



## **Site Stakeholder Group**

Hunterston B Station Director's Report

Period: November 2021 to January 2022

## 1. End of generation

At midday, on Friday 26<sup>th</sup> November 2021, Reactor 3 was taken offline for the final time, followed by Reactor 4 on Friday 7<sup>th</sup> January 2022. This marked the end of almost 46 years of safe and reliable zero carbon generation from the site.

On both occasions, staff had the opportunity to watch the reactors coming offline and enjoyed a Covid safe indoor BBQ and cake.

Station Director, Paul Forrest, and Plant Manager, Joe Struthers, thanked everyone at the station, past and present, for all their hard work, dedication and pride in helping to make the generation phase of Hunterston B a great success. The celebrations were about respecting the past and embracing the future.



Since the station came online in 1976 it has produced enough zero-carbon electricity to power every home in Scotland for nearly 31 years. The carbon avoided by the station, when compared to gas generation, is like taking every car off Scotland's roads for 19 years.

It was originally thought Hunterston B would run for 25 years but investment in the plant and the people who work here mean that was safely extended to 46 years.

Under the terms of a contract agreed with UK Government in June 2021, EDF will carry out defueling at all seven of the UK's Advanced Gas-cooled Reactor (AGR) stations before the sites are transferred to the NDA for its subsidiary Magnox to continue with decommissioning.

## 2. Defueling and decommissioning

During the reporting period, the Reactor 3 pre-defueling outage continued to be delivered in line with station plans. Two plant modifications are being carried out which are required to enable defueling, these are the permanent isolation of control rods and the isolation and drain down of the pressure vessel cooling water system.

The Fuel Handling and Reactor Defueling safety cases are being reviewed by the ONR. EDF is proactively engaging with ONR to provide responses to their feedback and delivery of the Licence Instrument is expected in time for the start of defueling.

A programme of improvement works have been taking place in the Flask Corridor to support increased traffic during the defueling period. This is an area within the station through which the flasks are processed as they make their way off site. The works are progressing to plan and commissioning and testing is scheduled to take place soon. The delivery of these improvements will support of both Reactor 3 and Reactor 4 in a safe, reliable and efficient manner.

### **3. Safety and Environment**

#### **Pandemic Response arrangements in response to COVID-19**

EDF's sites have a five-stage tiered approach which is based on the Covid-19 infection rate on site and in the surrounding local area, with 1 being the lowest risk and 5 the highest. Each of the risk levels has a suite of actions in place to help protect the site.

The risk status of our site is monitored daily by the Outbreak Management Team (OMT), which includes our company doctors.

On Monday 31 January, following consultation with the Fleet Incident Management Team, Hunterston B moved from Risk Rating 3 to Risk Rating 2.

A number of enhanced control measures remain on site including:

- An appropriate face covering must be worn in all internal areas, with the exception of:
  - Those exempt for medical reasons
  - When at your work site where social distancing can be maintained
  - When seated at a table to eat or drink
- Criteria for close contact self-isolation aligns with the Government's self-isolation criteria. Triple-vaccinated workers can return to our Generation sites but must carry out a lateral flow tests before travelling to site for 7 days.
- The requirement for 2 metre social distancing.

The station is continuously reviewing these arrangements in the event escalation to Risk Rating 3 is required.

#### **Station Industrial Safety Performance**

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

We have continued to improve and develop our Industrial Safety Action Team meetings alongside our contract partners and union reps. We have asked them to share ideas to promote a safe working partnership at Hunterston B and have seen an increased dialogue that supports our shared safety objectives.

We are closely monitoring our staff and contract partners during this busy pre-defueling period with daily walkdowns across work sites. Our aim is to support and promote a healthy questioning attitude to help people understand and manage risks at the point of work. Our observations have allowed timely interventions resulting in targeted focus areas in working at height, use of portable electrical equipment and areas within the Construction Design and Management (CDM) Regulations 2015.

We have completed a program of work on a number of our buildings to repair and mitigate against foul weather and storms and continue to proactively manage and plan building fabric works across the Station. As we embark on defueling we have begun a campaign of upgrades and maintenance within the Fuel Route and commenced projects relating to eventual decommissioning. All have safety and quality at the heart of planning and execution, with industrial safety embedded with the groups. In Q4 of 2021 we completed compliance evaluations for non-nuclear processes, scaffold and COMAH with no significant gaps.

Looking ahead, we will be carrying out evaluations on key CDM related activities including confined space arrangements; pressure systems; vessels and pipework; drilling and cutting and management of contractors. We will also be utilising Time in the Field with leaders and coaches to support and foster our nuclear, industrial and fire safety behaviours.

### 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.

<b>Radiation Dose to workers (November 2021 - January 2022)</b>		
Planned collective dose	10.5man.mSv	
Actual collective dose	7.1man.mSv	
	<b>Employee</b>	<b>Contract Partner</b>
Total Dose	4.55man.mSv	2.47man.mSv
Average individual dose	0.01mSv	0.01mSv
Highest individual dose	0.32mSv	0.43mSv
Individuals	366	345

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 2021 to January 2022.

As previously reported, an oil filled electrical cable from Transformer 4 lost pressure and some oil escaped into a bunded trench. The oil was a mixture of partially and fully biodegradable oil. A designed drain route transferred leaked oil from the trench to an oil interceptor. There was no loss of oil to ground and the leak site has been repaired.

Radioactive gaseous and aqueous discharges arising from normal plant operations 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 as we move from generation to defueling arrangements. As a group, we have been working on scenarios and fault events that will exercise our Emergency Arrangements.

During the first two months of 2022 we will be demonstrating our arrangements with oversight from the Office of Nuclear Regulation on areas of site security and fault scenarios. In addition, we will be exercising with our staff to maintain knowledge and experience.

One exercise from the 2021 shift exercise programme has been rescheduled for February 2022. E shift was unable to complete its programmed exercise due to a change in the site COVID risk rating.

Preparations for the removal of plant that affects emergency arrangements are being supported through Engineering Changes. This includes specialist assessment against the current emergency plan. With the reduction of chemicals and substances that are no longer needed for a defueling site, comes a reduction in risk and therefore changes to some aspects of response within our emergency arrangements.

Fleet Emergency Preparedness staff are liaising with external stakeholders on changes to the emergency arrangements based upon Hunterston B's move into defueling. This includes reviewing hazard evaluations conducted under the Radiation (Emergency Preparedness and Public Information) Regulations.

## 4. Generation

During the November to January reporting period, Reactor 3/Turbine Generator 7 operated continuously before being taken off-line on 26 November 2021 for its scheduled end of generation date.

Reactor 4/Turbine Generator 8 operated continuously with one three-day reduction in power for refuelling before being taken off-line on 7 January 2022 for its scheduled end of generation date.

Both units have moved to defueling status and shall not return to generation.

## **5. People**

Following the completion of the Collective Consultation and “Best Fit” process, an independent review took place in November. This was attended by the National Joint Council Chair and Secretary as well as an independent senior representative within Generation and the Employee Relations Manager and was carried out to ensure the agreed processes and principles had been followed. They found the information presented to be exemplary and the process had been carried out with the common goal of meeting the aspirations of employees.

The outcome letters for ‘Best Fit’ were sent out and line managers talked to each employee to explain individual outcomes. Communications were also sent to employees following the conclusion of the independent review which shared;

- 100% of employees whose aspiration was to remain at Hunterston B were able to do so, either in their own role or a suitable alternative role.
- 97% of employees overall had aspirations met, either to remain in employment or for redundancy
- We could not meet the aspiration of 3% of employees whose first preference was redundancy.

The station is pleased to have been able to meet as many employee aspirations as possible.

Some Management Team changes come into place at the end of January. Paul Forrest has accepted the role of Station Director at Torness and has been replaced by Joe Struthers who was previously Plant Manager.

Daniel Smith moves from Operations Manager to acting Plant Manager and Alistair Rafferty becomes acting Operations Manager.

Recruitment is ongoing to permanently fill these positions.

## **6. Company Update**

### **Lewis Wind Power's Stornoway Wind Farm receives additional consent**

Lewis Wind Power Project Manager Claire Jones said, "We are pleased Scottish Ministers have approved the additional consent for the Stornoway Wind Farm under Section 36 of the Electricity Act 1989.

This comes after two rounds of community consultation on the company's proposals, with public exhibitions at Stornoway Town Hall in October 2018 and February 2019. During these consultations we listened carefully to feedback from local people and consequently made changes to our proposal.

The new consent will give Lewis Wind Power the option of using the very latest onshore wind turbines on the market, which we believe may be necessary to generate power at the cost required to compete for long-term contracts in a government-backed auction taking place this year."

Contracts are awarded by the Low Carbon Contracts Company (LCCC) on a competitive basis with onshore wind farms on Scotland's 'remote islands' competing with other less established technologies including floating offshore wind, geothermal and wave power.

This new consented design features up to 24 turbines with a tip height of up to 180m and 9 turbines with a tip height of up to 156m, a total of up to 33 wind turbines. This compares to a maximum of 36 turbines at up to 145m in the project's earlier consent (from 2012, which was then amended in 2015). The latest consent also increases the separation distance between a number of turbines in the eastern part of the site and the town of Stornoway.

The Environmental Assessment completed to support the application detailed a number of mitigation measures which were embedded in the design of the scheme and controlled through the conditions attached to the consent. Lewis Wind Power look forward to working with stakeholders such as CnES, SEPA and NatureScot to deliver the project.

Claire Jones added "I would like to thank the Stornoway Trust for their support in the development of this project over the last twenty years and the Comhairle nan Eilean Siar for their constructive approach to the planning aspects of this development. The team at Lewis Wind Power will now focus efforts on supporting SSE to build a new electrical link to the island, obtain the other consents needed and further develop the routes to market."

### **Secretary of State praises progress at Hinkley Point C**

The Secretary of State for Business, Energy and Industrial Strategy has been in Somerset seeing how work is progressing at Hinkley Point C.

Kwasi Kwarteng MP toured Europe's largest construction site with the Exchequer Secretary to the Treasury, Helen Whately MP. The Chairman and Chief Executive of EDF, Jean-Bernard Levy, accompanied the Ministers as they were shown around by the team building the UK's first new nuclear power station in a generation.



The visit follows government commitments to new nuclear set out in the Energy White Paper, and passage through the House of Commons this week of the Nuclear Financing Bill, which will help lower the costs of building new nuclear such as Sizewell C. The Government has committed to putting nuclear at the heart of the UK's future energy mix, along with wind and solar. Hinkley Point C will be crucial in helping the country hit net-zero carbon emissions

by 2050 – by moving the UK away from high-polluting fossil fuels.

The Ministers were shown how construction has maintained momentum, despite the challenges caused by the pandemic. Experience gained from building the first reactor unit has allowed teams to deliver the second more efficiently, such as the liner ring being built 25% quicker than the same part for unit 1.

Apprentices also met the Ministers and shared their experiences of gaining industry experience at Hinkley Point C. More than 850 have been trained so far, strengthening the UK's skilled workforce. The project is expected to reach its goal of creating 1,000 apprenticeships later this year.

Business and Energy Secretary Kwasi Kwarteng said: "The UK Government recognises that large-scale nuclear is the only technology available to provide continuous, low carbon electricity at scale. In order to strengthen Britain's energy security and reduce our exposure to volatile global gas prices, we are firmly committed to deploying new nuclear, as seen through the construction of Hinkley Point C.

"To build on Hinkley Point C's success, we're backing the next generation of projects through our landmark Nuclear Bill. With a new funding model on the statute books, we will be able to attract British funds and other institutional investors to lower the cost of financing new nuclear power and, importantly, help to lower electricity bills for consumers and businesses.

"It has been remarkable to see how construction work is progressing and to meet with some of the workers driving forward one of Britain's biggest infrastructure projects. New nuclear is not only at the heart of our plans to ensure greater energy independence, but to create high-quality jobs, boost apprenticeships and drive economic growth."

Managing Director of Hinkley Point C Stuart Crooks said: "Hinkley Point C will be crucial in the fight against climate change, protecting the UK's energy security and insulating British homes and businesses from volatile global gas prices. We are also changing lives for the better, training apprentices, creating jobs, and pumping billions into the economy."

Chief Executive of EDF UK Simone Rossi said: "The building of a near-identical power station in Suffolk, Sizewell C, means the UK can continue this powerful legacy. Hinkley Point C and Sizewell C will be twin projects, but the ownership will be different: EDF is a majority investor in Hinkley Point C, but Sizewell C will be majority owned by British investors. Legislation to finance the project making progress through the House of Commons this week was an important step in securing the future of the UK nuclear industry and the country's low carbon energy supplies."

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