Site Stakeholder Group

Hunterston B Station Director's Report

Period: May to July 2019

1. Graphite Update

The safety cases for both Reactors 3 and 4 have been submitted to the ONR. Since submission EDF Energy has provided detailed information and analysis on a number of technical areas to support the ONR assessment.

The ONR will, completely independently, review the cases before deciding whether or not to approve for return to service. It is not possible for us to confirm with certainty how long this process will take; our top priority is that it's completed with appropriate rigour.

We will continue to keep the SSG, and the wider community, up to date on the progress of the safety cases. All updates are also posted on the graphite section of the EDF Energy website: https://www.edfenergy.com/energy/graphite-core

2. Safety and Environment

Station Industrial Safety Performance

Between April and June EDF Energy carried out a six week safety campaign across its fleet of power stations, including Hunterston B. The campaign was called "iAlways" and covered a range of issues including:

- Risk perception and elimination
- Dropped objects
- Hand safety
- Safe use of work equipment
- Working at height
- Driving standards.

All departments took part and there were regular management safety tours followed by internal communications on the findings. The industrial safety department also held meet and greets.

Our safety performance during the reporting period has been very good with no recordable accidents or incidents. Our TRIR rate currently sits at 0.59 which is a positive improvement from this time a year ago, however we still strive towards achieving zero harm.

Following the success of the" iAlways" campaign we will continue to focus on making industrial safety improvements. In August we are rolling out a PPE campaign which will increase awareness about the importance of wearing the correct PPE.

Our onsite working groups also continue to make industrial safety improvements across the station. These include groups on working at height, asbestos, lifting operations lifting equipment regulations (LOLER) and a work equipment oversight committee (WEOC).

Environmental Safety

There have been no significant environmental events in the period.

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

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.

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

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 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.

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

Radiation Dose to workers (May to July 2019)		
Planned collective dose	23.4man.mSv	
Actual collective dose	11.6man.mSv	
	Employee	**Contract Partner**
Total Dose	8.9man.mSv	3.0man.mSv
Average individual dose	0.02mSv	0.01mSv
Highest individual dose	0.80mSv	0.65mSv
Individuals	396	289

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)

Emergency Arrangements

There were no activations of the emergency arrangements during the reporting period.

Exercise 'Aquila' was held on 12th June. This was a large multi-agency exercise that ran for approximately eight hours.

This tested the off-site emergency arrangements in place for Hunterston B Power Station, including the Hunterston Strategic Co-ordination Centre (HSCC) at Liberator House, Prestwick Airport; the Media Briefing Centre (MBC) at Greenwood Conference Centre, Dreghorn; the EDF Energy Central Emergency Support Centre (CESC) at Barnwood and the Scottish Government Resilience Room (SGoRR), together with a number of other control centres.

The main focuses were the protection of the public in the local area and the information given to the public during an off-site nuclear emergency.

The ONR deemed it to be an adequate demonstration of the emergency arrangements.

Preparations are now under way for assessed exercises which are being held on the site during September and October to demonstrate the on-site emergency arrangements.

3. Generation

During the reporting period Reactor 3/Turbine Generator 7 and Reactor 4/Turbine Generator 8 remained off-line while the company works with the regulator to ensure that the longer term safety cases reflects the findings of the recent inspections and includes the results obtained from other analysis and modelling.

4. Station Update

SmartSTEMs Celebrates Reaching 10,000th Student

A charitable organisation that aims to inspire the next generation of scientists and engineers celebrated a significant milestone at a recent event in Glasgow.

More than 570 girls learned about the benefits of a career in science, technology, engineering and maths (STEM) at an event held by SmartSTEMs at Glasgow Caledonian University (GCU).

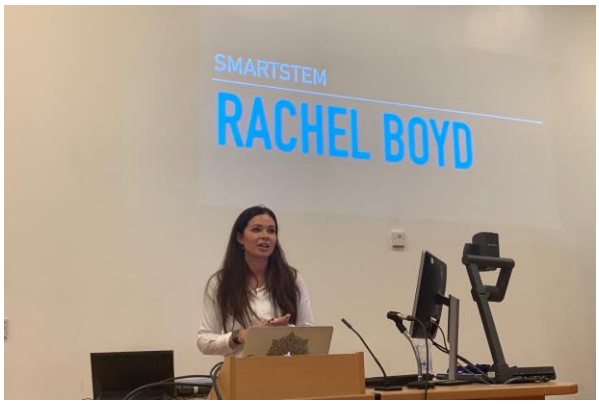
Madison Caldwell (10) from St Bernard's Primary School in Nitshill was identified as the 10,000th pupil to attend and was presented with a Lego wind turbine kit donated by headline partner EDF Energy to mark the milestone.

Madison said: "I won a wind farm Lego kit for being the 10,000th young person to come to SmartSTEMs. I'm really happy to have won, the kit looks really cool".

The pupils aged between 10 and 14, from schools across the city, heard from Digital Security, Forensics and Ethical Hacking student Maria Khokhar, winner of the GCU Student of the Year award, and Rachel Boyd, a technician at Hunterston B power station, about their careers in STEM. They also took part in a series of hands-on workshops including 'Wired for Sound: Exploring Analogue and Digital Technologies in Live Audio', 'Build your own Fitbit' and 'Keeping you safe in Cyber Space'.

Figures show that at the moment just one in four people working in core STEM careers in Scotland is female. Research also shows that in engineering alone 124,000 new recruits will be needed each year until 2024 to meet job demand.

Events run by charitable organisation SmartSTEMs target pupils aged 10 to 14 and aim to address these challenges and encourage more people from diverse backgrounds to study STEM subjects at school.



The session was one of 20 SmartSTEMs plan to deliver in partnership with EDF Energy before the end of the year, reaching up to 5,000 pupils.

Rachel Boyd said: "When I was growing up I was always lucky to have female role models working in engineering who inspired me pursue a STEM career. It was only when I started my training that I realised how few women there actually were working in the industry. Right now, only one in four people working in core STEM industries in Scotland is a woman. That is why I think it is so important that girls today have visible role models they can identify with.

"I'm delighted that EDF Energy's support has helped SmartSTEMs reach this milestone. We want to open girls' eyes along with those of their parents and teachers, to the variety of jobs available in these industries. Giving them the chance to hear from women working in these jobs and to find out about the range of careers they could enter can do just that."

Stuart Macdonald, of SmartSTEMs said: "We are delighted to pull together many wonderful industry partners and scores of generous volunteers to deliver this great event for these young girls. Proud to be playing our part in making Scotland a great place to discover and pursue STEM careers."

5. Company Update

Hinkley Point C Hits Its Biggest Milestone Yet

Hinkley Point C has hit its biggest milestone yet on schedule. The completion of the base for the first reactor, known as "J-zero", means that the construction of the nuclear buildings above ground can now begin in earnest.

The final 9,000m³ of concrete was the largest concrete pour in the UK, beating a record set by the Shard in London. Reinforced with 5,000 tonnes of Welsh steel, the base has been under construction by the UK-French joint venture of Bouygues-Laing O'Rourke for six months.

Good progress and efficiency improvements mean that the second Hinkley Point C reactor will hit its own J-zero moment in June 2020.

Project Update

The construction of the second of Hinkley Point C's two units is well underway and is already showing the improved efficiency possible when an identical design is repeated. The 12 month separation offers maximum efficiency for the transfer of teams between units.

Almost 4,000 people are now working at Hinkley Point C. Half of them are from the local area.

Forgings for the pressure vessel and steam generators are underway at Framatome in France and the world's largest turbine is under construction at GE.

The world's largest crane – the Sarens SGC 250 – is taking shape on site to allow prefabrication of large parts of the nuclear buildings, which improves quality and saves time. This is an innovation informed by experience from previous EPR projects.

£1.5bn of contracts has been awarded in the South-West and 64% of the project value is being spent with UK firms.

430 of 1,000 apprentices have been hired and 8,500 people have been trained and assessed at the specially built Construction Skills and Innovation Centre near the site.

Minister for Nuclear at the Department for Business Energy and Industrial Strategy, Andrew Stephenson said: "This is a huge achievement for Hinkley Point C and a major milestone for the UK's nuclear new-build industry, which - as a low-carbon electricity source is key to meeting our ambitious target of net zero emissions by 2050."

"The project will not only power nearly six million homes, it will add an enormous boost to the local and national economy, delivering over 25,000 new jobs and securing long-term, well-paid employment – a key step in delivering clean growth as part of our modern Industrial Strategy."

Hinkley Point C Managing Director, Stuart Crooks said: "I am proud of the talent and achievement of our diverse UK workforce, our unions, our international supply chain and the design team in France. We are benefitting from direct experience from other EPR projects and a partner in CGN which understands the technology and the project."

EDF Energy CEO Simone Rossi said: "Hinkley Point C's progress is good news for anyone concerned about the climate change crisis. Its reliable low carbon power will be essential for a future with no unabated coal and gas and a large expansion of renewable power. The innovation at Hinkley Point C sets up the opportunity to reduce costs for consumers for a near identical power station at Sizewell C in Suffolk."

EDF Energy and NEoT Capital Partner to Deliver EV Infrastructure across the UK

EDF Energy has entered into a partnership with NEoT Capital to accelerate the delivery of key infrastructure for electric vehicles (EVs) in the UK.

The energy supplier, which recently launched its 'Generation Electric' campaign and a new EV offer, will become NEoTs preferred partner to provide EV charging infrastructure engineering, procurement, and construction and management services.

In turn, NEoT Capital – which specialises in distributed renewable energy and zero emission mobility – will act as EDF Energy's preferred provider for financing EVs, particularly electric buses and batteries, and related infrastructure.

Demand for EVs is continuing to rise, with the average number of electric cars registered jumping by 900 per cent between 2014 and 2018, leading to an urgent need for widespread EV infrastructure across the UK. However, current investment by businesses in fleet EV operations is limited, with few businesses able to finance the large-scale holistic energy systems that will ensure the future cost efficiency of EVs, such as battery storage and vehicle-to-grid systems.

Both EDF Energy and NEoT Capital have invested heavily in new energy technologies in recent years. This partnership aims to combine their capabilities in order to support more meaningful investment into EVs, providing business customers with an end-to-end proposal for financing and infrastructure.

Béatrice Bigois, Managing Director, Customers at EDF Energy, said: "To accelerate the adoption of electric vehicles, we need to find innovative ways to finance the required investments. This strategic partnership with NEoT Capital will help us make electric mobility a reality for our customers."

Philippe Ringenbach, CEO at NEoT Capital, said: "NEoT has the ambition to help its customers, notably cities and private operators, finance their transition to eMobility. We have the ability to invest up to €150M in Europe by the end of 2020 and we believe that the UK market is one of the most dynamic.

"This partnership with EDF Energy will allow us to propose global 'eMobility-as-a-service' offers from battery-as-a-service to global financing and service solutions including batteries, vehicles and optimised charging infrastructure. We want to support local authorities and operators in the public and private transportation sector to change to clean vehicles."

6. Staffing Update

As of July 2019 the station has 480.5 employees (FTE). Recruitment is ongoing in a number of departments to maintain our organisational capability against agreed station numbers.

The station has prepared a Lifetime Resource Plan to 2023 in support of the business mission of safe reliable generation over extended life.

This provides us with an understanding of resource demands through the life of the station; potential attrition rates and what this means for resourcing, retirement of an aging workforce and an understanding of vulnerabilities for knowledge capture and transfer. The station plan is underpinned by detailed departmental plans to integrate opportunities and potential vulnerabilities.

During July and August, all employees will have an aspirational conversation with their leader. The purpose of these conversations is to understand and support employees with their career aspirations for the future and also to inform the station's resource planning. These conversations will be held annually with all employees.

Hunterston B vacancies are displayed on the www.edf-energy.com web site

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

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