



Site Stakeholder Group

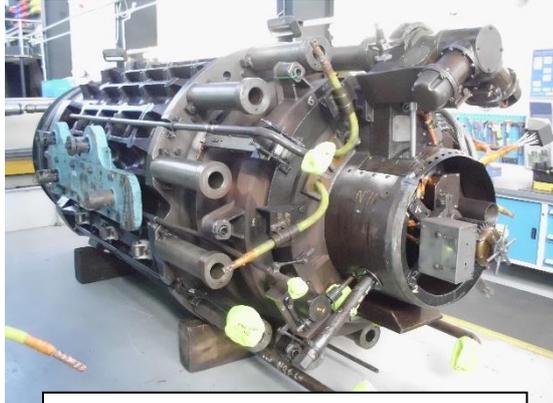
Hunterston B Station Director's Report

Period: November 2020 to January 2021

1. Defuelling and decommissioning

We continue to engage with the UK Government towards a legally binding agreement for defuelling and decommissioning preparations at Hunterston B and the rest of the AGR fleet.

Hunterston will be the first of the AGRs to begin defuelling and as such is setting the standard for the other stations to follow.



Completed final gas circulator

Already there are some examples of good practice which other sites are watching with interest. At Christmas the maintenance team completed the last gas circulator build for the station – an important move to increase resilience. Although we don't anticipate a gas circulator exchange being needed during the last year of generation or during defuelling, the maintenance team decided as a contingency, to complete the spare gas circulator to be available should the need arise.

We're looking forward to engaging with the SSG and the wider community on our defuelling plans once we have finalised the commercial agreement with Government.

2. Safety and Environment

Station Industrial Safety Performance

In January, we carried out our annual SafeStart campaign. This year the focus was on *risk perception*, building on the themes from last year's events not just at Hunterston B but across the fleet. This was backed up with a dedicated safety meeting pack for all teams. In addition a streamlined Leaders in the Field (LiFE) programme was deployed under COVID-19 restrictions to re-enforce the message on site.

The Total Recordable Incident Rate (TRIR) remained around 1.5 as a result of two incidents relating to one of our colleagues slipping and a scaffolder sustaining an injury whilst dismantling a scaffold in 2020. Both events were fully investigated with actions in place to prevent re-occurrence. The actions are focused on *risk perception* and will be supported by safety leadership training that has commenced fleet wide for all EDF and contract partners' leaders and is due to be completed by Q1 2021.

COVID-19 measures remain in place with routine meeting of the Site Pandemic Working Group and regular Fleet Pandemic Meetings. These teams review the local arrangements at Hunterston based on local numbers and continue to reduce interactions on site, maintain social distancing and other measure to minimise risk. This includes ensuring all non-essential site visits and training is cancelled with numbers on site managed. These measures are continuously reviewed based on government advice, local restrictions and community numbers.

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 constantly monitored and ultimately compared with the levels specified in the Ionising Radiation 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 on expected work 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.

Radiation Dose to workers (Nov 2020 to Jan 2021)		
Planned collective dose	21.0 man.mSv	
Actual collective dose	9.60 man.mSv	
	Employee	Contract Partner
Total Dose	7.73	1.87
Average individual dose	0.02	0.01
Highest individual dose	1.15	0.27
Individuals	365	226

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 Nov 2020 to Jan 2021.

Previous work on the aqueous discharge line has been completed successfully and discharges have returned to normal operations.

Radioactive gaseous and aqueous discharges arising from normal plant operations remain at levels well below those authorised by SEPA, with both reactors returning to service in September 2020.

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

Emergency exercises and training have resumed at the site, in an adapted form. Our normal exercise programme sees workers come together on site during mustering and in emergency control centres making social distancing challenging. With the approval of the ONR, the 2020 assessed programme was cancelled to protect staff during the pandemic.

There has been one exercise on site since the start of 2021, the exercise was limited in scope (using simulations) and with reduced participation, where possible, to facilitate social distancing. Exercises are being conducted under Covid-19 restrictions, with risk assessments and additional precautions in place. There is a Peer assessed exercise planned in March in preparation for our Level 1 ONR exercise scheduled during May 2021

The local authority have set the Detailed Emergency Planning Zone (DEPZ) at approximately 2.4km as recommended by the Ayrshire Civil Contingencies Unit. The Hunterston site Emergency Plan will be re-issued in parallel with the local authority.

3. Generation

Since synchronising to the grid on 31 August Reactor 3/Turbine Generator 7 has operated continuously with two periods of reduced load for refuelling in October and December respectively.

Also, since synchronising to the grid on 29 September Reactor 4/Turbine Generator 8 has operated continuously with two periods of reduced load for refuelling in November and January respectively.

Both units will come offline at the end of their respective six month runs and will undergo graphite inspections. The plan remains, subject to regulatory approval, to return both units for a final six month run before end of generation by 7 January 2022. The final graphite safety case for the station has been submitted to the ONR for assessment.

4. People

The recent round of Aspirational Conversations, which were completed in October, have been analysed and high level themes have been shared with the relevant stakeholders' onsite. The analysis is helping to inform the resource planning up to and through defuelling for Hunterston B and other locations.

An online 'People Hub' is available to all staff where information and resources are available to everyone, including defuelling information. There is currently a room being refurbished to create an onsite physical 'People Hub' which will be able to be used alongside the online version with resources and access to computers available.

Monthly meetings are taking place between the station and ONR to ensure a regular dialogue on all department and resource changes on station as it prepares for defuelling. All change is managed in accordance with License Condition 36 and the associated management of change process.

Paul Forrest and Plant Manager, Joe Struthers, have continued to hold the monthly leadership sessions. These updates cover a range of current topics to ensure all employees receive regular communication on station and company news. During the covid-19 pandemic, the sessions have been conducted via Skype and feedback from employees is that this has worked very well.

A number of Management Team appointments have taken place in the last few months. These appointments include Joe Struthers appointed to Plant Manager, Daniel Smith to Operations Manager, Dougie Graham to Maintenance Manager, Len Astell to Fuel Route and Outage Manager and Scott Cooley to Defuelling Preparation Manager. These changes have all been managed in accordance with our Management of Change process.

The Covid-19 pandemic has remained a priority on site in protecting our employees. We continue to protect our most vulnerable employees through appropriate risk assessment and in some cases, revised working patterns, including working from home where possible. We have also taken measures to ensure employees working on site are protected including appropriate mitigation within work environments, enhanced hygiene measures, social distancing and revised working arrangements. Regular dialogue and joint working continues with our Trade Union partners through our Local Joint Council and Health and Safety Committee.

5. Company Update

Hunterston B worker runs up charity total

A security guard at EDF's Hunterston B power station has raised more than £1000 for Prostate Cancer UK after taking part in the charity's "Run the Month" challenge.

John Frew, from West Kilbride, was inspired to run 50 miles in a month after finding out that 1 in 8 men will be diagnosed with prostate cancer during their lives.

John said: "Just a couple of days after signing up for the challenge my wife's uncle had the dreadful news that he had prostate cancer. Luckily he was diagnosed early, has had an operation and things are looking good for a full recovery but it really spurred me on.

"I am not really one for running so I started off doing 3km runs then built up my distance to 5km with the occasional 7km. West Kilbride is all hills so it was tough at first and the only thing that pushed me through was the thought of all the families in pain over loved ones fighting against cancer."

John's target was £200 but he smashed that, raising £1,160, which, as Prostate Cancer UK is EDF's corporate charity, will be matched by the company.

This is the end of year one of a three year partnership and while Covid-19 has made the usual fundraising efforts more challenging Hunterston B has still managed to raise £3,726.75 for the charity. That has included John's run and other activities like a Christmas gate collection which raised £773.

Station Director, Paul Forrest, said: "This year has brought some really big challenges as we have all gotten to grips with the pandemic. We've had to change the ways we work and interact with each other so I'm delighted that, even in these strange times, John and others on site have still found ways to support charity."



Fundraising efforts are already underway in 2021 with plant manager, Joe Struthers, taking on a challenge to virtually cycle around all of the nuclear sites in the EDF fleet; a total distance of 2291km. He's due to complete his challenge on 4 March.

Blyth offshore wind farm phase two expansion underway using floating turbines

EDF Renewables plans to build phase two of the Blyth Offshore Demonstrator (BOD) wind farm off the coast of Northumberland using floating offshore wind technology. Once completed it would be among the first projects of this kind in English waters.

The first phase of the wind farm consists of 5 wind turbines and was constructed in 2017. It has a generating capacity of 41.5MW and the first UK offshore wind farm to utilise float and submerge gravity base foundations, as well as 66KV rated inter array and export cables to connect the turbines to an onshore substation.

EDF Renewables is already working on project planning for phase two with a consent variation and procurement activities underway to use the Blyth site for the installation of up to 5 further turbines. This would be in an already identified array location 14km from the shore in water depths of around 55 metres.

The capacity for phase two has still to be finalised but the current consent for BOD wind farm is for a maximum of 99.9 MW, leaving a remaining capacity of 58.4MW.

The turbines to be installed in the BOD Phase two project will be constructed on floating sub structures. The project has yet to select the key contractors including the turbine supplier but a range of floating technology options are being considered, with the final design still to be determined by further detailed engineering studies.

A key requirement of the project is to demonstrate new and innovative technologies that have potential to reduce the cost of offshore wind (floating and fixed) developments in the future. As a result, EDF Renewables is working closely with suppliers and research organisations including the Offshore Renewable Energy Catapult to ensure these technologies and approaches are fully explored and incorporated where appropriate.

Director of Offshore wind at EDF Renewables, Michele Schiavone said: “We are very excited about this next phase of the BOD project and want to further the demonstration of construction and operation of floating turbines to show that floating wind is technically feasible and cost competitive in water depths of 50-60 metres.

“With the Contract for Difference (CfD) mechanism providing a potential route to market, we are confident that floating turbine technology can accelerate the UK’s journey to a net zero future where clean energy powers all our lives. We will use the project to support the further development of this emerging technology.”

“We are ambitious when it comes to offshore wind and already have two operational offshore wind sites at Blyth and Teesside. We are currently working on our 450 MW Neart na Gaoithe project in the Firth of Forth in Scotland (a joint venture with ESB) and our Irish Codling project (a joint venture with Fred.Olsen Renewables) which will have a capacity of up to 1.5GW.”

The development timescale for BOD phase two has not yet been finalised. However, subject to detailed programming, the target is for it to be fully commissioned by Spring 2025.

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

Fiona McCall, External Communications Manager

Tel: 01355 846281

E-mail: fiona.mccall@edf-energy.com

Emma Horne, Visit Coordinator

Tel: 01294 826157

E-mail: emma.horne@edf-energy.com