Sizewell A & B Stakeholder Group Meeting
Venue: Sizewell Sports & Social Club, King Georges Avenue, Leiston IP16 4JX

Thursday 29 June 2023
09:00 hours registration for 09:30 hours start

AGENDA

1. **Apologies** for absence and declarations of interest
2. **SIZEWELL A REPORTS**
    a. Sohail Ashraf (Site Director, Magnox) *
    b. John Rogers (Site Inspector, Office for Nuclear Regulation) *
    c. James Heavingham (Environment Agency) *
3. **MAGNOX CORPORATE UPDATE**
    a. Bill Hamilton (Magnox)*
4. **NDA REPORTS**
    a. Simon Napper (NDA)*
5. **NWS UPDATE**
    a. Guy Esnouf (Update on Geological Disposal Facility) *
6. **SIZEWELL B REPORTS**
    a. Robert Gunn (Station Director, EDF) *
    b. Daniel Gregory (Site Inspector, Office for Nuclear Regulation) *
    c. Alex Lord (Environment Agency) *
7. **EDF CORPORATE UPDATE (to include SIZEWELL C matters and introduction to new Team)**
8. **Matters arising** and questions from minutes and action tracker:
    a. Minutes and actions of meeting held on 15 March 2023
    b. Other matters or correspondence received
9. **Chair & Vice-Chair Report including Consultations, and future sub-group meetings** *

** After each of these agenda items, and following questions from Group members, there will be an opportunity for members of the public to ask questions.*

Next meeting: 20 September – venue and time to be discussed/confirmed. This meeting will be our AGM at which we will review Constitution, appoint/confirm Chair and Vice Chair and membership.

Site Stakeholder Group

MINUTES OF THE MEETING OF THE
SIZEWELL A & B STAKEHOLDER GROUP (SSG)
HELD AT SIZEWELL SPORTS & SOCIAL CLUB
WEDNESDAY 15 March 2023

Attendance/Apologies list

Attendance

Members

Marianne Fellowes	Independent Chair
Pete Wilkinson	Deputy Chair
Trevor Branton	Co-Opted Member
Cllr Lesley Hill	Leiston Town Council
Pat Hogan	Sizewell Residents Association
Cllr Peter Palmer	Aldeburgh Town Council
Cllr Russ Rainger	East Suffolk Council

Operators and Officers

Sohail Ashraf	Site Director, Sizewell A
Paul Berenguier	ONR
John Carey	Senior Facilities Manager, Magnox
Amy Davies	Employee Communication Lead, Magnox
Rob Dean	Executive Support, Magnox
Daniel Gregory	ONR Inspector, SZB
Robert Gunn	Station Director, SZB
Bill Hamilton	External Affairs Director, Magnox
Wendy Heath	Senior Project Manager - Magnox
James Heavingham	EA Inspector SZA
Themis Kantara	EA Inspector SZB
Ashley Lancaster	Project Manager - Erith
Peter Langford	Emergency Panning, Suffolk County Council
Neal Evans	Emergency Panning, Suffolk County Council
Karl Littlewood	EA SZB
Alex Lord	EA Nuclear Regulator, SZB
Simon Napper	Stakeholder Relations Manager, NDA
Cath Pritchard	Secretariat & Comms Officer
Peter Reynolds	EA Inspector SZA
John Rogers	ONR Inspector, SZA
Niki Rousseau	Communications, SZB
Sean Verrall	Plant Manager, SZB
Gareth Ward	Waste Manager SZA Magnox
Janet Fendley	Representing Friends of The Earth
Sheila Filby-Woznow	Together Against Sizewell C
Cllr Bill Seale	Representing Aldringham cum Thorpness Parish Council
Geoffrey Dore	Minute Taker

Members of the public

David Bailey
Nic Pehkonen
Mike Taylor

Apologies

David Cutler	Suffolk Police
Joan Girling	Co-Opted Member
Cllr TJ Howarth-Culf	Ward Member Suffolk County Council
Ian Mallet	Suffolk Joint Emergency Planning Unit title needed
John McNamara	Communications Manager, NDA

INTRODUCTION & APOLOGIES FOR ABSENCE AND DECLARATIONS OF INTEREST

4845 Marianne Fellowes welcomed the group to the meeting and reminded the attendees of the housekeeping rules. Emergency processes were explained.

Apologies for absence were received as listed above. There were no new declarations of interest.

SIZEWELL B REPORTS

4846 **Robert Gunn (Station Director, EDF)**

Robert Gunn reported that there had been no recordable injuries, nuclear reportable events or environmental incidents during the reportable period. Robert Gunn noted that, when the reactor had been taken offline following an outage in February, there had been a compliance issue with one of the permits. An investigation had taken place, and it was not anticipated that there would be any environmental impact.

SZB had 250-300 full time contract partners, while the site headcount was being increased from 500 to 550. SZB was due to close in 2035, and a project was currently running to extend the closure date to 2055.

The final investment decision for long-term operations would take place in 2024. It was anticipated that there would be an additional £700 million investment in the plant.

The statutory outage had a business plan of 66 days, and SZB was on day 27 of the programme. £82 million would be spent on the investment programme. Thermal sleeves had been inspected, and no issues had been identified. Primary circuit pipework had been inspected. 23 wells had been checked, and all results had been positive. Over £10 million had been spent to mitigate the risk.

The Office for Nuclear Regulation (ONR) and Environment Agency (EA) had been on site to inspect the outages, and good feedback had been attained. Inspectors from the World Association of Nuclear Operators (WANO) had also been on site and had provided positive feedback. An additional 1,000 workers were on site.

Several seals had entered SZB's forebay area. Currently, three seals were in the forebay and would be safely removed in due course. Robert Gunn provided an assurance that the seals were in good health.

Robert Gunn noted that it had been previously reported that there had been an issue with a pin hole in the one of the fuel pins. A safety case had been put in place, and the cast had been moved over to the dry fuel store with no issues.

Planning permission had been received to build a new emergency response centre that would replace the facility at Abbey Farm. Work would commence later in the year, and there would be no disruption to the local community.

Should SZC be approved, several SZB buildings, such as the outage store and training building, would be relocated to the south end of the station. The scope of work would also include a new car park, training centre and administration building. Several contracts had been placed, including with local companies, to progress the buildings.

Robert Gunn noted that there had been a query regarding boundary maps. Boundary maps had been issued during the 2020 consultation. Work was taking place to minimise disruption to the local community and the station.

The amenity and accessibility fund had been running for 10 years. The 2023 funding application had closed the following week. There had been several applications.

Janet Fendley referred to the land management facility and stated that she was unsure of the reference to the existing land management base at Upper Abbey Farm. Niki Rousseau responded that the land management facility had existed at Upper Abbey Farm for the last

28 years. This would no longer be used, and a new facility would be built for the freedom group to work from.

Marianne Fellowes asked what would happen to the existing buildings at Upper Abbey Farm. Niki Rousseau said this would become part of the SZC area. Marianne Fellowes explained that she had formally requested that a SZC communications representative attend the meeting to provide further information on the boundaries.

Marianne Fellowes asked if the district survey lab (DSL) could be returned to the community if no longer required. Robert Gunn agreed to review this.

A. ACTION: Robert Gunn to review if the DSL could be returned to the community if no longer required.

Marianne Fellowes said she understood that the Suffolk Wildlife Trust no longer provided maintenance of the land. She asked who would maintain the land. Niki Rousseau responded that the Freedom Group would. Robert Gunn agreed to review this.

B. ACTION: Robert Gunn to review the boundaries and movement of other relocated buildings.

C. ACTION: Robert Gunn to provide an update from the Freedom Group regarding its maintenance of the estate.

Trever Branton highlighted the outage work and asked if any work would increase the output of the station. Robert Gunn responded that the outage work would include cleaning items, such as boiler tubes. Regarding increased generation, SZB's turbine rotors would be updated, and it was anticipated that there would be an increase in output. The reactor would remain at the same power.

Trevor Branton queried the effect that SZC would have on the output of SZB. Robert Gunn responded that it was not anticipated that there would be any significant change.

Pete Wilkinson queried the percentage of the total number of weld inspections (23%) represented. Robert Gunn responded that it represented approximately 10%. All vulnerable areas had been selected. All four cooling loops and main welds that went into the primary circuit had been covered.

Pete Wilkinson asked what would happen if the welds sheered. Robert Gunn replied that it was not anticipated that more than one weld would sheer at once. Under the approved safety case, there would still be enough cooling for the reactor.

Mike Taylor referred to the crack recently located at the Penly 1 reactor in France. The crack had appeared where previous welding had been carried out, and it had been implied that the welding had affected the structural integrity of the pipework. He asked if this was a new phenomenon. RG responded that several things could cause stress corrosion cracking. SZB had referred to its records of 30-plus years, and all inspections and weld designs had confirmed that there were no issues. The weld quality, chemistry and pipe layout was fine.

Mike Taylor referred to the welding of the overpack on the nozzles. He understood that there was to be a safety case made for this, and he assumed that there could be an assurance that this work was being carried out. Robert Gunn responded that, although no issues had been identified with the welding at Sizewell, an overlay of weld would be applied to the existing welding as a proactive measure.

Mike Taylor stated that there was a risk that SZB was attempting to conceal an issue. Robert Gunn replied that, although no issues had been identified with the original weld, it was anticipated that there would be an issue in the forthcoming years. The extra overlay would become the primary weld.

D. ACTION: Robert Gunn and Sean Verrall to produce a weld inspection report.

Pat Hogan stated that there was controversy surrounding the land transfer from SZA to SZB, as Sizewell residents were anxious to ensure that Pillbox Field was not used. Robert Gunn acknowledged this concern.

Marianne Fellowes said she understood that the arrangement to transfer the land was at an advanced stage. The only concern was that it should not automatically go through and that there should be consultation with communities. She asked why Pillbox Field had not been withdrawn from the planning application, given that EDF had committed to local residents that it would not be used. Robert Gunn said there was an intention to avoid using the Pillbox Field area.

Pat Hogan asked how the seals had entered SZB's forebay area. Robert Gunn responded that divers had inspected the pipework, and the grating at the end of the intake was in good condition. There would be a full inspection of the pipe to identify the gap.

E. ACTION: Robert Gunn will provide an update.

Mike Taylor stated that there was confusion pertaining to the land ownership. He read out the statement that accompanied the drawing. There was SZC's red line, SZB's site licensed area and SZA's area. It appeared that the facilities within the area of Coronation Wood related to SZC. This had caused confusion regarding the use of the building. Marianne Fellowes explained that the map was titled SZC as it was a SZC planning application. There was a lot of confusion for everyone in the community. Marianne Fellowes proposed a separate meeting to address the issue.

Janet Fendley asked if the 2,500 trees had been planted. Robert Gunn responded that they had been.

Janet Fendley asked if the New Emergency Centre would incorporate a green roof. Niki Rousseau responded that she believed it would be and agreed to confirm this.

F. ACTION: Niki Rousseau to confirm if the New Emergency Centre would incorporate a green roof.

Janet Fendley asked if there would be new security lighting by the car park. Robert Gunn replied that the main car park would include normal car park lights. Janet Fendley stated that she had observed that lighting had increased and was exceedingly bright.

G. ACTION: Investigation to be undertaken to monitor the lighting at the car park.

Mike Taylor said there was extra lighting in the spoil heap from the wetland creation. This was in the vicinity of Ashwood and was part of the wetland creation approved by the district council's approval for SZC's wetland creation. He asked if the lighting was acceptable in the AONB.

H. ACTION: SSG to return to East Suffolk Council to review the planning application for the spoil heap area.

Marianne Fellowes noted that a large, escorted load had left the site. She had contacted the EDF office to question the contents in the escorted load, and the individual who had answered the phone had directed her to the tracker. It had taken a week for her to receive a response, via email, though she had requested a phone call. Marianne Fellowes also noted that she had requested that an EDF SZC representative attend the SSG meeting to answer questions, as there was no separate SZC forum. Robert Gunn did not think SZC had been unwilling to engage in discussions.

I. ACTION: Robert Gunn agreed to provide feedback to the office.

4847 **Daniel Gregory (Site Inspector, Office for Nuclear Regulation)**

Daniel Gregory reported that the case for storing the single multi-purpose cannister (MPC) in the dry fuel store had been approved last year. This was a temporary case, and a long-term strategy would be developed. Feedback from the inspections had been positive. Structural weld had been highlighted. The ONR had been closely involved in the meetings pertaining to stress corrosion cracking, and the results had been encouraging.

Marianne Fellowes requested further information regarding rationale for the safety case being approved. Daniel Gregory said the safety case included two factors; safety, and whether it

was the correct thing to do. The ONR was satisfied that storing the single MPC in the dry fuel store would not result in any damage. There would also be a 15-year limit.

Marianne Fellowes asked if discussions had taken place with emergency planning and the Suffolk Resilience Forum. She also asked if the risk to the building would change. Daniel Gregory said the risk posed was bounded by the existing case. The emergency plan would not change.

Pete Wilkinson referred to the IRSN report and questioned the ONR's reaction to it. Daniel Gregory replied that he was not close enough to the EPR to comment. He would provide a response in due course.

A. ACTION: Daniel Gregory to contact colleagues more closely linked to the SZC response on the IRSN report.

Mike Taylor asked if the extra flood barriers for SZB had been installed. DG responded that all proposed actions had been completed.

Daniel Gregory noted that Paul Berenguier would be returning to France, having been seconded to the ONR. Marianne Fellowes thanked Paul Berenguier for his contributions during the SSG meetings.

4848 **Alex Lord (Environment Agency)**

Alex Lord stated that the EA had issued a joint report for SZA and SZB sites. Since the last meeting, the EA had performed assessment management, environmental governance and leadership and pre-outage inspections. Outage activities continued to be monitored.

Alex Lord referred to permit breach of the water discharge activities permit. The event had been disappointing. The sample had indicated a concentration of one part of a million, against a limit of 0.3 parts per million. The plant had been shut down, and the concentration had dropped promptly. EDF would undertake a full investigation, and the EA awaited a response. It was likely that the EA would issue a non-compliance in this area. If the full investigation indicated that there was an operator error, the EA would undertake an inspection in this area within the next financial year.

Alex Lord highlighted the environmental monitoring results There was nothing of regulatory concern.

The EA would publish its decision on the operational permits for the proposed SZC development at the end of March.The EA would undertake several communications and follow-up engagements in May.

A. ACTION: A message to be sent out to all members not in attendance to advise them on how to join the EA's stakeholder list for the engagements.

Pete Wilkinson stated that everything within the EA report was below regulatory concern and appeared to represent complacency. The *British Medical Journal* (*BMJ*) report had stated that the exposure to low levels of radiation had been underestimated and was linked to a considerable impact on cardiovascular disease. He asked if there was any concern within the EA that such reports might be correct and if the EA would review the limits that it used. Alex Lord responded that he had not read the report. The EA took advice on health impacts from the UK Health Security Agency. The EA would expect the UK Health Security Agency to consider any reports that provided evidence of new or differing information. If the UK Health Security Agency advised the EA to provide a response, it would do.

Pete Wilkinson asked if the EA had individual responsibility to check if there was evidence it was administering levels which were underestimating the impact. Alex Lord stated that the EA would forward any report to the UK Health Security Agency that it thought it should consider. The EA did not form its own opinion on health impacts and took advice from experts in the area.

B. ACTION: The *BMJ* article to be circulated to Alex Lord.

Marianne Fellowes said the EA should provide a response on its independency in terms of independent research. Alex Lord said the EA also took recommendations from the International Commission on Radiological Protection (ICRP).

Marianne Fellowes referred to the permit breach of the water discharge activities permit and noted that the sample had indicated a concentration of one part of a million, against a limit of 0.3 parts per million. She asked what would have been the worst-case scenario. Alex Lord replied that the TRO equated to the amount of disinfectant in the water. The amount of disinfectant that had entered the environment had been no more than what would have entered during the operation, but the concentration going out of the effluent had been higher. The issue had been noticed after two hours. The EA would await the full investigation.

Marianne Fellowes asked how often the water discharge was sampled. Alex Lord said it was sampled daily and manually. Marianne Fellowes stated that, in a worst-case scenario, it could have been 24 hours since the last cycle. Alex Lord said the environmental impact would be negligible.

Marianne Fellowes queried the worst-case scenario should a fish or individual ingest the concentration. Alex Lord replied that he would have to investigate the concentration on an organism, but the EA was of the view that there would be no lasting impact.

C. ACTION: The EA to provide additional information on the concentration levels of the disinfectant.

Janet Fendley noted that the chlorine added to the tap water was one part per million, but the EA was now stating that the safe level was 0.3 parts per million. There was a discrepancy. Alex Lord responded that the 0.3 had been the permit limit, but the sample had indicated 1 part per million.

Pete Wilkinson said the EA's exercise could deliver far more important results if it considered the ingestion of a microparticle of alpha. Marianne Fellowes noted that there was an outstanding action for Public Health England to address this issue.

Marianne Fellowes requested an update on the potential need for a desalination plant. Alex Lord stated that this would be considered as part of the SZC proposals. There would be engagements after the elections to address the issue.

D. ACTION: Alex Lord to provide an update on the potential need for a desalination plant.

Mike Taylor requested an update on what was permitted to be taken from the public water supply by SZB. Alex Lord agreed to obtain information on this.

Mike Taylor referred to the wave net system for monitoring the wave conditions and water temperature. It had been taken out of service for SZB but not redeployed. It had also been taken out of action at Hinkley Point C (HPC) and only reinstated when people had highlighted that it was not in operation. He did not want the situation to repeat itself at Sizewell.

Mike Taylor noted that the radiation incident monitoring network (RIMNET) had been scrapped, by decree of the Government. Alex Lord said it was being replaced by a publicly accessible system. The EA had provided links to the data. Marianne Fellowes agreed to circulate the links to members.

E. ACTION: Marianne Fellowes to circulate the link to the report for the replacement RIMNET.

SIZEWELL A REPORTS

4849 **Sohail Ashraf (Site Director, Magnox)**

Sohail Ashraf introduced Gareth Ward, Rob Dean, Wendy Heath and Ashley Lancaster, who were part of his site delivery team.

4850 Sohail Ashraf delivered his report and highlighted the following points:

- The grid sub transfer to EDF relicensing work continued;
- Black redstart nesting boxes had arrived on site, and installation work was imminent;
- Ongoing issues continued with managing seagulls.

There had been no injuries, incident or environmental events since the last period. However, there had been several hand injuries within Magnox. To combat this, there had been human performance training and an emphasis placed on psychological safety. This would be embedded over the next two to three months.

4851 Work continued on the energy efficiency campaign. The sustainability action plan included a focus on:

- Energy efficiency
- Plastic usage
- Redundant equipment

4852 Rob Dean reported on the Young Persons Network (YPN). There were three objectives:

- Retain skilled individuals;
- Be an attractive proposition for the next generation;
- Ensure that Magnox is future proof for the future.

4853 The YPN aimed to:

- Support members' development;
- Provide members with a voice into the business;
- Facilitate learning and knowledge sharing;
- Enable networking and community building
- Provide opportunities and career development.

4854 Magnox provided:

- An integrated network of colleagues across the country – promotion of shared knowledge and experience;
- Upskilling of the young workforce through L&D opportunities;
- An environment that ensures starters are up to speed as fast as possible, reducing the burden on line managers;
- Exposure to internal innovation opportunities;
- Challenge to shape working practices/workplace culture;
- Links to young people across the NDA.

Marianne Fellowes queried the difference between the YPN and the Young Generation Network (YGN). Rob Dean responded that the YGN covered young nuclear professionals across the entire nuclear industry, while the YPN was Magnox specific. Marianne Fellowes stated that it was most important that communities felt that everyone was contributing to decommissioning. Rob Dean said there were members of the YPN who were also members of the YGN.

Trevor Branton asked if there would be an attempt to build links with professional bodies. Rob Dean responded that there would be.

Mike Taylor proposed paying tribute to individuals such as Joan Girling, who had raised health concerns. He also paid tribute to the importance of the stakeholder group and highlighted the value of knowledge transfer as being extremely important. Rob Dean stated that this would

be an overall objective for Magnox. Magnox had reciprocated the feedback provided. Marianne Fellowes thanked Joan Girling and other individuals who had served on the SSG.

Sohail Ashraf said the purpose of the YPN was to interact with the future generation. Some of the initiatives were critical to Magnox's mission. The next generation would deliver the decommissioning, and it was integral for them to be part of the strategy and challenge.

Pete Wilkinson queried the licences that Magnox awaited from the ONR and EA. He also asked if it was expected that there would be any offsite radiation associated with decommissioning that Magnox awaited authorisation for. Sohail Ashraf explained that there would be a review of the work to grid off the fence lines. Work would take place with the regulators and communities regarding the licence transfer. There would be some interaction with the EA.

The residual asbestos strip work had commenced, and it was anticipated that it would be completed in May. The legacy scaffolding removal had begun, and progress had been attained. 8,000 boards and accompanying tubes were to be removed over a 12-month period.

4855 Ashley Lancaster reported on the turbine hall demolition. The turbine hall demolition had been split into four phases, which were:

- Mobilisation
- Asbestos removal and scaffolding
- De-planting in the turbine hall
- Demolition

The process was currently at the second phase. 4,600 man hours had been spent on scaffolding activities and 7,250 man hours on asbestos removal. Three skips had been exchanged, and 2,000 scaffold boards had been installed. The mobilisation had been completed in October 2022, and asbestos removal and scaffolding was due to finish between May and September. The de-plant would start in May, and the demolition would take place from late 2024 to early 2025.

A video was played showing the Dungeness A crane removal.

Janet Fendley asked where the asbestos was disposed. Ashley Lancaster responded that it went to a landfill that was approved to dispose of asbestos.

Janet Fendley asked what monitoring was taking place for individuals at SZA who were working with Asbestos. Ashley Lancaster explained that employees received a yearly asbestos medical and annual asbestos training. There would also be an annual fit-for-work examination. Sohail Ashraf said Magnox had to comply with the control of asbestos regulations.

Cllr Peter Palmer asked what form of asbestos had been lurking in SZA. Ashley Lancaster stated that the turbine hall bulk asbestos had been removed previously. The current work entailed dealing with residual asbestos. It had been difficult to access some areas to take samples of the asbestos. It was being dealt with as a worst-case scenario.

4856 **Asset Management**

Sohail Ashraf reported that work to widen the south road had been completed. Concrete repairs were underway, and further work continued to relocate the portacabins. Air conditioning replacements continued. Top duct T hanger inspections had been completed.

4857 **Bradwell Management**

The inspection campaign had been completed in November. Government officials from the Department for Energy Security and Net Zero and Centre for the Protection of National Infrastructure (CPNI) had visited Bradwell.

A. ACTION: Sohail Ashraf agreed to show a video of the Bradwell site at the next SSG.

Bradwell was reviewing how it managed its risk. Work was taking place with the regulator.

4858 **Update on *East Anglian Daily Times***

The *East Anglian Daily Times* had visited the site on 14 March. The visit had been positive.

4859 **Sizewell Applications**

Leiston Events Group had submitted a successful funding application for the Christmas lights replacement. Sohail Ashraf reminded the SSG of the good neighbour funding. He hoped that local residents would promote this within the local community.

Pete Wilkinson noted that there were a lot of contaminated areas of ILW on site. Sohail Ashraf stated that 99% of SZA's nuclear materials had been removed. There was still some ILW waste to process, but the main hazard had been removed. SZA would move from a nuclear operator mindset to managing the conventional health and safety side. Sohail Ashraf stated that managing the radiological waste was equally as important as managing the conventional health and safety aspects.

Pete Wilkinson said he assumed that a huge amount of graphite remained on site at SZA. Sohail Ashraf said all graphite remained within the reactors at SZA and Bradwell. However, it was in a sealed reactor unit and was in a safe condition. SZA would have to review how it would dispose of the graphite in the future. SZA's current journey was towards care and maintenance and dealing with the ILW waste. The ILW waste would be packaged and either disposed of or stored at the ISF facility (at Bradwell).

4860 **John Rogers (Site Inspector, Office for Nuclear Regulation)**

John Rogers noted that his site report had included an LC11 inspection. The inspection had been positive, and SZA had obtained a green rating.

The turbine hall demolition had been inspected by John Rogers and an ONR conventional health and safety inspector in February. The ONR had been impressed by how Magnox and Erith had approached managing, planning and executing the work. Magnox had achieved a green rating.

John Rogers referred to the Construction Design and Management (CDM) regulations. The ONR was generally pleased with how Magnox was implementing its arrangements for the regulations, but there was a concern regarding certain aspects with the planning. There was a conflict between how Magnox planned, engineered and carried out work under the terms of the licence conditions. This would be addressed with Magnox.

John Rogers explained that an ONR specialist had carried out an inspection at SZA, under the Ionising Radiations Regulations (IRR). The inspection had been rated as green, and SZA had been commended on several good practices. On 14 March, John Rogers had conducted a Licence Condition 7 inspection. The inspection had been rated as green. One of Magnox's sites had not obtained a good health and safety finding, and enforcement action would be taken. John Rogers had asked SZA to talk to the other site to identify the issues and obtain learnings from the site.

John Rogers reported that there was a programme of work for pond skip removal. He had been encouraged by the manner that SZA had worked with Dungeness to develop safe systems of work. Magnox had carried out work on methods and disposal routes for the skips, and it had been concluded that the radiological characterisation information was no longer suitable, and another sampling regime would need to be carried out.

John Rogers noted that he had previously discussed the ONR's discussions with the NDA regarding levels of contamination. The NDA had provided a draft paper which considered all options. The log jam would soon be unlocked, which would allow Sohail Ashraf to continue with the decommissioning exercise.

Pete Wilkinson asked if the skips at SZA were ILW or low-level waste. John Rogers responded that the skips at SZA were low-level waste, while the ones at Dungeness were thought to be ILW.

Mike Taylor highlighted the Government consultation on radioactive waste management. Marianne Fellowes proposed a subgroup to review this.

A. ACTION: The Government consultation on radioactive waste to be addressed via a subgroup.

4861 **Peter Reynolds (Environment Agency)**

Peter Reynolds reported that, in the last few months, one inspection had taken place at SZA. The EA was satisfied with the arrangements in place to train and replace staff. The EA had also reviewed SZA's radioactive waste advisor capacity. Peter Reynolds had been content that all 17 areas set out in the syllabus for an RWA had been covered.

Peter Reynolds had reviewed the environmental events, and he was satisfied that there was good process. The next inspection would review the environmental culture and leadership.

Peter Reynolds reported on the monitoring of non-radioactive discharges. There would be three to four monitoring exercise per year at SZB. The SZA surge plant outlet was no longer inspected, as it was deemed to be low risk.

Peter Reynolds referred to the RIMNET replacement and stated that he would check if it was possible for the SSG to receive a password to review the live data. He confirmed that there had not been a change to the monitoring. Peter Reynolds would also ascertain the location of the closet mobile station to Sizewell.

A. ACTION: The outstanding action pertaining to fish management would need to be addressed by SZB.

Pete Wilkinson asked why SSG needed to have a password to review the RIMNET live data. PR responded that everyone required a password in order to maintain control of the system. Pete Wilkinson said he suspected that the aim was to control the information rather than the system.

Karl Littlewood explained that the RIMNET system was not owned by the EA. If the SSG had queries about access, they should be directed to the appropriate party. Pete Wilkinson said the public was entitled to know about the air that it was breathing. The EA should be informing BEIS to provide the information to the public. Karl Littlewood stated that the EA was not the regulator for the information. Marianne Fellowes asked who owned the data. Peter Reynolds replied that it was owned by BEIS.

B ACTION: Peter Reynolds to approach BEIS regarding if the SSG could obtain access to the RIMNET data.

Peter Reynolds noted that he would be leaving Sizewell and introduced James Heavingham, who would replace him. Marianne Fellowes thanked Peter Reynolds for the service that he had provided to SZA, SZB and the SSG.

NDA REPORTS

4862 **Simon Napper (NDA)**

Simon Napper delivered his report to the SSG and highlighted the following points:

4863 **Energy Department.**

The Department for Energy Security and Net Zero would be referred to as the Energy Department. Grant Shapps, the prior Secretary of State for BEIS, was now the Secretary of State for the Energy Department. All civil servants in the nuclear department had transferred across. A permanent secretary at BEIS had departed, and Jeremy Pocklington, a permanent secretary from DCMS, had come in.

Andrew Bowie had been announced as the UK's first Nuclear Minister.

A stakeholder survey had taken place over the summer. 800 people had partaken in the survey. Key indicators on trust, transparency and openness had increased. People had also said they wanted to know more about the technical information.

A stakeholder summit had been held in Edinburgh in September 2022. A virtual summit would take place in October. In-personal regional events would also take place during 2023.

The Nuclear Industry Association (NIA) had held its annual week in parliament in January. The NDA had sponsored a reception for parliamentarians, highlighting its decommissioning work, as well as sponsoring a skills fair.

4864 **NDA and New Nuclear**

The NDA waited to hear about Great British Nuclear. The NDA had been approached by several technology providers, and it had only provided publicly available information.

4865 **Decommissioning and waste management consultation**

The decommissioning and waste management consultation had been issued at the end of February and would last for 12 weeks. The consultation would update and consolidate the policies. The Government, rather than the NDA, would lead the consultation. Simon Napper noted there were two documents on the website. Document 1 was proposed changes to existing policies, and document 2 entailed how everything would look if the changes were approved.

4866 **NDA Graduate Scheme**

The NDA had introduced an NDA-wide graduate scheme. This had commenced in January, and applications were being accepted.

4867 **Concrete Box**

The first concrete box of radioactive waste had been filled and transferred into the purpose-built store at the Berkley site at the end of 2022. The technology would be rolled out to other sites as appropriate.

Time Magazine had detailed Lyra as one of its top 200 innovations of 2022.

4868 **Working Together to find a Solution**

Sellafield had encountered an issue with contaminated chemical waste in one of its stores. It had worked with Nuclear Waste Services (NWS)'s waste management division to redesign an existing waste drum to allow it to move the chemicals to different parts of the site.

Marianne Fellowes proposed a more detailed presentation on waste management, RDM and GDF in the future. Simon Napper said discussions had taken place with NWS, and a director was due to attend the next SSG meeting.

Pete Wilkinson noted that there had been a residual amount of Magnox fuel which had had to be reprocessed at Sellafield. He asked if a residual amount still needed to go be reprocessed. Simon Napper said he understood that Magnox's reprocessing had ceased. A certain number of residual materials had not been reprocessed. This would be safely stored at Sellafield until they could be safely disposed of in the GDF. Pete Wilkinson stated that he had been informed that Magnox waste could not be stored in water as it decayed. He asked why the residual waste had not been stored as opposed to being reprocessed. Simon Napper responded that this was not his area of expertise. However, he agreed to review this.

A. ACTION: Simon Napper to provide an update on waste management, RDM & GDF. And a response to Pete Wilkinson's question regarding why the residual waste had not been stored.

Marianne Fellowes stated that it would be interesting if the reprocessing had been initiated before ceasing. Simon Napper said he understood that it had stopped, though there had been some material that had not been processed that was being dealt with separately.

MAGNOX CORPORATE UPDATE

4869 **Bill Hamilton (Magnox)**

Bill Hamilton delivered his report to the SSG and highlighted the following points:

A new SSG website had been launched. The site would adapt and change over time.

The NDA had published a draft business plan in December. The current strategy of all Magnox sites was to move to care and maintenance. Magnox would move towards a different strategy for decommissioning. Sohail Ashraf and his team would create a stie specific strategy for the decommissioning of SZA, with the target of reaching final site clearance in the 2070s. Over the next decade, Magnox would:

- Expand its management of sites from 12 to 20;
- Increase its employee headcount from 3,000 to 6,000;
- Increase its annual budget from £500,000 to £1 million-plus.

The seven advanced gas reactors owned by EDF would transfer to NDA ownership and then through to Magnox to carry out the decommissioning. Magnox would undergo a rebranding process.

The NDA had received additional funding to assist communities close to each Magnox site with the cost-of-living crisis. Money had been provided to East Suffolk District Council to allocate to the young people's cost of living project, the Leiston Primary School community pantry and Christians Against Poverty.

Marianne Fellowes noted that the new website did not include archive documentation. She stated that the website had to include archived documentation and links to EDF.

Pete Wilkinson asked if the decommissioning of the AGRs would be paid for by the Nuclear Liabilities Fund. Bill Hamilton responded that it would be. A deal had been agreed between the Energy Department, EDF and the NDA regarding EDF defueling the sites, before passing them over to Magnox. The funding would then emanate from the Nuclear Liabilities Fund. Magnox had stated that it would require access to the Nuclear Liabilities Fund prior to the completion of the defueling. Magnox was extremely alert to the fact that the funding for the decommissioning of the AGRs had to emanate from the Nuclear Liabilities Fund. Marianne Fellowes thanked Simon Napper and Bill Hamilton for their attendance.

MATTERS ARISING FROM MINUTES AND ACTION TRACKER

4870 Any questions pertaining to the minutes of the last meeting, action tracker or matters arising from the meeting should be emailed to the secretariat.

CHAIRMAN'S REPORT

4871 Information has been included verbally.

ANY OTHER BUSINESS

4872 Marianne Fellows thanked all present for their attendance. There being no other business, the meeting was closed.

Next Meeting dates: Thursday 29 June and Wednesday 20 September 2023.

Sizewell Stakeholder Group

Sizewell B report – June 2023

EDF Energy Ltd. *Registered in England and Wales. Registered No. 2366852. Registered office: 90 Whitfield Street, London W1T 4EZ*

20/06/2023

Sizewell B report – June 2023

1. Safety performance and staffing

Station Safety Performance

We measure our safety performance against top tier indicators, including nuclear reportable events, environmental events, and staff and contract partner recordable injuries.

During the period of the report there have been:

- No recordable injury
- No nuclear reportable incidents
- No environmental incidents

Staffing at Sizewell B

We currently have **565** EDF staff this includes **9** Apprentices, **2** Industrial placements, **2** Technical Trainees, and **10** Visitor Centre staff and **250** year round contracting partner's.

2. Operations

Turbine generator 1 pipework repair

Turbine generator 1 was taken offline at Sizewell B on Monday 19 June 2023, to complete a repair to a section of its pipework. This is in the non-nuclear area of the power station.

The reactor and turbine generator 2 continue to supply safe, low-carbon electricity.

Sizewell B back generating after successful outage

Sizewell B returned to service on Friday 19 May following the successful completion of a planned maintenance and £80million investment programme.

The work completed at the station lays the foundation for another 18months of low carbon generation and planned investment of over £300million over the next three years will continue to improve reliability, performance and strengthen the case for a 20 year extension to 2055. The latest investment programme at the power station included replacing one of the two rotors that are responsible for turning the turbine that makes the power, replacement of one of the four reactor coolant pumps inside the iconic dome and routine servicing of valves and motors.

The outage enabled a complete inspection of the primary circuit of pipes for any signs of stress corrosion cracking. This is a known issue that can sometimes occur due to mechanical stress and

corrosion. The primary circuit was given a clean bill of health by engineering experts familiar with the issue.

Preparation work for the outage begins at least two years in advance of refuelling the reactor as part of a ten-year strategic plan at the power station.

As a low carbon electricity generator, Sizewell B's long-term operation will be key in supporting the UK's 'Net Zero' climate change ambition. By 2028 Sizewell B is due to be the only generating nuclear power station from the existing fleet. Sizewell B will grow its workforce by 10% to support long term operation.

Together Sizewell B, Sizewell C and Hinkley Point C could deliver reliable low carbon power for more than 15million homes and enable the growth of the UK renewables sector.

3. Sizewell B and community news

Relocated facilities update

Sizewell B Relocated facilities project reaches a milestone as the installation of the steelwork structure of the new training facility is completed. The six week program of works carried out by Norfolk based company Wall Engineering, working for Barnes construction.

Negotiations for utilisation of land within Sizewell A in preference to Pill Box Field, are progressing well and EDF is close to being able to secure the land. In the meantime NDA have commenced the statutory de-designation process which is an important part of the transaction's critical path. (de-designation is a process required by statute to remove the land from its decommissioning designation.)

Construction of new land management facility near the Emergency Response Centre, Sizewell Halt

EDF will be building a new land management facility near the existing Emergency Response Centre (ERC) at Sizewell Halt. The facility will be a single story building containing office space, a meeting room, storage area, welfare facilities and a maintenance workshop, with parking. The facility will be used by EDF's land management team and contractors from Freedom who have been with us for many years.

There will be approximately 6 people using the facility for general office work and for storage and maintenance of the land management equipment and vehicles, which are used for managing the Sizewell Estate land. The new facility will replace the existing land management base at Upper Abbey Farm.

The new building is to be constructed with functionality and sustainability at the forefront of its design. It is proposed to be a timber frame structure to the office element of the building with steel frame

portal frame to the rear. It will be timber clad with a sedum (living green) roof. Eco-friendly fixtures and fittings will be installed with emphasis on providing heating and hot water efficiently.

Subject to the contractor appointment process, construction of the facility is currently scheduled later this year.

Approved planning application can be viewed via East Suffolk Council website: DC/22/4608/FUL

Combat2Coffee helps raise awareness of Mental Health at Sizewell B

Sizewell B hosted Combat2Coffee in May, just one of the events in a packed agenda for employees as part of Mental Health Awareness week.

Combat2Coffee was formed as a support outlet for Armed Forces veterans who may be struggling with life outside of service. Combat2Coffee was formed by Nigel Seaman after being diagnosed with PTSD that was linked to service around 2 years ago. Nigel had always had this fascination to work with coffee and decided to use coffee as the vehicle to help others. Wanting the Journey to be end to end he decided to use another veteran who roasts coffee beans to roast the Combat2Coffee Recovery Blend, this is where the slogan "Roasted, Toasted and Poured By Veterans" originates from.

Staff at the station got to meet some of the Combat2Coffee team over a coffee and a cake.

4. Company News

End of generation at West Burton A

West Burton A closed at midnight on 31 March 2023, completing an agreement signed with National Grid ESO last year. The station and its workforce have fulfilled the request to have 400MW available through Winter 2022 to 2023 as an emergency standby option and from 1 April the whole station moved into full decommissioning.

The coal-fired power station in North Nottinghamshire has been a terrific servant for UK plc since 1966 (57 years) it has supplied electricity and a great debt of gratitude is owed to all the people that have worked there over the years. During its 57 years of operation, West Burton ran four 500MW units with a total generation of 491,792 GWh, which is enough to power 164 million houses for a year or every house in London for 44 years. The last Generation took place Tuesday 7 March 2023 with both remaining units (1 and 2) delivering the last of the station's power to Grid.

Decommissioning will now take place at the West Burton A site, removing oil and fuel from the plant and terminating any power connections. Once this is complete by December 2023, the principal demolition contract partners will work on removing structures from the site until it is at ground level.

This is an end of an era with the site handing over the legacy of generation to the power of the future. The UK Atomic Energy Authority (UKAEA) plan to build the UK's first ever prototype fusion power station at West Burton.

EDF confirms plans to keep turbines turning at Heysham 1 and Hartlepool power stations

Heysham 1, in Lancashire, and Hartlepool, in Teesside both mark 40 years of generation this year. In 2009, when EDF took responsibility for the fleet, they were due to end generation in 2014. EDF invested significant resources to enable the forecast to move to 2024. This has now been moved out by a further 2 years to March 2026.

The decision has been made after a rigorous review by EDF of the technical and commercial cases for life extension.

In particular, positive inspections of the graphite reactor cores during 2022 have increased confidence that the stations can generate for longer and continue to meet stringent regulatory standards.

The additional 29TWh of electricity these stations could generate over that 2-year period could help to displace 6billion cubic metres of gas. The carbon avoided from this displacement is 10million tonnes, like taking 5m cars off the UK's roads for a year.

Since taking responsibility for the existing UK nuclear fleet in 2009 EDF has invested more than £7billion to support extended operating lifetimes and help UK energy security. Output from the fleet has been more than 30% above what was expected when EDF took on the fleet. Over the next five years (2023-27), the aim is to invest more than £1.5billion to sustain safe and reliable generation, alongside preparing for and delivering defueling.

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Office for Nuclear Regulation

ONR Site Report

Magnox Ltd – Sizewell A

ONR Site Report

Magnox Ltd –Sizewell A

Report for period: 1 January – 31 March 2023

Authored by: J Rogers, ONR Nominated Site Inspector

Approved by: I Phillips, ONR Sueprintending Inspector – SDFW Division

Issue No.: 1

Publication Date: April 2023

ONR Record Ref. No.: 2023/21281

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 Sizewell Stakeholder Group and are also available on the ONR website (http://www.onr.org.uk/llc/).

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

Contents

1. Inspections

1.1. Date(s) of Inspection

The ONR site inspector and specialist inspectors made inspections on the following dates during the report period 1 January – 31 March 2023:

1 February 2023

15 February 2023

14 March 2023

2. Routine Matters

2.1. Inspections

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

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

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

In this period, routine inspections of Sizewell A site covered the following:

- Management of decommissioning including control and supervision

This inspection, which was rated "Green" under the ONR Inspection Rating Guide, targeted the turbine hall demolition project and the boiler house legacy scaffold removal project. ONR was generally satisfied with the evidence presented and the control and supervision demonstrated, however there were some minor shortfalls with the management of the projects which ONR will discuss with Magnox Corporate.

- Radiological protection

This inspection, which was rated “Green” under the ONR Inspection Rating Guide, was carried out by ONR radiation protection specialist inspectors. No shortfalls were identified.

- Incident reporting and investigation

This inspection, which was rated “Green” under the ONR Inspection Rating Guide, targeted the standard of incident investigation and reports. No shortfalls were identified.

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.

2.2. Other Work

During the period the ONR site inspector and ONR licensing specialists attended a virtual meeting with Magnox Ltd and EDF where the licensees presented their proposals for relicensing a section of Sizewell A land to Sizewell B. This was a useful meeting which enabled all stakeholders to gain a better understanding of the licensee’s proposals. Further meetings are expected before a formal application for the relicensing is made.

3. Non-Routine Matters

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

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

4. Regulatory Activity

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

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

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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Office for Nuclear Regulation

ONR Site Report

EDF Energy Nuclear Generation Limited – Sizewell B

ONR Site Report

EDF Energy Nuclear Generation Limited - Sizewell B

Report for period: 01 January – 31 March 2023

Authored by: D Gregory, Nominated Site Inspector

Approved by: I Bramwell, Head of Operating Reactors Sub-Division

Issue No.: 1

Publication Date: June 2023

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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 Sizewell SSG and are also available on the ONR website (http://www.onr.org.uk/llc/).

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

Contents

1. Inspections

1.1. Date(s) of Inspection

ONR inspectors made inspections on the following dates during the report period 1 January to 31 March 2023:

- 10 to 12 January
- 8 February
- 28 February to 2 March
- 6 to 9 March
- 14 to 16 March

2. Routine Matters

2.1. Inspections

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

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

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

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

- examination, maintenance, inspection and testing;
- modifications to plant, equipment and safety cases.

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.

Refuelling outage 18

The majority of the inspections during the report period were associated with Sizewell B's refuelling outage, RO18, which is described in more detail in section 4. The main requirements ONR seeks to confirm during a periodic shutdown are:

- Examination, inspection, maintenance and testing (EIMT) activities required in support of the station's safety case have been carried out, by suitably qualified and experienced persons, with an appropriate level of supervision and quality assurance.

- Safety issues identified during the reactor outage have been adequately addressed with suitable and sufficient justification provided to allow a regulatory judgement to be made that start-up of the reactor is safe and will remain safe until the next periodic shutdown.

To this end, inspections were carried out by inspectors from the following disciplines over the course of the outage:

- Civil engineering;
- Structural integrity;
- Mechanical engineering;
- Electrical engineering;
- Control and instrumentation;
- Fuel and core;
- Chemistry;
- Radiation protection.

The inspectors were satisfied that the licensee had carried out EIMT in accordance with the requirements of its maintenance schedule, and that the work was conducted to the required quality standards by competent personnel. They found no issues of significance that would prevent the start-up of the reactor. As a result, ONR issued a consent for restart as described in Section 4.

Heating, ventilation and air-conditioning chillers

The Sizewell B safety-significant heating, ventilation and air-conditioning (HVAC) chillers have been found to have an in-service availability history which is worse than that assumed by the station safety case. These chillers are part of the HVAC systems which maintain acceptable temperatures for safety critical equipment. The licensee is therefore delivering a programme of work to justify replacement of the chiller units at Sizewell B.

In advance of the chiller replacement, a justification for continued operation (JCO) has been produced. This includes temporary measures at Sizewell B to manage the situation should existing chillers fail. The site inspector, supported by a control and instrumentation specialist inspector, carried out an inspection of the implementation of this JCO at the station, ahead of the warmer summer ambient air temperatures.

The inspectors:

- Held discussions with operations duly authorised persons (DAPs) and observed their ability to locate and interpret the relevant tech spec action condition logic and alarm sheets.
- Questioned the DAP's decision-making processes in the case of a room overtemperature and were satisfied that appropriate action would be taken.
- Reviewed technical specifications and their supporting bases associated with safety classified equipment room temperature and found that they reflected the operating rules derived in the safety case.
- Reviewed associated alarm sheets and found that they had been updated in accordance with the JCO, containing appropriate guidance with regards to deploying temporary chillers and isolating non-essential equipment.
- Sampled recently completed maintenance records in order to ensure that the equipment which is claimed in the JCO is being adequately maintained, concluding that appropriate maintenance activities were being undertaken and satisfactorily recorded.

From the evidence sampled during the inspection, the inspectors judged that the implementation of the measures identified in the HVAC JCO was adequate and that the chiller issues were being adequately managed locally at the station.

3. Non-Routine Matters

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

There were two matters of particular note during the period, both of which were concerned with the return of the reactor to power at the end of the outage.

When restarting the reactor, the operators first need to raise the temperature and pressure of the primary circuit, before then going critical.

There are a number of tests that are done at this time, because they can only be done either with the primary circuit intact again (i.e. with the reactor pressure vessel head back on) or with the primary circuit pressurised (to various degrees).

Two such tests revealed problems with valves on two different systems, which required rectification by the licensee and led to a delay in the restart of the reactor. ON was informed by the licensee of both issues, and was kept apprised of efforts to resolve them. ONR is satisfied with the steps taken by the licensee, and considers that at no point was there a threat to nuclear safety.

Reactor vessel head vent system valves

The reactor vessel head vent system is a manually operated system which allows the operator to reduce the pressure in the primary circuit during a fault scenario by venting the primary circuit into a tank inside containment. There are two separate head vent lines, and a pair of valves provides isolation for each line. During testing, one of the pair of valves on one of the lines failed to operate correctly. The site brought in the valve manufacturer, who was able to fix the valve.

Reactor coolant system pressure isolation valves

The Sizewell B primary circuit operates at high pressure. Several safety systems interface with the primary circuit to inject water into the primary circuit at lower pressures, either during outages or in fault conditions. As these systems are designed for much lower pressures they normally need to be isolated from the primary circuit to prevent leakage or overpressure. This isolation is achieved through the use of a set of non-return valves, collectively termed 'Reactor Coolant System (RCS) Pressure Isolation Valves'.

All RCS Pressure Isolation Valves need to be tested for leakage prior to returning the reactor to power following an outage. One of these RCS Pressure Isolation Valves experienced high leakage when tested at the end of RO18 (all the other RCS Pressure Isolation Valves passed their leakage testing). To fix the valve, the reactor

was depressurised in accordance with the technical specifications. Station staff then intrusively examined and repaired the valve in question.

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.

The following LIs, Enforcement Notices and Enforcement letters have been issued during the period:

- Consent 561. Sizewell B’s operating cycle lasts approximately 18 months, after which it is required to shut down so that it can be refuelled. When refuelling is undertaken, some of the fuel assemblies (around one-third) are replaced with new ones. The existing fuel assemblies are returned to the core in a rearranged array to ensure optimum fuel utilisation.

  To continue to operate safely and reliably the reactor plant requires regular EIMT. Continuous improvement also requires plant upgrades to be implemented where deemed to be reasonably practicable. Whilst some of these activities can safely take place when the reactor is operating at power, many of them require the reactor to be shut down. The refuelling outages at Sizewell B provide the opportunity for undertaking such activities.

  The requirement to shut down periodically for the purposes of EIMT is captured in LC 30. LC 30(1) states that “when necessary for the purpose of enabling any examination, inspection, maintenance or testing of any plant or process to take place, the licensee shall ensure that any such plant or process shall be shut down in accordance with the requirements of its plant maintenance schedule referred to in Condition 28”. LC 30(3) further states that “The licensee shall, if so specified by ONR, ensure that when a plant or process is shut down in pursuance of paragraph 1 of this condition it shall not be started up again thereafter without the consent of ONR”.

  The reactor at Sizewell B was shut down on 17 February 2023 for its eighteenth refuelling outage, RO18. ONR carried out inspections throughout the outage, as described in Section 2, on the basis of which it issued LI 561 to provide its consent to restart the reactor, as required by LC 30(3).

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

Date	Type	Ref. No.	Description
25/04/23	Consent	561	Consent to the start up of the Sizewell B reactor

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

5. News from ONR

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

6. Contacts

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Sizewell Sites Stakeholder Group Report

This report covers the Environment Agency's regulation of Sizewell A & Sizewell B nuclear sites and related issues for the period January to June 2023.

Our Regulation

We regulate radioactive waste disposals and discharges to the environment. We do this by placing limits and conditions in environmental permits, which helps us to ensure that radioactive waste discharges are minimised, and that the environment is protected. We carry out a variety of regulatory activities to check for compliance with our regulatory requirements, including site inspection, review of documents and arrangements and any reports of events.

Details of our assessments and any non-compliances identified are included in Radioactive Substances Compliance Assessment Reports (RASCARs), which are placed on our public register. See the 'further information' section at the end of this document to find out how to request documents from our public register.

We regulate and control other activities through our environmental permits, including surface water discharges to surrounding water bodies and emissions to air from emergency diesel generators. We are also the joint competent authority, alongside the Office for Nuclear Regulation (ONR), for the Control of Major Accident Hazard (COMAH) regulations that apply to Sizewell B.

Information on environmental permits and our regulation of the Sizewell sites can be found at: https://www.gov.uk/guidance/sizewell-nuclear-regulation

Site regulation

Sizewell A

We continued to hold monthly remote meetings with Magnox to discuss work taking place on site that could have an environmental impact. We reviewed the quarterly discharge monitoring and environmental monitoring reports for Sizewell A.

In June, we inspected the management and monitoring of gaseous and aqueous disposals at Sizewell A. Aspects we investigated included a review of the systems, processes and procedures used to manage and monitor gaseous and aqueous discharges. We also visited the sampling and monitoring locations at site and assessed the maintenance regime and asset management of gaseous and aqueous discharge systems.

Sizewell B

Alongside our inspection programme, we have maintained bi-weekly telephone and regular email contact with EDF, and routine review of returns.

In January 2023 we carried out an inspection of EDF's governance and leadership at Sizewell B. We saw evidence that EDF's management, leadership and organisational capability is sufficient to ensure compliance with its environmental permits. We concluded that EDF continues to meet our expectations and principles for management and leadership for the environment. No non-compliances were identified.

In advance of Reactor Outage 18 (RO18), we carried out an inspection focusing on waste management and preparations for the outage. This indicated that outage activities, environmental risks and wastes were well understood. We saw strong leadership and ownership of environmental and waste issues from contractor Equans. In March we attended the RO18 start-up meeting at site alongside the ONR, to review outage status and activities, and the case for return to service. In April we confirmed to the ONR that we had no objection to the restart of Sizewell B following RO18. In July we will carry out a post-outage inspection, reviewing activities and management of wastes generated.

At the start of the outage, on shutdown of main cooling water pump, electro-chlorination dosing of water continued. During routine main cooling water sampling the Total Residual Oxygen (TRO) concentration recorded was in the region of 1ppm, above the permitted limit of 0.3ppm. The electro-chlorination plant was shut down and TRO concentration subsequently reduced to below the specified limit. The actual impact on the environment was considered minimal given the level of dispersion in the outfall to the sea and the event was of a transient nature only. EDF promptly notified us of the event and exceedance. For context, the TRO concentration recorded would be within tap water guidelines for England and Wales.

Enforcement

Following notification of the breach of TRO limit, we issued CAR I/0749384, along with a CCS3 non-compliance score. In respect of the non-compliance, we issued EDF with a warning, but do not intend to take further enforcement action. We will review EDF's investigation into the event to understand the root cause, and will undertake an inspection of control of work and configuration management.

We have not taken any enforcement actions at Sizewell A in the period since the previous SSG meeting.

Environmental Permitting

Sizewell A

There have been no changes to Magnox's Sizewell A permits in the period since the previous SSG meeting. In the next year, we are expecting a joint partial permit transfer application from Magnox and EDF to transfer an area of land currently within the Sizewell A site boundary, known as the grid substation land, from Magnox to EDF.

Sizewell B

There have been no changes to EDF's Sizewell B permits in the period since the previous SSG meeting. The above joint partial permit transfer application will seek changes to the EDF permit boundary for Sizewell B.

Discharge Reports

The sites' environmental permits require the operators to use Best Available Techniques (BAT) to manage their operations so that wastes are minimised along with their impacts on the public and wider environment. Disposal of wastes – as solids, liquids, or gases – can only be made via permitted routes or by transfer to permitted sites.

Magnox and EDF are required to report liquid and gaseous discharges to the environment to us on a regular basis. These reports are placed on the public register. We examine these reports and detail our assessment of their performance through RASCARs.

Sizewell A

At Sizewell A Magnox are required to report liquid and gaseous discharges to the environment to us on a quarterly basis, within 30 days of the end of the quarter. Reports received in January and April 2023, covering the reporting period October 2022 to March 2023 (inclusive) showed that all liquid and gaseous discharges from Sizewell A were at levels well within permitted limits. No discharges were made via the main radioactive effluent route during the reporting period.

Low volumes of treated effluent were discharged from the sewage treatment plant, which serves both Sizewell A and Sizewell B sites. The plant is managed by Magnox. Effluent is monitored at quarterly intervals for the presence of tritium or caesium-137. No radioactivity above limits of detection was reported in samples taken during the period covered in this report.

Gaseous discharges from Sizewell A are very low compared to when the site was operational (pre-2007). Gaseous discharges are fairly constant as the site's reactors are now “breathing” passively. This means there is no forced flow of air through the reactors and discharges follow a seasonal pattern across the year influenced by barometric pressure, and weather conditions.

Sizewell B

Liquid and gaseous discharges from Sizewell B have remained within permitted limits for the period October 2022 to March 2023 (inclusive), and returns were submitted to us within the required timescales. 12-month cumulative gaseous discharges of carbon-14 remained less than 76% of the annual limit, with other gaseous discharges less than 25% of respective annual limits. Liquid discharges were in-line with expected levels and remain less than 42% of the annual limit for tritium, and less than 7% for caesium-137 and other radionuclides.

Environmental Monitoring

We carry out sampling and analysis under our independent environmental monitoring programme, in association with the Food Standards Agency. The results of this work are published in our annual Radioactivity in Food and the Environment (RIFE) report. The Sizewell sites are considered together for the purposes of environmental monitoring.

The monitoring data for the calendar year 2021 was published in RIFE report 27 (RIFE 27) in November 2022, and can be found at: https://www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rife-reports. For Sizewell, the total dose for the representative person was 0.016mSv in 2021, less than 2% of the government derived limit to protect members of the public. Levels of radioactivity found in the environment remain low.

In parallel to this programme, the operators are required to carry out their own programme of environmental monitoring and to submit the results of this programme to us on a periodic basis. This is carried out jointly by Magnox and EDF. We received the latest environmental monitoring report in March 2023, for the quarter October to December 2022.

A sand and sediment sample at Sizewell Beach from October indicated higher levels of potassium-40 and ‘gross beta’, compared with the previous 12 results. Potassium-40 is reported as an indicator of grain size. Smaller average grain size increases the surface area per unit mass of the sediment, increasing the adsorption of radioactive elements. The higher potassium-40 measurement is therefore an indicator of smaller sediments being collected. The higher 'gross beta' measurement is thought to be a result of this higher potassium-40 content and caused by a smaller sediment size being collected compared with the previous 12 results. The results remain below regulatory concern and demonstrate the effectiveness of the operators' programme and analysis in identifying and informing results of interest. The results continue to be consistent with our independent programme and do not indicate any other concerning results or trends. We make the information from both operator and our own environmental monitoring programmes available on our public register.

Sizewell C

On 28 March 2023 we issued three new environmental permits to NNB Generation Company (Sizewell C) Limited for a new nuclear power station to be built at Sizewell. The permits will allow the operator to carry out radioactivity substances, combustion, and water discharge activities. NNB Generation Company (Sizewell C) Limited applied for the permits in May 2020, and we consulted on the application from July to October 2020 and on our proposed decision and draft permits from July to September 2022. More information can be found at: https://www.gov.uk/government/consultations/sizewell-c-environmental-permits-for-a-new-nuclear-power-station. Our plan on how we will engage with the public and stakeholders can be found at: https://www.gov.uk/government/publications/sizewell-c-engagement-plan.

Further Information

The Environment Agency's Nuclear Regulation Group (South) (NRG(S)) is responsible for the environmental regulation of radioactive waste disposals on or from nuclear licensed sites in southern England and Wales. We work closely with local Environment Agency teams as well as external bodies such as the Office for Nuclear Regulation.

The Environment Agency’s Lead Regulator for Sizewell B site is Alex Lord. James Heavingham took over from Peter Reynolds as lead regulator for Sizewell A site on 01 April 2023.

NRG(S) Address	Environment Agency, Nuclear Regulation Group, Red Kite House, Howbery Park, Wallingford, Oxfordshire, OX10 8BD
Email	nrg.south@environment-agency.gov.uk
Local Office Address	Environment Agency, Iceni House, Cobham Road, Ipswich, Suffolk, IP13 9JD

For regular updates on our work in regulating radioactive substances and nuclear sites visit our Linkedin page:

https://www.linkedin.com/showcase/regulating-radioactive-substances

A public register service is available on the GOV.UK website at:

https://environment.data.gov.uk/public-register/view/index

Alternatively you can request access to public documents directly by contacting the Customers and Engagement Team in the Wallingford office. Please email:

WTenquiries@environment-agency.gov.uk

Further information on how we regulate different types of nuclear sites, and protect people and the environment is available on the GOV.UK website at:

https://www.gov.uk/guidance/nuclear-sites-environmental-regulation

Our enforcement and sanctions policy is publicly available on the GOV.UK website at:

https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy

Our public participation statement on when and how we consult on permit applications is available here:

https://www.gov.uk/government/publications/environmental-permits-when-and-how-we-consult

UK Health Security Agency has placed guidance on ionising radiation dose comparisons on the GOV.UK website at:

https://www.gov.uk/government/publications/ionising-radiation-dose-comparisons

Ref number	Brief description	Who responsible	Update/comments and suggested STATUS
4610	Report sent to SA to be forwarded to PHE to comment re: impact of low level radiation on public health	PW	Public Health England was replaced by UK Health Security Agency and Office for Health Improvement and Disparities. East of England regional contact identified, in process of sending questions for answer. OPEN
4611	Rim net data to be circulated to members so level at individual collection sites could be understood.	EA	Information is published. EA requested to assist in obtaining local data per site. OPEN
4624	SZA land NDA to provide lease & freehold documentation, ahead of follow up meeting with Land team	J McN/NDA Land team	Presentation at next SSG meeting 8th June 2022. OPEN. Simon Napper to give an in-depth update 15 March 2023
4657	Taishan – damage to fuel rods, circulate report when received	RG	We have no further information, when more information becomes available, we will share with the SSG - OPEN
4681	Future fuel storage and update/attendance by EDF Energy so they can address SZC overlap issues	Secretariat to invite	Request sent to EDF. OPEN.
4737	Clarification required on planning for SZA relocation facilities	Carolyn Barnes	EDF provided formal notice they were switching to the second relocated facilities consent (DC/20/4646/FUL) in July 2022, they will be implementing the second consent. EDF's letter of notification is on Public Access under DC/20/4646/FUL if they want to read it (the notification of switch of permission was built into the section 106 agreement so we were expecting it). A note on Mike Taylor's point – it is Sizewell B relocated facilities, not Sizewell A. For full context if they find it helpful, there are currently two applications in relating to the Sizewell B relocated facilities application; reserved matters for the welfare and admin buildings (DC/22/2823/ARM) and a discharge of condition

			application (DC/22/2822/DRC) – both of which relate to the second relocated facilities application, the one EDF will be implementing. OPEN Both applications (a discharge of condition application DC/22/2822/DRC and reserved matters application for the welfare building and admin building DC/22/2823/ARM) were positively determined at the end of 2022. We are still awaiting a reserved matters application for the visitor centre, submission date not known. We currently have an application in for discharge of condition 12 in relation to landscaping to the west of the Western Access Road, which will likely be positively determined in the next few weeks (DC/22/5001/DRC – can be viewed on Public Access). EDF are progressing the second relocated facilities application (DC/20/4646/FUL) following notification of the switch from the first permission to the second permission in summer 2022.
4749	Clarification required SZB regulators to respond in relation to fish monitoring requirements.	Peter Reynolds	The Environment Agency does not regulate the intake, but rather the discharge. Sizewell B is not required by its environmental permits to carry out ongoing monitoring of fish impingement or entrainment. We do not undertake ongoing monitoring of fish impingement or entrainment, but the determination of our permits and the DCO require assessment under the Habitats Regulations – as is being done for the prospective Sizewell C site. Information on fish impingement and entrainment at Sizewell B was collected by Cefas on behalf of Sizewell C, and I would point to the attached EDF response to a previous SSG query for associated data. OPEN

4806	Investigate alternatives to plastic barriers	SA	Our sustainability team are looking at other options to the plastic barriers with respect to the future. As other projects come into flight, the sustainability team will be liaised with in advance. OPEN
4810	Request for presentation of the Turbine Hall demolition from Sohail.	SA	Presentation and Q&As to be sent and circulated The team are coming to present at the SSG on progress, and will show the footage of a similar demo (assuming the technology at the Sports and Social Club) are available OPEN
4821	Request to arrange attendance at SSG/presentation by Nuclear Waste Services on the GDF and waste disposal	John McNamara	Guy Esnouf, the Director of Communications for NWS has said he would be happy to come to Sizewell for the June meeting to give a comprehensive update on work with community partnerships on the GDF OPEN
4833	Request for Sohail to update on the new campaign for wet ILW.	SA	Sohail Ashraf to update on the wet ILW campaign Will ask the programme team to attend an SSG later in the year, or early next year. - OPEN
4835	Request for Peter R to update on water and sewage output	Peter Reynolds	Answer questions regarding water and sewage output
4846 (a)	Confirmation of future of DSL building and if this could be made available for community use.	SZB	District Survey Lab is on land owned and managed by EDF Energy Nuclear Generation Ltd. The building houses telecommunications systems that are still required for the foreseeable future.

4846 (b)	Request for map of EDF estate, boundaries and indication of relocated facilities	SZB	Relocated Facilities maps attached – as per consultation documents that were issued in Jan 2019 and Aug 2020. Upper Abbey Farm is not included in these works.
4846 (c)	Update of Freedom Group maintenance plan for land	SZB	EDF's Land & Biodiversity Management Team, supported by Freedom Group, are responsible for managing the Sizewell B estate and SSSI. Freedom Group have been working with EDF fleet-wide, delivering 'environmental land management' since 2014.
4846 (d)	RG to circulate weld inspection report to Members	SZB	During Sizewell B's last outage a number of inspections were carried out:- Stress Corrosion Cracking inspections; these are ultrasonic inspections of over 20 locations around the reactor coolant system to determine whether the phenomena experienced on some French reactors was relevant to Sizewell B. Structural Weld overlay; this involved a number of ultrasonic inspections of areas of pipework that had been subject to pre-emptive weld overlay, to demonstrate the quality of the welds.
4846 (e)	Update on health and management of seals, and actions to prevent reoccurrence	SZB	Follow-on inspections of the Thermal Sleeves that were replaced in the previous outage. In total around 500 inspections, ranging from visual, ultrasonic, eddy current, magnetic particle, dye-penetrant and radiographic inspections were conducted in the outage. All work was conducted by experienced and qualified inspectors. All inspection results were satisfactory and supported the return to service of the reactor for a further cycle of operation. The results were reported off-site to the ONR as part of our Safety Case to operate the plant for the next cycle, and ONR subsequently issued their formal consent to start-up based on their assessment of this case.

4846 (f)	Confirmation of roof design for new response centre (green?)	SZB	Yes, sedum roof – see Sizewell B report.
4846 (g)	Request to monitor and report back on additional light pollution – including from car park	SZB	
4846 (h)	Chair to enquire of ESC regarding planning permission for soil heap area and lighting plan	SSG	
4846 (i)	Request for SZC to attend and update on relevant matters	ALL	
4847 (a)	DG to contact SZC colleagues regarding IRSN report to provide to Members	DG ONR SZB	
4848 (a)	Chair to send instructions on how to join EA stakeholder list to Members	SSG	
4848 (b)	PW to forward BMJ article to EA Alex Lord, for EA comment	PW/EA	

4848 (c)	EA Inspector to provide information on the concentration levels in the disinfectant incident	EA	
4848 (d)	Request for update on desalination plant	EA/EDF	
4848 (e)	Request for link to report for RIMNET to be circulated	EA/SSG	
4857 (a)	Show video of Bradwell site – How it managed its risk	SA	
4860 (a)	Subgroup to be held to review Gov consultation on radioactive waste management following update by RWM at next meeting	SSG/NDA	
4861 (a)	Request for update on fish management at SZB and proposals for SZC	EDF SZB and SZC	
4861 (b)	Request for access to RIMNET data	NDA/SSG	

4868 (a)	SN to provide presentation and response regarding residual waste storage at next meeting	SN/RWM	

CLOSED ACTIONS

Ref number	Brief description	Who responsible	Update/comments and suggested STATUS
4604 (3)	Are staff/contractors told about the Radiological Disease compensation scheme?	SA and RG	Yes, on the internet and also promoted by Magnox and Trade Unions. CLOSED
4604 (4)	What is SZA annual budget?	SA	NDA produce annual accounts, projects not necessarily site specific spend. See link on attached document. We can

			request more information on specific elements if required – Information available through the annual accounts provided by the NDA CLOSED
4604 (5)	What is latest plan for Graphite core decommissioning?	SA	Using info from lead-and-learn site of Trawsfynydd. Shall we ask for a report? When there is more information available from the development and implementation of the Trawsfynydd strategy in future years, we will share this CLOSED
4662	Where was fuel rod manufactured that developed pin hole?	RG	We are unable to determine the source. It's either a BNFL or Siemens (Framatome) sourced assembly. CLOSED
4670	ISI for control rod mechanism and other questions – to be answered	RG	This has been answered comprehensively - responses provided to SSG in 2022 as per attached - CLOSED
4671	What public consultation on revised REPPIR emergency planning requirements?	RG	The extraordinary SSG meeting has taken place where Neal Evans came along to outline the off-site plan - CLOSED
4672 (ii)	Would SZB work with SCC Highways regarding speed limit on Lovers Lane	RG	This is a matter for Leiston Town Council to pursue with the Highway Authority (SCC). LTC reps on SSG could request LTC to consider. CLOSED

4673	Prof Henderson report (small fish in cold water system) – comments needed from EA and SZB	CW to provide, AL & RG to respond	Report and question forwarded to EDF and EA for comment. See Response to 4749 CLOSED
4776	SZB to confirm date of next fuel (full or partial) cycle.	Sean Verrall & Richard Parlone	Refuelling Outage 19 is planned to take place in October 2024. CLOSED
4777	Check whether EDF was contributing to the NLF.	Sean Verrall	EDF has been contributing to the Nuclear Liabilities fund – please see attached report. CLOSED
4824	Request to circulate presentation and questions from 'Keeping the Conversation going' via John McN	John McNamara	To send presentation and Q&As JM has the presentation which he will send CLOSE

Sizewell A & B Site Stakeholder Group

Hear the latest news and have your say about the Sizewell A and B nuclear sites

Thursday 29 June 2023
starting at 9:30am
Venue: Sizewell Sports & Social Club, King Georges Avenue, Leiston IP16 4JX

Listen. Learn. Be heard

Contact:
sizewell.ssg@magnoxsites.com