

Site Stakeholder Group

Hunterston B Station Director's Report

Period: August 2022 to October 2022

1. Defueling

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

More than a quarter of the spent fuel stringers have now been safely removed from Reactor 3 and the average time taken per stringer has progressively improved over the reporting period.

To date 55 flasks have been despatched from the station, following the successful completion of the flask corridor upgrades earlier this year. This is the most flasks despatched by any station this year and has been achieved safely and error free.

Another flasking milestone includes 3 in 3 out at the railhead – a first for the station and a significant milestone which will support the target of defueling the station in 3 years.

In July and August site managed two issues with the skip manipulator which is used to move fuel skips as part of the defueling process. Both were reported to the regulator.

In July, a small auxiliary hoist was left parked in an abnormal position and when next moved it came into contact with a sensor mounting on the pond wall, Procedures have been put in place to stop this happening again.

In August, an issue with a travel limit switch emerged during a movement of the manipulator. The incident revealed a design issue with the travel limit switches which can result in misalignment through increased use. Additional checks have been put in place and work is underway to physically improve the switches to prevent a repeat.

2. Transfer and Deconstruction

Preparations for deconstruction have continued. There are three streams to our preparations as follows;

- 1) Site Transition. These are the activities required to transition the site from Operational Defuelling to Deconstruction.
- 2) Transfer. These are the activities required to transfer the site license to Magnox (currently forecast to take place 9 months after fuel free verification)
- 3) Deconstruction Preps. These are activities on the critical path to enter the site into a care and maintenance state (currently forecast to take 12 years) and activities to reduce hazards on site.

In the last period we have had some notable success in getting an organisation in place to deliver the above, generating a first draft of a site transition plan and completing the removal of 10,000 litres of fire resistant fluid from site.

3. Safety and Environment

Station Industrial Safety Performance

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

Team monthly safety meetings continue to be a success with topics including risk assessment, chemistry and radiological protection which have generated good discussion.

Industrial safety engineers (ISEs) have been busy completing compliance evaluations on lead & compressed gas cylinders during Q3. Q4 will involve the ISE's carrying out the control of

contractors compliance evaluations which will involve looking at our big six contract partners in line with the fleet programme.

In October we had a fleet Zero Harm week. This is an important time in to focus and encourage wider discussion around the topics of safety and wellbeing. At Hunterston B we arranged various activities which included Andy's Man's Club, blood pressure checks carried out by occupational health, information on prostate cancer by a Prostate Cancer UK representative, eye sight road worthy checks in the canteen, driving with artificial beer goggles so see how alcohol affects your vision. In addition to this we had therapies including reflexology, Indian head massages, deep tissue massage of legs or back, Reiki and crystal therapy.

All of our working groups which include, COMAH, vibration, W@H, building and fabric, asbestos, rail head crane, etc. continue to report directly into our Industrial Safety Action Team meeting which takes place on the 3rd Wednesday of every month.

The station went live with the new revised process of Risk Assessment on the 24th of October, a cross functional working group has redesigned the process to be more robust, this has been endorsed by the Nuclear Generation Management Team.

The regulator, the ONR, is due to visit the station on the 23rd of November to assess our arrangements for Control of Major Accident Hazards (COMAH). The ONR will be on site again in early December for its annual industrial safety visit where inspectors will be following up with topics such as asbestos and machine guarding.

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 2022 - October 2022)		
Planned collective dose	9.0man.mSv	
Actual collective dose	5.8man.mSv	
	Employee	Contract Partner
Total Dose	4.10man.mSv	1.72man.mSv
Average individual dose	0.02mSv	0.01mSv

Highest individual dose	0.24mSv	0.15mSv
Individuals	344	271

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 August 2022 to October 2022.

Work is in progress to repair a slow, low-level leak of oil from a transformer cable. The oil, which is used for insulation in the cable, is light, clear and fully biodegradable. A tracer has been added to the oil in the cable to help establish the leak site, however the leak is small and identification may take some weeks. Once identified a repair will be planned. SEPA have been kept fully informed and have been very supportive.

Radioactive gaseous and aqueous discharges arising from normal plant operations in defueling remain at levels well below those authorised by SEPA.

The programme of off-site environmental monitoring and radiation surveys in the district has continued throughout the period and demonstrates that the radiological discharges from the station have a negligible impact on the local environment. Reports are provided monthly and quarterly to SEPA, detailing the samples and results of analysis performed.

Work to process and package solid low level wastes has continued in the period as part of normal operations and consignments have been made to our regular partners.

Emergency Arrangements

There have been no issues with the emergency arrangements during this reporting period. Hunterston B continues to work closely with fleet Emergency Preparedness Group as the lead defueling site. As a group, we have been working on developing defueling scenarios and fault events that will exercise our Emergency Arrangements.

During the reporting period we completed a Counter Terrorism (CTX) demonstration exercise with oversight from the ONR (CNS). Hunterston provided an adequate demonstration with strong security and CNC performance and good lockdown behaviours.

We continue to work on embedding the learning and addressing identified areas for improvement from our previous defueling fault scenario demonstration exercise. We have an agreed date for ONR observation of a shift exercise in December to assess station performance. We also continue to sharing this learning with the rest of the fleet as part of our 'lead and learn' responsibilities.

We have completed a planned 2022 shift exercise season to allow existing role holders and trainees to exercise their roles in defueling based scenarios. There are two further exercises planned this year with arrangements in place for peer assessment of performance in November followed by ONR observation and assessment in December.

Fleet emergency preparedness staff are liaising with external stakeholders on changes to the emergency arrangements based upon Hunterston B's move into defueling. These changes will require an update to on & off-site emergency plans to reflect the change in site based hazards and plant state. An implementation plan has been developed to track tasks associated with REPPIR 2019 compliance, LC11 Optimisation and stable iodine removal activities for Hunterston B in line with the timescales agreed with the local authority.

4. People

The Good Day at Work survey was launched by RobertsonCooper at the start of the year providing a comprehensive view of wellbeing at work. Across the Generation business the results showed that 3.9/5 days are experienced as "good" and a workshop took place with the management team to review the results and discuss how we can further support our people. In October a follow up pulse check survey was carried out giving a further opportunity to see how best to further support people.

We previously developed a leadership development plan that focused on identifying and delivering training such as the aspirational conversations, engaging through change and the formal consultation training that would help leaders prepare for the end of generation and transition into the defueling part of the nuclear lifecycle. We are now focusing on preparing a new training plan for the next stage when our leaders will be preparing and leading teams through the transfer to Magnox. It is important to us that we ask leaders for their views. We held a collaborative session with leaders sharing thoughts and ideas on particular support and development that would be beneficial. As we did for defueling, we will continue to prepare our people for the next step of Hunterston B's journey.

As Hunterston B moves into its dual mission of Operational Defueling and Transfer & Deconstruction Preparations we have adjusted the organisation with the introduction of a Transfer and Deconstruction Preparation and Project Controls Departments. This started with Andy Dalling accepting the position of Transfer & Deconstruction Preparation Manager and Graeme Campbell as the Project Control Manager.

We appointed a Transfer and Deconstruction Preparation Group Head and there are now a number of key positions within the new team that will be tasked to deliver exciting activities associated with seamless transfer and deconstruction preparation. We are currently recruiting internally and externally into these positions for the new departments.

We have had four apprentices achieve their maintenance apprenticeships and have now gained full time employment as maintenance technicians.

5. Company Update

Team Hunterston take on charity run for Ayrshire Cancer Support

A team from Hunterston B power station has helped to raise more than £9,500 for a local cancer charity by running Scotland's largest half marathon.

Shift Manager Robert Miller, decided to take part in the Great Scottish Run to fundraise for Ayrshire Cancer Support following the loss of his wife, Lorraine, to cancer just under a year ago.

The charity supported Lorraine and her family during her 4-year battle with cancer.

The 13.1 mile course takes in several Glasgow landmarks, starting in George Square, crossing the "Squinty Bridge" and ending at Glasgow Green. Robert was joined on course through the city by more than twenty friends, family and colleagues from the station, including members of his shift, the management team and the Station Director.

Robert said: "Ayrshire Cancer Support helped Lorraine enormously throughout her battle; this is a small way of thanking them for helping her when she needed it most. I am blown away with the generosity of my friends, family and colleagues in raising almost £10,000 for such a worthy charity."



Joe Struthers, Station Director said: "Robert has been an inspiration to us all over the past few years, and I was proud to join him, alongside his family, friends and lots of colleagues from Hunterston B, running to raise money for Ayrshire Cancer Support in memory of Lorraine."

Nicola George, Head of Fundraising at Ayrshire Cancer Support said: "We are hugely appreciative of the support from family, friends and colleagues of Robert to raise vital funds for Ayrshire Cancer Support."

"As cancer rates sadly grow, so does demand for our range of services. These are provided free and include transport for patients receiving cancer treatment at hospital, professional counselling, a range of complementary therapies, various support groups and workshops, our drop-in centre, cancer nurse appointments, and specialist cancer information, as well as our new children and young people service."

EDF provides update on UK's existing nuclear fleet

In September, EDF provided an update on its UK nuclear generation business, to help develop understanding of its role in short term energy security, as well as helping the UK deliver longer-term policy objectives. EDF owns and operates eight nuclear power stations across the UK, five that are generating and three in the defueling phase. It is building Hinkley Point C in Somerset and there are plans to develop a sister station at Sizewell C, with a final investment decision due in 2023. The full strategy update can be viewed [here](#).

EDF's role in short-term energy security

- Over the 2023-25 period, EDF plans to invest £1 billion in the UK fleet to sustain output and help maintain security of supply
- The case to extend generation at Hartlepool and Heysham 1 power stations (2.2GW) - beyond the current estimated end date of March 2024 - will be reviewed in the coming months, with an ambition to generate longer if possible
- Output from the nuclear fleet in 2022 is forecast to be 42TWh (13% of UK demand), which is in line with the plan and sold well below current wholesale prices

- During the next 18 months total available generating capacity is 5.5GW, providing an important source of home-grown, low-carbon* power that helps limit gas imports
- In its thermal business, EDF has answered a Government request to keep part of West Burton A coal-fired power station open for a further six months (to 31 March 2023), with 400MW available if needed by National Grid.

Long term commitments – nuclear skills and investment

Over the longer term, EDF is committed to playing its part in the Government's commitment to expand UK nuclear capacity up to 24GW by 2050. With major interests in four of the eight designated sites for development (Hinkley Point, Sizewell, Hartlepool and Heysham), the company is working with 'Great British Nuclear' to help Government develop ideas on how to bring the policy goals to life.

Preserving and developing nuclear skills - alongside financing and planning consent for new nuclear - is a key priority for all those with an interest in re-building the UK's nuclear capabilities. This year EDF will invest around £40million in training its nuclear workforce and continues to build a centralised technical skills capability to support future developments. Next year EDF will hire up to 200 people to join its existing fleet and move its operational and technical headquarters to smaller, more modern offices in Gloucester and Glasgow.

In terms of investment, EDF and partners are investing £26billion to construct Hinkley Point C, a 3.2GW power station that will supply 7% of the UK's electricity. Advanced plans are in place for a replica at Sizewell C in Suffolk, and EDF is pursuing a 20-year extension of Sizewell B out to 2055. The company is also working with technology providers on plans for Advanced Modular Reactors (AMRs) at its Hartlepool site, to support industrial decarbonisation on Teesside; and is keen to explore options to support the development of the site, including both new nuclear technologies and hydrogen production at its Heysham site in Lancashire. EDF's West Burton A coal-fired power station site in Nottinghamshire is on the shortlist for the UKAEA's STEP fusion project, with a decision expected in the coming months.

*The [UK Fuel Mix disclosure](#) information, published by Government Department BEIS, recognises electricity from wind, solar and nuclear fuel produces zero carbon dioxide emissions at the point of generation.

Bright future for West Burton A as site looks to move from fossil fuel to fusion

EDF's West Burton A site in Nottinghamshire is to host the UK's first prototype fusion energy power plant.

The decision to site the new plant there was announced on Monday, October 3 by Secretary of State for Business, Energy and Industrial Strategy Jacob Rees-Mogg.

Following the announcement, the UK Atomic Energy Agency (UKAEA) team arranged an event at the site to unveil an artist's impression of the new site and to share more information about fusion technology and the prototype reactor which will be constructed at site when the coal-fired station closes.

West Burton has now entered its final winter, following a request from the Government to provide emergency back up to UK power supplies from its two remaining units. From the beginning of April 2023 the site will be in full decommissioning. As West Burton moves through decommissioning and then demolition, the UKAEA will formally begin its journey to fusion which

will spur investment in the area, a range of educational opportunities, jobs, industry collaboration and ultimately clean energy.

Hinkley Point C smashes apprenticeship target ahead of schedule

Hinkley Point C has hit its goal of training 1,000 apprentices during the power station's construction phase. The target was set during the planning stage of the project, as part of its commitment to maximising opportunities for local people.

The apprenticeship programme's success is due to the extensive outreach work being done with local schools and colleges. Partnerships have also been set up with training providers, such as Bridgwater & Taunton College, creating a pipeline from the classroom to employment.

The apprenticeship programme is making a real difference across Somerset, with two thirds of all apprentices living within the local area.

Apprenticeships will continue to be available on the project as construction develops. Due to the number of skills needed to build the power station, there is a course for everyone, from welding, nuclear engineering, to HR and catering. Opportunities are available, regardless of previous experience, background, or age – the youngest apprentice is 18, and the oldest is in their 50s!

Hinkley Point C has also invested £8 million into three "Centres of Excellence" in Somerset, specialising in welding, mechanics, and electrics – meaning apprentices have access to world-class training equipment.

6. Contacts

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

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