Site Stakeholder Group Report

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1. Safety and station issues

I am pleased to present my report and operational update on behalf of the team at Hinkley Point B.

Last week we reached the eleventh anniversary since the power station's
last Nuclear Reportable Event. This performance is comparable to some of the best performing nuclear power plants in the world, and we are all very proud. We have a healthy and open reporting culture, our decision making processes are robust, we have nurtured an environment where everybody is personally accountable for their actions, and we effectively embrace the use of organisational learning tools. These are just some of the reasons which have contributed to us reaching where we are today and achieving this world class level of performance.

We are also doing extremely well with our environmental safety performance, and I am pleased to report it is now over eight years since our last environmental event. Clearly again this is world class performance, and we will strive to maintain these high standards as we continue our journey to safety excellence.

As reported at our last meeting, back in April one of our contract partners fell approximately two metres through a skylight while working on a roof and sustained cracked vertebrae. Thankfully we are pleased to report the individual is expected to make a full recovery. Since the last meeting the Office for Nuclear Regulation (ONR) has served both Hinkley Point B (EDF Energy Nuclear Generation Ltd) and the contract partner's employer with improvement notices. These notices relate to the management of working at height activities at our site, and we have until January 2018 to comply with the requirements specified. Since the accident we have started a comprehensive programme of work to examine, inspect and where appropriate, make improvements. Recently we presented an update on the progress we have made and the action we have taken to ONR at their Bootle offices. I am confident that our procedures are robust to ensure safety when working at height at Hinkley Point B.

Unfortunately, during the period a further injury occurred requiring medical treatment when an operator was struck by a plastic strainer lid during a routine plant operation causing a cut to the mouth. We are holding a thorough investigation into the accident, and I am pleased to confirm the individual has made a full recovery and returned to work for his next shift. The remaining 16 first aid injuries during the period were of a very minor nature.

We are continuing with our investigations to identify the exact location of the single fuel pin defect in reactor 4, which was reported at the last meeting. The defect is in the stainless steel cladding of one of the pins that encapsulates the fuel. A fuel pin defect, also known as failed fuel, is included in the safety case for operation of the power station, and does not represent a danger to human health or pose harm to the environment.

In August auditors from Lloyds Register Quality Assurance (LRQA) completed their sixth annual LRQA surveillance at Hinkley Point B. I am pleased to report the awarding body recommended the station's certification continues against the management system standards for quality (ISO 9001:2008), environment (ISO 14001:2004), occupational health and safety (OHSAS 18001:2007) and the publicly available standard for asset management (PAS55-1:2008).

Station output for the period 15 June 2017 to 17 October 2017 was 2.67 TWh (One terawatt equals 1,000,000 megawatts: one terawatt-hour represents one hour of electricity consumption at a constant rate of 1TW).

As I write this report, reactor 3 is currently offline. We manually shutdown the reactor on Thursday 19 October after routine monitoring activities revealed a higher than expected temperature on a busbar located on the generator brushgear. Once repairs have been made, we will commence start up activities to return the unit to nominal full load. There was one other manual reactor shutdown during the reporting period, and this is explained in section 5 (production statistics) of my report.

Following the terror event at Parsons Green tube station in London on Friday 15 September and the subsequent raising of the UK terror threat level to critical, Operation Temperor was activated on Saturday 16 September. This once again meant the deployment of military personnel to backfill Civil Nuclear Constabulary (CNC) officers at nuclear power stations, including at Hinkley Point B, and other sites where CNC have a presence. This was to enable them to help provide support to the country's Police forces on the streets of the UK. On Sunday 17 September the UK terror threat level was lowered and reverted back to severe, and Operation Temperor was stood down.

EDF Energy has an extensive graphite research programme which benefits from the expertise of our own team of graphite specialists, along with expert academics at several universities across the UK, including University of Bristol. This has allowed us to develop an extensive understanding of how our reactor cores age. At the end of September, Mervyn Brown and I travelled to Bristol to see some of the pioneering research work on graphite EDF Energy has been doing in partnership with the University of Bristol. Integral to this research is a 1/4 scale model of a graphite core which is located on a shaker table.

2. Environmental update

As reported at the last meeting, in March 2017 the surface water oil interceptor was taken out of service for cleaning and inspection. It was found a number of changes had to be made to the internal structure of the interceptor and large volumes of silt had settled from the cooling water extracted from the Bristol Channel. This work was completed in June 2017 and the interceptor has now been returned to service. We continue to closely monitor its performance to ensure cleaning and maintenance activities are optimised.

In August a discharge of radioactive effluent was performed without all of the required written analysis on the pre-discharge samples being completed. Subsequent investigations identified the activity of the discharge was within the expected range and there was no environmental impact caused. We have taken the potential consequences of this event very seriously, and have since completed an investigation to identify the causes. Improvements have now been identified to the communication process and have subsequently been completed. This event was immediately reported to the Environment Agency and has been defined as a non-conformance with the permit with no environmental detriment.

In addition, the Environment Agency site inspector has visited Hinkley Point B throughout the period to complete themed inspections. These inspections have not raised any findings of significance. Small improvement opportunities have been identified and these are being tracked and resolved as part of the station's action tracking process.

3. Emergency arrangements

During the reporting period, we successfully completed the 2017 emergency exercise season. As part of this programme the station was successful in both regulatory exercises (safety and counter terrorism) during the summer and while a number of areas for improvement were identified, the regulator did comment favourably upon a number of aspects. Planning is already underway for the 2018 shift compliance exercises with four scheduled for January and one for March. Our 2018 Level 1 exercise is planned for Wednesday 5 September and our counter terrorism demonstration for Wednesday 19 September.

In the period there have been two ambulances called to site for station staff being taken unwell. I am pleased to report both have since made a full recovery. No other emergency services have attended.

4. Station events

There were no INES reportable events during the reporting period.

Events on a nuclear site are rated according to the International Nuclear Event Scale (INES), which is rated from 0 to 7, with 7 being the highest. A Level 1 event is classified as an anomaly.

5. Production statistics

For the period 15 June 2017 to 17 October 2017:

TWh (terawatt-hour) Production:

Reactor 3 1.404
Reactor 4 1.268

On 9 August reactor 4 safely and automatically shutdown after an electrical fault occurred on a relay resulting in the release of a group of control rods into the reactor. While the reactor was off line, we took the opportunity to complete a small maintenance programme. The unit was safely returned to service on 18 August.

Unit Capability Factor (% load factor) is based on a rated unit power (RUP) of 480 GNN (Gross Net Net) for reactor 3 and 475 GNN for reactor 4.

- Reactor 3 100% excluding planned shutdowns and refuelling
- Reactor 3 97.5% no allowance for planned events

- Reactor 4 91.1% excluding planned shutdowns and refuelling
- Reactor 4 89% no allowance for planned events

Number of channels re-fuelled on both units: 36 plus 7 shuffled channels.

Number of flasks despatched: 14

Source: station records.

6. Community relations

Site visits
Since the last meeting the station has hosted a variety of organised external group visits, including representatives from Al Ashraf Secondary School for girls (Gloucester), Bishop Fox's School (Taunton), Bridgwater YMCA, Brixham College, Brymore Academy (Cannington), Combe St Nicholas Primary School (Chard), HSBC Pensioners Association,

Huish Episcopi Academy (Langport), Knights Templar School (Watchet), MX5 Owners Group, National Star College (Cheltenham), Norton Hill School (Midsomer Norton), Portsmouth University, Shapwick School, Taunton School, Vodafone, Women into Property South West Group and Yew Wah International Foundation. Each group received presentations on EDF Energy, Hinkley B and nuclear power at our visitor centre before being taken on a guided tour of the site.

Sponsorship and Donations
EDF Energy continues to support local charities and organisations. Since the last meeting, beneficiaries have included:-

- Bridgwater Guy Fawkes Carnival
- Burnham and Highbridge Choral Society
- Children's Hospice South West
- Escape Support Group
- Help for Heroes
- Homeless Shoebox Appeal, Bridgwater
- Nelson Trust, Bridgwater
- Royal National Lifeboat Institution, Burnham on Sea
- Salvation Army, Taunton
- Samaritans of Taunton and Somerset
- Sedgemoor Chess Club
- Somerset and Avon Rape and Sexual Abuse Support
- Spaxton Junior Football Club
- Stroke Association
- Taunton Rugby Club (Juniors)
- Ups and Downs South West
- Watchet Town Football Club (under 8's team)

Hinkley Point Visitor Centre
Members of the public and organised groups have been taking the opportunity to visit Hinkley Point's visitor centre since it was opened in December 2012. Over 69,000 people have visited the interactive centre which is based in Bridgwater's Angel Place Shopping Centre. The visitor centre is open six days a week, Monday to Friday 09:00 to 16:00 and on Saturdays between 09:00 and 13:00. An EDF Energy customer services representative is also there every Wednesday between 10am and 3pm answering customer queries. To find out more information about the visitor centre or to book a tour of Hinkley Point B power station, email hinkleybtours@edf-energy.com or telephone 01278 429225 / 01278 428988. Since the visitor centre opened over 13,000 people have visited the Hinkley Point B site.

Charity of the Year – Breast Cancer Now
Since the company launched its three year charity partnership with Breast Cancer Now in October 2016, station staff and contract partners have raised over £8,500 for the popular

charity. Some of the charity fundraising activities Hinkley Point B workers have taken part in include parachute jumps, sponsored walks and runs, and cake sales, to name just a few. In addition footballers from EDF Energy's Hinkley Point B and Hinkley Point C sites raised more than £2,000 for the company's charity partner Breast Cancer Now. The two sites locked boots on the pitch at the Kings Down Pavilion in Bridgwater on Friday 1 September for what will be an annual charity footballing challenge. After an exciting and close 90 minutes, Hinkley Point B came away as eventual victors after winning the match 4-3.

Companywide an overall total of £221,861 has been raised through fundraising activities, and this includes a £50,000 match funding donation by EDF Energy.

7. Staff

- 533 full-time EDF Energy employees
- 22 apprentices (20 x engineering maintenance and 2 x business)
- 200 full-time contract staff
- 1 industrial placement student

8. Company news

New leadership roles announced at EDF Energy

During the period EDF Energy announced changes to its leadership team which saw Stuart Crooks take charge of the Hinkley Point C project now that it has entered fully into its construction phase.

Stuart was very successful as Managing Director of the Generation business but will now lead the construction and delivery of the UK's first new nuclear power station in almost a quarter of a century.

Brian Cowell has become the new Managing Director of the Generation business, having been Director of Nuclear Operations for EDF Energy's high-performing nuclear fleet. He is now responsible for all of EDF Energy's existing nuclear, coal, gas and renewables operations and will oversee work to identify further nuclear life extension opportunities, optimise end of the nuclear stations' lives and plan for the phased closure of the coal plants. Through the EDF Energy Renewables joint venture, he will seek to develop further UK renewables capacity.

Major milestone achieved for Blyth Offshore Wind Farm

Wind turbine foundations are now in place off the coast of Blyth in Northumberland to mark the latest stage of a pioneering offshore wind farm development. EDF Energy Renewables is currently delivering the Blyth Offshore Demonstrator Wind Farm after taking over responsibility for the scheme from ORE Catapult (formerly Narec) in October 2014. Five gravity based foundations (GBFs) have now been installed using a new "float and submerge" process – the first time this method has been used for offshore wind turbines. Designed and built by Royal BAM Group in the Neptune dry dock on the Tyne, the GBFs were floated into position off the coast of Northumberland and submerged onto the seabed and further ballasted to provide the support structures that act as the foundations for the turbines. The Blyth offshore wind demonstrator project incorporates several new and innovative features as part of its role in testing and proving new and emerging offshore installation methods and technologies. The demonstration scheme will set a new technology benchmark for other similar offshore wind developments around the country. Installed around 6.5km off the coast of Blyth, the turbines have a total generating capacity of 41.5MW and once operational will produce enough low carbon electricity to power around 34,000 homes.

P. G. Evans

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