Site Stakeholder Group

Hunterston B Station Director's Report

Period: August 2021 to October 2021

1. Defueling and decommissioning

Preparations are continuing for the start of the station's defueling phase of operation, following the end of generation at the site by 7 January 2022.

Once the units are taken offline a nominal 60 day statutory outage will be carried out on each one to ensure the plant is ready to commence defueling.

The site defueling safety cases (Reactor and Fuel Handling) have both now been submitted to the regulator for formal assessment and the team are prepared to respond to any technical queries to support progress through to approval.

A programme of upgrades are currently being carried out in the Flask Corridor to ensure that our plant, people and processes in that area have the capability to successfully deliver increased flask traffic throughout the defueling period.

We continue to review the timing of making a planning application for waste facilities for Hunterston B. As reported at the SSG in September, EDF and Magnox have agreed that the strategic planning assumption for the HNB ILW waste should be that use of the HNA ILW store will be possible and will be preferred. On this basis EDF has decided to suspend work on a standalone ILW store. Magnox /NDA continue to further develop this option and, if it remains appropriate, will formally confirm the change in their plans. The parties remain committed to finding the optimum technical and environmental solution for waste management at Hunterston sites.

2. 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 that is 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 18 October, following consultation with the Fleet Incident Management Team, Hunterston B moved from Risk Rating 2 to Risk Rating 1.

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
- Additional criteria for self-isolation applies. In addition to the Government's self-isolation criteria, double-vaccinated workers returning to our Generation sites following a negative PCR test are given a further test 48-72 hours after return to site. A negative test result clears them for normal access on and around site.
- The requirement for 2 metre social distancing.

The station is continuously reviewing these arrangements in the event escalation to Risk Rating 2 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.

During the reporting period there was one industrial safety event. In August, a release of clean CO2 was detected by station equipment. The fire alarm was raised to alert staff. Station Incident Response Teams mustered and investigated the cause, which was traced to a relief valve lifting. The plant was made safe and CO2 levels abated to background levels. Scottish Fire and Rescue service attended but did not have to take any action.

Monthly industrial safety meetings have continued with "Time in the Field" observation, safety stand down for fleet injuries to personnel and the roll out of "TAKE5" which replaces the previous campaign - "Time Out for Personal Safety" or TOPS.

Compliance evaluations are being carried out in line with the 2021 programme. Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), Provision and Use of Work Equipment Regulations (PUWER) and workshop machine tools evaluations were completed in Q3. In Q4 the following evaluations are programmed and on plan: non-nuclear processes, scaffold and COMAH.

We continue to make improvements across the station with good engagement at the Industrial Safety Action Team, (ISAT). Key areas of oversight are:

- Lighting upgrades in the 6th and 8th floor turbine hall have been completed.
- Building and fabric group, with weekly meetings providing timely progress and updates.
- Machine guards upgrades near completion, of the 195 being tracked only 6 remain and due to be completed by the end of November.

Radiological Protection

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

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

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

Differences between the actual and planned dose can be down to a range of factors including changes to the work programme, development of new techniques for carrying out work that will result in a lower dose and the deployment of new equipment. In this case, the reduced work programme resulted in the actual dose being lower than the predicted.

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

Radiation Dose to workers (August 2021 - October 2021)	
Planned collective dose	16.0man.mSv
Actual collective dose	5.3man.mSv

	Employee	Contract Partner
Total Dose	3.86man.mSv	1.96man.mSv
Average individual dose	0.01mSv	0.01mSv
Highest individual dose	0.18mSv	0.22mSv
Individuals	354	284

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 reporting period.

An oil filled electrical cable from Transformer 4 lost pressure and some oil escaped into a bunded trench. There is no evidence of loss of oil to ground. This is being closely monitored until a safe repair can be carried out.

A consignment of low level waste containing a small amount of asbestos material that was not identified prior to dispatch was sent to a permitted waste company. In addition, a skip containing asbestos waste was transferred to a waste management contractor, but was incorrectly identified as general waste. There was no loss of material or harm to persons as a result of either event but work is underway to ensure that asbestos awareness training on-site is robust and that identification methods for skips are improved, alongside our contract partners.

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

With the reduction in Covid-19 cases and easing of some restrictions being lifted, shift emergency training has commenced. Currently, three of the five planned shift exercises have been completed as well as a flask transportation desktop exercise. Feedback from the ONR assessed Level 1 report has been received and Hunterston B have prepared additional desktop exercises to support communication and briefing training.

With the support from fleet Emergency Planning Group, Hunterston B held a workshop to review emergency arrangements as the station transitions from an operational to a defueling site. This

support will continue into Q4 and early 2022 and will be used to prepare for the annual demonstration of emergency arrangements to the ONR in June 2022.

As the site moves into defueling certain hazards will reduce like chemical stocks. Emergency arrangements will be reviewed to accommodate these changes.

3. Generation

During the August to October reporting period Reactor 3/Turbine Generator 7 operated continuously with one five-day reduction in power for refuelling.

Reactor 4/Turbine Generator 8 has operated continuously with one five-day reduction in power for refuelling.

Reactor 3 is scheduled to come offline on 26 November 2021 with Reactor 4 due to follow no later than 7 January 2022.

4. People

The main focus during the period has been on the formal Collective Consultation process which commenced on Monday 2nd August and concluded Friday 17th September. Bi-weekly meetings were held with the trade unions and no issues or concerns were raised. Each employee had a formal aspirational consultation where line managers had conversations and recorded employees' preferences as the station moves to the defueling structure.

The information collected through the conversations has been reviewed and a 'Best Fit' process has been started. This aims to meet the station's business need and as many of people's aspirations as possible. An independent review of the process will take place in November before the outcomes are communicated to employees.

The station is also working with Ayrshire College to provide training and development opportunities which are being made available to all staff as part of defueling preparations. The courses delivered so far have been the Electrical Installations British Standard and the Introduction to Project Management. Both the courses have received good feedback from participants. The station will continue to work with the college to offer further courses.

The EDF Executive Team visited the station on the 7th September, the final visit as a generating station. The day started with the Executive Team listening to presentations from the Management Team who covered a number of topics including Station History & Pride, Looking After Our People, Simplification, Preparation & Defueling.

There was also the opportunity to visit display stands which were hosted by different teams from around the site covering various topics including; Defueling Preparation Programme, People – Preparing our Leaders & Staff, People – Showcasing our History, Defueling Safety Cases, Deconstruction Preparations and Flask Route Optimisation.

There was a question and answer session which welcomed a cross section of staff from the station and provided them with opportunity to have an open and engaging discussion with the Executive Team on a number of topics. It was a positive visit and the "togetherness, ownership and pride" of the teams were recognised by CEO Simone Rossi.

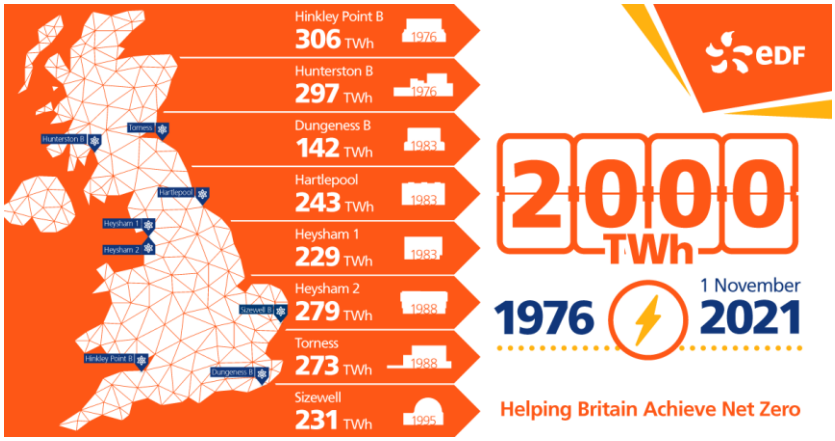
At the end of October Paul Forrest, Station Director and Joe Struthers, Plant Manager held a leaders' session giving leaders the chance to view the stands previously shared with the executive team which look both at Hunterston's past achievements and to the future. This was the first face to face meeting for leaders since the start of the pandemic and was held with Covid mitigations in place.

There was also a session held for leaders with the Station Director and Plant Manager who were joined by John Munro, Chief Nuclear Officer, who gave a fleet update and answered questions from leaders.

5. Company Update

UK nuclear fleet marks major milestone

The UK's nuclear stations, run by EDF, reached a major milestone, clocking up 2000 terawatt hours (TWh) of zero carbon electricity – enough to power all the UK's homes for more than 18 years.
Since the oldest stations in the fleet first started generating in 1976 the eight sites across the UK have not only powered the country and sustained thousands of jobs – they have also helped it avoid the emission of 700 million tonnes of CO2.



Matt Sykes, managing director of EDF's Generation business, said: "For decades the UK's nuclear fleet has been quietly providing the nation's zero carbon electricity. Originally it was thought our stations would operate for about 25 years. But thanks to careful stewardship, world leading engineering expertise and billions of pounds of investment, we have been able to generate safely well beyond those dates.

"We know nuclear can divide opinion. The undeniable facts are that we have kept Britain's homes supplied with precisely the sort of reliable, zero carbon power the world is now crying out for - and all from an operational footprint less than one square mile. "In recognising this outstanding milestone, I want to pay tribute to the efforts of the people that work at these stations and in the overwhelmingly British supply chain. Many people talk about how to achieve net zero in the future. Today, the nuclear fleet raises its voice to remind us about the work already done."

Greg Hands, Minister of State for Energy and Clean Growth at the Department of Business, Energy and Industrial Strategy, said: "This milestone demonstrates the key role that nuclear power has to play in Britain's electricity mix, as the UK works to reduce its reliance on fossil fuels and exposure to volatile global gas prices.

"While more renewables will help us press on towards our world-leading net zero commitment, nuclear power has proven a reliable backbone to our energy system, and will continue to be needed for times when the sun isn't shining or the wind not blowing."

EDF's nuclear business employs more than 5,000 people across sites in Lancashire, Teesside, East Lothian, East Kilbride, North Ayrshire, Suffolk, Kent, Somerset and Gloucestershire. Each year the nuclear business spends more than £800m through its supply chain, 93% of which is spent with UK companies, and since taking over the nuclear fleet in 2009 it has invested over £6bn in the plants.

EDF works with Scottish Fire and Rescue Service on ambitious Carbon Reduction Plan

Britain's biggest generator of zero carbon electricity, EDF, has been tasked by the Scottish Fire and Rescue Service (SFRS) to help guide the public sector organisation to significantly improve its energy efficiency.

In accordance with the Scottish government's target to achieve net zero by 2045, EDF will be helping it reduce the emissions associated with the energy used to power its buildings, as well as its extensive fleet of emergency vehicles. The ongoing carbon reduction and efficiency work with EDF will help SFRS on its own journey towards net zero and save over 14,000 tonnes of carbon emissions by 2030 - which equates to the amount that would be generated by flying between Glasgow and Sydney more than 7,500 times.

This will allow 356 fire stations to collectively attend over 91,000 incidents a year and go about their vital work sustainably and effectively.

EDF has been supplying SFRS with renewable electricity since 2017, ensuring that the electricity they use to power their operations is from a zero-carbon source. To further address the emissions associated with its building portfolio, select SFRS sites will also benefit from the introduction of on-site renewable generation - through the installation of solar PVs - allowing the SFRS to produce some of the energy required to run its operations. So far, the solar PVs that have been installed are expected to save the SFRS around £90,000 per year and 150 tonnes of carbon.

Meanwhile, in line with Scottish government's target of phasing out new petrol and diesel vehicles by 2032, EDF will be helping SFRS transition to new electric vehicles (EVs) and installing charging stations across its network of sites. It aims to transition 50 per cent of its 755-strong 'light fleet' of cars and vans to EVs by 2025, increasing to all light vehicles by 2030. EDF has already installed 51 charge points across 46 SFRS sites, with charge points strategically placed across Scotland to ensure that each Area Commander can cover their area and collectively they can cover the whole of Scotland.

Matthew Nunn, Director I&C Sales at EDF, said: "This kind of leading initiative within the public sector to reduce carbon emissions is vital for the UK's collective journey towards net zero. SFRS' ambitious plans should serve as an example to similar organisations looking to take similar steps, demonstrating the kind of commitment, planning and determination that can help everyone achieve the net zero target."

Iain Morris, Acting Director of Finance and Procurement at SFRS, said: "These important measures to improve energy efficiency across our buildings and fleet reflect our ongoing commitment to reducing our impact on the environment.

"As an organisation, our frontline firefighters respond to the impacts of severe weather events such as wildfires and flooding, therefore we want to ensure we are taking all necessary steps to address the climate emergency.

"We have set out our long-term goals and are working towards reducing carbon emissions by six percent each year until 2030."

To date, EDF has carried out works on 80 SFRS sites across Scotland, with all works project managed by Imtech - the engineering services company and subsidiary of EDF.

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

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