



Site Stakeholder Group

Hunterston B Station Director's Report

Period: August to October 2016

1. Safety and Environment

Station Industrial Safety Performance

We are working with Cape PLC to produce two virtual reality productions at Hunterston B. These productions will promote safe behaviours which are expected on site at all times and remind personnel of potential outcomes when rules are not adhered to. We intend to deliver these productions during "Safe Start" in January 2017. "Safe Start" is a safety campaign which is ran at the start of every year after the festive period to refocus personnel on the year ahead and ensure that we all start the year as we mean to go; with Zero Harm at the forefront of our minds.

There were no Lost Time Incidents (LTIs) reported by EDF Energy or our Contract Partner staff between the start of August and the end of October. The Total Recordable Injury Rate is currently 0.54.

It has been 3118 days since the last EDF LTI and 3106 days since the last Contract Partner LTI at HNB. That is more than eight and a half years.

There were no Industrial Very Significant Incidents or Serious Incidents reports in this period.

Throughout this period our excellent engagement and team work coupled with high standards of nuclear professionalism and accountability mean we have achieved a good safety performance.

We will continue to work towards zero harm.

Environmental Safety

There have been no significant environmental events in the period.

Three minor events have been recorded in the period:

- A few litres of fuel oil spilled into a concrete trench during works to replace some fuel oil pipe lines. The work team responded well by cleaning up the spillage promptly and the pipe work has been repaired. The oil was contained within the concrete trench.
- Some ammonia spilled into a bund during the filling of a chemical tank as a result of incorrect valve alignment. The ammonia was contained within the bund and cleaned up. The alignment error is being investigated to identify the causes and prevent recurrence.
- While SEPA was sampling the sewage system an elevated pH reading was detected in the discharge to sea. On investigation it was discovered that a pH meter which controlled the dosing of the sewage to maintain an appropriate pH had failed resulting in the discharge being overdosed. The pH meter has been repaired and we are investigating the cause with the sewage plant operating company. SEPA have written to the station requesting that we investigate the failure of the sewage plant which is in progress.

There was no harm to the environment as a result of any of these events.

Work is now well progressed at the surface water discharge point to improve safe access for personnel and to provide greater resilience against storm conditions. There has been some local landscaping, and fencing erected to secure public and employee safety.

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 Winfrith, and Hythe.

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 1999 which is the UK Health and Safety legislation that applies to work with radiation.

During the reporting period the actual collective dose was below plan (see table below). We plan the collective dose expected for each year based on the work due to be carried out on the plant. A breakdown of dose received is shown below (along with a comparison of relevant dose statistics).

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.

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.

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

Radiation Dose to workers (Aug-Oct 2016)		
Planned collective dose	20.0man.mSv	
Actual collective dose	9.4man.mSv	
	Employee	Contract Partner
Total Dose	7.2man.mSv	2.2man.mSv
Average individual dose	0.017mSv	0.007mSv
Highest individual dose	0.25mSv	0.17mSv
Individuals	426	297

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 has been no activation of the Hunterston B emergency arrangements during this reporting period.

On the 21st September, Hunterston B took part in a demonstration of the Hunterston Off Site Plan, exercise KESTREL. This was large multi-agency exercise held across many different command centres; Hunterston B, the command centre at the EDF Energy headquarters at Barnwood, the strategic coordination centre at Prestwick, ONR office at Bootle and Scottish Government offices.

The ONR agreed the exercise was an adequate test of the offsite arrangements. Many organisations took place and each has taken its own learning to ensure continual improvement.

The onsite training of all our emergency responders continues with the annual training of teams in breathing apparatus and search and rescue for casualties.

The calendars for the residents in the DEPZ will be sent out during the next few weeks. We are also planning our training and exercises for 2017.

2. Generation

Month/Unit	R3/TG7	R4/TG8
August	<ul style="list-style-type: none"> 12th: Returned from unplanned outage Operated at optimum load for remainder of month 	<ul style="list-style-type: none"> 2-5th: Output reduced for low load refuelling Operated at optimum load for remainder of the month
September	<ul style="list-style-type: none"> 14–19th: Unit offline following turbine led trip Operated at optimum power for the rest of the month 	<ul style="list-style-type: none"> Operated at optimum load throughout month
October	<ul style="list-style-type: none"> Operated at optimum load throughout month 	<ul style="list-style-type: none"> 6-9th: Output reduced for low load refuelling Operated at optimum load for rest of the month

3. Company Update

Final contracts signed for Hinkley Point C

Contracts for the Hinkley Point C nuclear power station in Somerset have been signed.

The signings took place between the Secretary of State for Business, Energy and Industrial Strategy Greg Clark, EDF group Chairman and CEO Jean Bernard-Levy and CGN Chairman He Yu. French Foreign Minister Jean-Marc Ayrault and the Administrator of the Chinese National Energy Administration Nur Bekri attended the ceremony.

The event marks the end of the project's development phase following years of rigorous preparation and planning.

The signing formally relaunches new nuclear construction in the UK and Europe and will provide a significant boost for industry in Britain and France.

The plant's two EPR reactors will provide reliable, low carbon electricity to meet 7% of the UK's future electricity needs. Their construction is a major step forward in the fight against climate change.

Heysham 2 ends record breaking run for planned maintenance shutdown

Heysham 2 nuclear power station's record-breaking reactor has been taken out of service for a planned maintenance programme.

One of the two units at the Lancashire station was turned off for planned maintenance on Sept 16 after 940 days of continuous operation. This record run beats a record previously held for 22 years by the Pickering nuclear power station in Canada.

During the run the reactor produced over 14TWh, enough low carbon electricity to power 3.4m homes for a year, while avoiding around 7.5m tonnes of CO2 emissions.

Since EDF Energy took over its UK nuclear power stations 2009, their output has increased by 50%, safety performance has increased by 51% and their lifespans have increased by 25%.

Earlier this year EDF Energy announced new extended scheduled closure dates for four of its nuclear power stations, with Heysham 2 now scheduled to operate until 2030, an extension of seven years.

Lewis Wind Power buys Uisenis Wind Farm

Lewis Wind Power (LWP), a joint venture between Amec Foster Wheeler and EDF Energy Renewables has bought the Uisenis Wind Farm project on the Isle of Lewis.

The wind farm has planning consent for the development of 45 turbines with a maximum capacity of 162 MW. This would be enough to power 124,000 homes and would be the biggest renewable energy development on the Western Isles.

LWP owns the Stornoway Wind Farm project located around 20km to the north of Uisenis which has planning consent to develop 36 turbines to a maximum capacity of 180 MW – enough to power 135,000 homes.

The acquisition shows LWP's commitment to developing low carbon renewable energy on the Isle of Lewis offering significant benefits for the community.

The joint capacity of up to 342MW is a crucial part of building the case for an interconnector to the Scottish mainland which is estimated to require over 350MW of committed project power to be viable.

The interconnector is essential to make sure electricity can be exported from the island to the wider UK electricity grid.

4. Station News

Search begins for new Hunterston B apprentices

Hunterston B power station has started the search for apprentices to join EDF Energy next September.

During the autumn, staff from the power station will be visiting schools and colleges to promote the four-year training scheme. The Visitor Centre will also be hosting information sessions for those interested in becoming apprentices.

The start of the apprentice recruitment process coincides with a relaunch of the national campaign to change teenage girls' perceptions of science and inspire them to pursue science-based careers.

Last year, EDF Energy launched #PrettyCurious, a long-term programme to encourage more teenage girls to study STEM. The programme aims to give girls hands-on experiences and provide them with opportunities to learn about the wide range of careers available in STEM.

Hunterston B power station, which took on six apprentices this year, is running information sessions at the Visitor Centre on 12, 13, 26 and 27th November.

The closure date for applications is early in January 2017, when successful applicants will first take tests, followed by interviews and then join an assessment centre before the final selection is made.

Apprentice co-ordinator Craig McGhie, said: "We are determined to find the best people for the programme so the selection process is pretty rigorous but I would encourage anyone who thinks they would be interested to book a place on one of the information sessions."

After the 2017 apprentices are chosen they and their families will be taken to see HMS Sultan – the Portsmouth-based training facility where the apprentices will spend their first two years.

Craig said: "We know that for many of our new apprentices that it will be first time they will have left home. "So it is important that they and their parents see what's on offer at HMS Sultan, the accommodation as well as the leisure facilities."

Away from the classroom the apprentices will enjoy excellent sports and leisure facilities under the watchful eye of the centre's own team. EDF Energy's apprentices also undertake an extensive life skills package along with some cultural visits to European cities. After two years, the apprentices return to their home sites to complete their apprenticeship with on-the-job training.

- Applications for the apprentice programme will open on November 1, and will be through the EDF Energy careers website <http://www.edfenergy.com/careers/>
- To book a place on the information mornings contact Hunterston B power station on 01294 826000

5. Staffing Update

The station currently employs 550 full time staff, this includes 23 apprentices.

The apprentice recruitment campaign for the 2017 intake is now underway.

We are currently recruiting in the areas of Engineering, Nuclear Safety and Operations. 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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6. Glossary of terms

Term	Definition
Unit	A unit refers to one of the reactors at the power station and its generating turbine
Nuclear reportable event or incident	Nuclear reportable events are events reported to the Office of Nuclear Regulation (ONR) in compliance with EDF Energy's nuclear site licences.
Environmental event or incident	Environmental events arise from wastes or discharges above permitted levels or breaches of permitted conditions.
Lost Time Incident (LTI)	When a member of staff injures themselves at work, and is absent from work for one day or more, this is referred to as a lost-time incident (LTI)
Total Recordable Incident Rate (TRIR)	Total Recordable Incident rate is the total number of Lost Time Incidents, Medical Treatment Cases, Restricted Work Cases and which is divided by the amount of total amount of man-hours and then multiplied by 1 million. This indicator is a 12 month rolling figure. $((LTI+MTC+RWC)/manhours) \times 1000000 = TRIR$ 0.54 represents 1 Restricted Working Case during December 2015
Outage	A period during which a reactor is shut down. The periodic shutdown of a reactor including for maintenance, inspection and testing or, in some cases, for refuelling is known as a planned outage. In the UK, some planned outages are known as statutory outages and are required by the conditions attached to the nuclear site licence needed to operate the station. Unscheduled shutdown of a reactor for a period is known as an unplanned outage.