areas.

De-planting SRUs

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 current phase of works are expected to start in Summer 2023 and conclude by Spring 2024.



4 PEOPLE

4.1 Site HR

We are awaiting the outcome of our 2023 Business Planning resource proposals which have particular focus on our resources required over the next 2 years. The number of resources agreed will depend on resource demand to fulfil priority programme of work within our funding profile available to us. Current resource demands already approved continue. In the last quarter we have had 1 new entrant, have another 19 new entrants at various onboarding stages, this includes some supplied workers who have taken up Magnox positions. In addition we have 14 posts at various stages of the advertising/selection process and 2 apprenticeship opportunities to join the company from September 2023, specifically electrical and mechanical apprenticeships.

A new Employee Benefits Scheme has recently been introduced. This has expanded to the benefits available to include a variety of discounted schemes including gym membership, dental insurance, financial wellbeing as well as existing benefits such as childcare vouchers, employee benefits cycle2work salary sacrifice.

4.2 Occupational Health

Our sickness levels remain considerably higher than the Company average. Our long-term sickness cases, that are the main contributor to this, are now beginning to reduce slightly. This is through continued appropriate support to these cases managed by the line managers in conjunction with , HR and Occupational Health.

The workforce are encouraged to consider the wellbeing initiatives highlighted to them. Hunterston Wellbeing Group continue to promote various topics the latest being about 'Habits' and changing to habits to new healthier ones. Our Hunterston Fitness Suite has also reopened with a £5 joining fee for new members going to Macmillan Cancer. The Company continue to make various webinars available to sites on a variety of topics in support of health and wellbeing.

5 ASSET MANAGEMENT

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

We are currently replacing the sites two 11kv transformers which have been in service for over 25 years. This work is going to plan and will be completed with the second transformer being swapped over weekend of the 25/26 March.

Building fabric repairs continue with a large scaffold erected to the south of the Cartridge Cooling Ponds. This enables an inspection of the cladding as well as gutter repairs.

There have been a number of Welfare upgrades identified during the year with improvements to the male and female C3 showers, as well as the Security facilities which will be completed by the end of March.

Improvements to the site roadways and car parks has been undertaken with resurfacing works completed. Line marking will conclude that work and improve the vehicle and pedestrian interfaces.

As we near the end of the 2022/23 financial year we are already planning the delivery of a portfolio of work packs in 2023/24 and even further forward to 2024/25.

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 2022, to the end of December, are as follows:

- Approximately 223 employees and visitors received a total collective dose of 11.913 man.mSv between them
- Approximately 425 contractors received a total collective dose of 13.350 man.mSv between them
- The highest individual dose received by an employee was 1.633 mSv
- The highest individual dose received by a contractor was 1.577 mSv

The majority of dose accrued in 2022 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 (Jan 2022 - Dec 2022)

Solid

Low Level Waste (LLW) disposals to the Low Level Waste Repository (LLWR) continue. 52.83 m³ of LLW and VLLW with a total activity of 0.75 GBq was disposed of during the twelve month period from January 2022 to December 2022. 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 January 2022 - December 2022 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 (Jan 2022 - Dec 2022)
Tritium	30 GBq	0.007 GBq
Caesium-137	160 GBq	0.048 GBq
Plutonium-241	2 GBq	0.001 GBq
All alpha emitting radionuclides not specifically listed taken together	2 GBq	0.003 GBq
All non-alpha emitting radionuclides not specifically listed taken together	60 GBq	0.039 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 (Jan 2022 - Dec 2022)
All authorised outlets taken together.	Tritium	100 MBq	0.3 MBq
	All other radionuclides (excluding tritium)	3 MBq	0.441 MBq
Discharges made as a consequence of reactor breathing	Tritium	3000 MBq	434.6 MBq
	Carbon-14	200 MBq	51.49 MBq

7.2 Non-radiological Environmental update (Jan 2022-Dec 2022)

Treated sewage effluent from the plant is not currently being independently assessed by SEPA due to SEPA Covid restrictions on visiting Site. 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 January 2022 to December 2022, the site used 18.30 Terra Joules (Tj) of energy; 17.82Tj attributed to electricity consumption and 0.48 Tj attributed to fuel use in site vehicles, equipment, and generators. In the same 12-month period the site water consumption was 6,083m³. 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 January 2022 to December 2023 a total of 627 tonnes of waste was collected for consignment from site (526 tonnes for re-use, recycling, recovery, or composting, 96 tonnes sewage waste and 5 tonnes for disposal to landfill). This gives a recycling rate of approximately 84%.

7.3 Environmental Events (November 2022-January 2023)

The site received a warning letter from SEPA following the findings from a SEPA inspection conducted at the site during October 2022. The inspection focussed on the site's arrangements for the maintenance of ventilation systems. The ventilation defects did not cause harm to any persons or the environment however we did not satisfy the requirements of our Permit. The site instigated a programme of close proximity inspections immediately following discovery of the defects with additional actions being placed to address the findings within the warning letter and site investigation.

The site received a warning letter from SEPA following failure to carry out six-monthly mandatory leak checks on six air conditioning units within the required timescales due to the unavailability of the specialist air conditioning contractor. This event has been investigated and actions have been placed to minimise the risk of a reoccurrence in future.

8 SOCIO-ECONOMIC / STAKEHOLDER UPDATE

As mentioned previously, Magnox / NDA committed £499,999 towards creating a sector leading Future Skills Hub on the North Ayrshire Kilwinning Campus, named the Willie Mackie Hub. Work is progressing well. The low carbon two-storey building will be a flexible space to deliver an innovative curriculum in Engineering, Construction and SMART Technologies. It will also become the primary location for high quality STEM vocational skills development for not just college students, but also local school pupils and employers looking to upskill their workforce. The facility will be supported by green technologies using air source heat pumps for the building's heating system.



The Hub is due to open in time for the September 2023 intake.

The main contractor, Ashleigh (Scotland) Ltd, selected two bricklaying students from the college via an interview process, to gain a week-long experience placement working on the project.



Successful candidates Darren & George

Good Neighbour applications

- Firth of Clyde Coastal Rowing Club recently had approval of £2,000 from the Magnox socio-economic scheme to fund a road trailer and trolley launch.
- Ardrossan Winton Rovers under 14's girls team are to receive £730 towards Magnox branded tracksuits.
- Tass Thistle 2007 FC are to receive £786 towards Magnox branded football strip.

For more information on the scheme, or to apply please visit:

Magnox working with our communities - GOV.UK (www.gov.uk)

9 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
Monday 5 December	Fitness Suite re-opened at Hunterston A site
Tuesday 6 December	Safety Stand Down by Mark Blackley, Site Director
Tuesday 13 December	Witnessed Emergency Exercise by ONR
Wednesday 14 /Thursday 15 December	Christmas Lunch & Charity support for West Sound Cash for Kids
Wednesday 4 January	Return to Work Stand Downs
Monday 16 / Thursday19 / Monday 30 January	Leadership Cohort visits to site
Tuesday 24 January	Magnox Support Office – Environment & Waste Peer visit / Gaseous & Aqueous Containment system
Wednesday 1 February	Hunterston Decommissioning Teleconference Update by Site Director, Mark Blackley to Hunterston SSG Chair, Rita Holmes and SSG Vice Chair Stuart McGhie. (Microsoft Teams Meeting)
Wednesday 1 February	Andrew Forrest – Chief Technical Officer
Wednesday 1 February	Cyber Security & Information Awareness Roadshow
Thursday 2 February	EHSS&Q Review
Wednesday 1 March	Hunterston Decommissioning Teleconference Update by Site Director, Mark Blackley to Hunterston SSG Chair, Rita Holmes and SSG Vice Chair Stuart McGhie. (Microsoft Teams Meeting)



Office for
Nuclear Regulation

ONR Site Report

Hunterston A

ONR Site Report

Hunterston A

Report for period: 1 October – 31 December 2022

Authored by: S Fannin, Nominated Site Inspector

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

Issue No.: 1

Publication Date: 02/23

ONR Record Ref. No.: 2023/9859

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/lrc/>).

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.

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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 October – 31 December 2022:

1-2 November 2022

13 December 2022

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

4 October 2022

2. Routine Matters

2.1. Inspections

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

- The 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:

- security
- transport of radioactive materials
- emergency preparedness

Security – On 4 October 2022 the site security inspector evaluated a demonstration of the site security arrangements. The scenario provided a good test of the site emergency organisation's ability to respond to the postulated threat and the inspection was rated adequate.

Transport of radioactive materials – On 1 November 2022 a specialist inspector carried out an inspection of the Magnox Ltd internal regulator function when auditing consignments of radioactive materials from the site. The inspection concluded that the audit process was adequate, and Magnox Ltd could be assured that site complied with the company standard for the transport of radioactive materials. The inspection was rated adequate.

Emergency preparedness – On 13 December 2022 the site inspector evaluated a demonstration of the site emergency arrangements. There was a good performance by personnel in the Incident Response Centre and the casualty was decontaminated and safely recovered from the incident scene. The demonstration was therefore rated adequate.

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.

Other Work

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:

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) event – On 3 November 2022 a worker in a controlled contamination area received an injury to his hand. A ONR conventional health and safety inspector carried out a preliminary inquiry and determined that the event did not meet the ONR investigation criteria. The site has instigated a route cause investigation and 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

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L20 7HS
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Hunterston Site Stakeholder Group

SEPA Update- Hunterston A

2nd March 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 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.

Low Level Waste Processing Facility – Warning Letter

The site notified SEPA whilst SEPA were on site undertaking an inspection (24th – 26th October – site inspection documented at December SSG) that holes were discovered within the ventilation ductwork in the Low Level Waste Processing Facility on the site. There were two areas where there were issues found – one hole within the facility in a filtered room, pre abatement where the duct is under negative pressure. The second hole was after the abatement, and after the fan within an unfiltered room where the duct was under positive pressure prior to entering the stack. The site undertook an investigation into the discovery and identified a number of potential non compliances and actions. SEPA subsequently issued Magnox with a warning letter in December 2022 outlining a number of non compliances with the Hunterston A site EASR permit associated with the findings of the inspection.

SEPA Site Inspection 21st – 23rd November

Upon finding the issues with the LLWPF vent ductwork 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 has since been made aware of a number of defects associated with these systems and is considering the implications with regards to potential non compliances with the site permit, having visited site as part of this investigation on 21st – 23rd November.

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 and is ongoing.

Non-Rad Regulation

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

Environmental Events

Notification 1st February 2023

Magnox notified SEPA on the 1st February 2023 that during a 'return to operation' inspection of the Low Level Waste Processing Facility ventilation system, it was noticed that the stack drain line is permanently connected to a local storm drain downpipe. No isolation fitting or valve could be found in the line. The site's internal investigation into this is ongoing and SEPA will consider the information provided in due course with respect to any potential non-compliances with EASR.

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)

A CAR compliance inspection was undertaken on 15th February 2023. No breaches of license limits were found. In addition there have been 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 27) covering 2021 has been published and can be obtained from SEPA's website along with previous year's reports. RIFE 27 reports that the total dose for the representative person (most exposed) around the Hunterston site, which includes both Hunterston A and Hunterston B, for 2021 was 0.006 millisieverts, which is well below the legal annual dose limit of 1 millisievert as set out in paragraph 26, Schedule 8 of EASR19.

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 2021, including that from Hunterston A and B, have been published and are available on SEPA's website under "Environment/Environmental data/SPRI".

Cyber-Attack

SEPA continue to update our service status on a weekly basis so that we're clear on what those we work with can expect and how we'll prioritise progress.

Melanie Hayes
Radioactive Substances Specialist
February 2023

Hunterston SSG

NDA – Update Report

March 2nd 2023

UK Government

- Whole team of civil servants concerned with nuclear in BEIS have moved into the Department for Energy Security and Net Zero (DESNZ)
- Secretary of State is Grant Shapps, who was head of BEIS
- Very likely that the minister for NDA Group will be Graham Stuart, but final allocation of roles is still ongoing. He was the minister responsible in BEIS
- Perm Secs Clive Maxwell (previously in BEIS) and Jeremy Pocklington (previously DCMS but before that DECC)

Stakeholder Survey

- NDA commissions an independent organisation to survey stakeholders every two years
- 800 people took part, 200 more than the last survey. Mix of key stakeholders and those on our mailing list to receive updates electronically.
- Key indicators all up since last time – trust, transparency and openness.
- We also asked people where we could improve: one of the key findings was that they wanted to know more about mission delivery and how we solve technical challenges, so we will address that.

Stakeholder Summit

- After the event in Edinburgh last September, NDA has decided that the next in-person Stakeholder Summit will be held in Cumbria in 2024.
- There will be an online, virtual Summit this year, probably in October.
- During the year, though, we will be holding a series of in-person, regional meetings for stakeholders. It is planned these will be linked to universities with a nuclear science department, so that we can showcase the links between NDA, research and innovation.
- More details as soon as we have them.

Nuclear Industry Association (NIA) - Week in UK Parliament

- The Nuclear Industry Association annually organises a series of events to draw the sector to MPs' attention. The latest was this January.

- NDA sponsored a reception for Parliamentarians highlighting the decommissioning aspects of nuclear.
- NDA sponsored the Skills Fair and brought graduates and apprentices to London for them to meet their local MP – and for the MPs to understand the work of the NDA in their communities.

NDA and New Nuclear

- We are still awaiting news from the Government about when Great British Nuclear will be set up and what its remit will be.
- In the meantime, we are being approached by a number of developers and technology providers about the availability of land on our sites.
- We are providing publicly available information on an open and transparent basis to enquirers.
- In Wales, we are continuing to support Cwmni Egino, in line with the Memorandum of Understanding between BEIS, NDA and Cwmni Egino.

Decommissioning and Waste Management Consultation

- New Government consultation on decommissioning and waste management due to be published shortly.
- The last one was published in 1995. This will update, consolidate and introduce new options.
- Has been agreed by BEIS, Scottish Government and Welsh Government: the 1995 paper was issued before devolution. Waste management is a devolved power.
- Will be a full 12-week consultation.
- More details of engagement activities will be given when it is published.

NDA Graduate Scheme

- The challenge of ensuring NDA and its operating companies have sufficient highly-skilled and motivated personnel over several generations as it fulfils its mission is one of its priorities.
- In January, NDA launched a new group-wide graduate programme to help ensure a continued flow of young people into the business.
- Applications are now open for roles in around 20 different professional disciplines at various locations in all corners of the UK.
- The new programme, supported by NDA subsidiary Energus, will offer three placements in different parts of the group. It will operate alongside the graduate schemes run by other operating companies.

- To find out more about the scheme, graduates can visit [the NDA group graduate programme website](#)

Robots in Radioactive Management

- A robot designed with help from Dounreay to safely inspect hazardous environments is in Time Magazine's top 200 innovations of 2022.
- The robot, known as Lyra, has been used to inspect ventilation ducts and feedback radiological information. Human access to this area is currently impossible due to the size of the duct and radiological risks.

Draft Business Plan

- Hunterston SSG feedback received by NDA.
- Fourteen submissions.
- Feedback being considered.
- Subject to approval by the UK and Scottish Governments, final version will be published before the end of March 2023.

NDA/Scottish Government Secondment

- Ended December 2022.
- New secondment currently being considered for 2023.

ENDS

David J. Wallace

NDA Stakeholder Lead - Scotland

SCOTTISH GOVERNMENT UPDATE TO HUNTERSTON SITE STAKEHOLDER GROUP – 2ND MARCH 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 is part of joint four nations work to develop a new and updated UK wide policy framework for nuclear decommissioning and managing radioactive substances. This framework update clarifies and consolidates a number of policies into a single UK-wide policy framework, whilst respecting the different policy positions that exist particularly for radioactive waste management across the separate administrations. The consultation is due to be published soon and we will forward links when available to enable stakeholders to contribute views.

UK Energy Bill

Mr Michael Matheson, Cabinet Secretary for Net Zero, Energy and Transport, attended the Scottish Parliament's Net Zero Committee on 24 January to give evidence regarding the Scottish Government's legislative consent memorandum for the UK Energy Bill (which includes consent for some provisions related to nuclear sites which touch on devolved issues). There were no issues raised regarding any of the nuclear site related provisions. Further information can be found on the Scottish Parliament website;

<https://www.parliament.scot/bills-and-laws/legislative-consent-memorandums/energy-bill>

Annual NDA meeting with Minister for Environment and Land Reform

The Scottish Government is working with the NDA to arrange the annual meeting between the Minister for Environment and Land Reform, the NDA Chair and NDA CEO as set out in the NDA Framework document. This will be to discuss NDA matters including progress across the three NDA sites in Scotland. Depending on diary availability the meeting should take place this Spring.

Site Visits

The SG team have also been progressing with in person site visits/meetings to further our understanding of local issues. We visited Chapelcross in January this year and have a scheduled visit to Hunterston sites A and B on the 30th March.

Draft Energy and Just Transition Plan Consultation

The draft Energy and Just Transition Plan Consultation opened in January. If any SSG members wish to submit their views, please do so on the consultation web page, links below.

[Supporting documents - Draft Energy Strategy and Just Transition Plan - gov.scot \(www.gov.scot\)](https://www.gov.scot/supporting-documents/draft-energy-strategy-and-just-transition-plan-consultation)

[Draft Energy Strategy and Just Transition Plan consultation - Scottish Government - Citizen Space](https://www.gov.scot/citizen-space/draft-energy-strategy-and-just-transition-plan-consultation)

Scottish Government