

Hinkley Point B Power Station Site Stakeholder Group Report



Mike Davies, Hinkley Point B Station Director
25 February 2022

1. Safety and station issues

Thank you for giving me the opportunity to present my first report and operational update for Hinkley Point B as Station Director.

Before doing so, I thought I would introduce myself. I am not entirely new to the Site Stakeholder Group, as for the past year I have attended the meetings where I have provided updates on our defueling preparations.

I joined the nuclear industry in 1998 as a Graduate Chemist, and I moved to Hinkley Point B in 2002. Since then I have held a number of station positions, including Outage Group Head, Work Management Group Head, Station Chemist and Operations Services Group Head. I joined the station's management team in 2011 as Training Manager, and in the past 11 years, I have held other managerial positions at the site, including Strategic Outage Manager, Operations Manager, and more latterly Lifetime Transition Manager. I replaced Peter Evans as Station Director in December 2021, and I would like to take this opportunity to formally acknowledge his contribution to the Site Stakeholder Group over the years. I live in Wembdon, and I am married with two children.



We measure our safety performance against top tier indicators, and it has been over 15 years since our last Nuclear Reportable Event. This fleet leading performance is comparable to some of the best performing nuclear power plants in the world. In terms of industrial safety, it has now been over six years since the station's last lost time incident to a member of staff, and over two years since the last lost time incident to a contract partner. Since the October meeting, there have been four minor first aid injuries at the site, all of a very minor nature.

Station output for the period between 17 October 2021 and 12 February 2022 was 2.162 terawatt hours (TWh). A terawatt hour is a measurement of electrical energy consumption and is equivalent to a trillion watts consumed in one hour.

I write this report a few days after *Storm Eunice* brought strong winds and disruption to our region. Unfortunately Hinkley Point B did not escape the impacts of the extreme weather, and reactor 3 automatically shutdown on Friday 18 February at 13:35 hours following a fault in the National Grid substation after the wind had blown salt and other dust sediment onto electrical insulators. Due to the need to facilitate urgent grid washing activities to remove this debris, we then took the proactive and precautionary decision to also take reactor 4 off line and the unit was manually shutdown on Saturday 19 February at 16:30 hours. We are planning to return both units to service within the next seven days.



Apart from the shutdown mentioned above, reactor 3 has been operating at nominal full load since 25 October 2021 and throughout the reporting period.

After 215 days of continuous generation, reactor 4 was manually shutdown on Friday 12 November for a planned maintenance and graphite inspection outage. We completed inspections on 31 graphite channels, and I am pleased to confirm these results were within expectations and the graphite continues to behave as experts have predicted. Reactor 4 was returned to service on 19 December 2021 to start its final six-month generation run.

At October's meeting, I gave an update on EDF's AGR defueling programme and the preparations the power station is making for end of generation. These preparations are progressing well, and we continue to operate with defueling and decommissioning in mind.

The year is very symbolic and defining in the history of Hinkley Point B, as we will move into defueling no later than 15 July. I recognise this is a big change for us, culturally and personally, especially as for the majority of us working at the power station, all we have ever known has been the need to provide safe and continuous zero carbon electricity. We are doing everything we can to ensure we have a smooth transition into defueling, and we are continuing to work closely and engage with our staff and contract partners about our defueling plans and the future. Even though there is much change to come at Hinkley Point B over the coming weeks and months, there is no doubt we have a positive future ahead of us. Being the UK's most productive nuclear power station, this is a moment for us to celebrate what we have achieved, and be proud of our history.

2. Environmental update

In our last Site Stakeholder Group report, we outlined the progress made in recovering the oil following the generator transformer phase tank failure and fire on 19 August 2021. The work to clean the site's drainage systems of the escaped oil is now complete. We also continue to enhance our defences, from both large and small oil losses, through improvements to drainage systems and the installation of oil skimmers and monitoring performance equipment on oil protection plant. Following the comprehensive investigation into the event, we have shared these findings and recommendations with the rest of the EDF nuclear fleet to prevent the occurrence of a similar event at another location. The Environment Agency has served the station with a warning letter following the event.

We continue to monitor low levels of CO₂ from a boiler reheater defect which was identified in December 2021. We have applied for a minor change to our discharge permit to ensure that these discharges remain within limits. This change relates to the percentage of discharges permitted via minor routes and does not affect the overall discharge limits for the site. The Environment Agency is aware of the reheater defect, and we regularly provide discharge updates.

Back in January, a water sample line for the ponds was not fully closed following routine pond water monitoring activities. This led to approximately three cubic metres of water draining to the Active Effluent Treatment Plant (AETP). This is a small volume of water compared to the normal amounts of active effluent regularly processed through the AETP. An investigation is underway to determine the circumstances surrounding the event, and the Environment Agency has been informed.

Despite the continuing pandemic, all compliance monitoring and reporting has been maintained as required.

No other events of environmental significance were recorded during the reporting period. As per normal process, all events on site of environmental interest are recorded and trended to determine the potential for continually improving our operational activities.

3. Emergency arrangements

Like everybody else, the pandemic continued to provide challenges, especially following the emergence of the Omicron variant in late 2021. We have consistently managed our organisational resilience and response to COVID in a controlled and methodical way, and we have worked extremely hard in successfully preventing workplace transmission and keeping our staff and their families safe. Of course, we will continue to do this as the national restrictions are eased.

Our 2022 emergency exercise season is underway, and at the time of writing, three of the five shifts have completed their exercise and associated training. We are using these exercises to further enhance the skills and competencies of our highly skilled and trained emergency scheme team members, with a focus on the learning points from our 2021 exercise season.

We will be holding a Level One Emergency Exercise on Wednesday 6 July and a security exercise on Wednesday 13 April. These exercises may involve the attendance of the emergency services. It is possible that the site siren will sound for these exercises.

Since the October meeting, there have been two ambulances called to the site for individuals who have been taken ill at work. I am pleased to report both have made full recoveries and have since returned to work.

4. Production statistics

For the period 17 October 2021 to 12 February 2022, TWh (terawatt-hour) production:

- > Reactor 3 1.262
- > Reactor 4 0.900

Unit Capability Factor (percentage load factor) is based on a rated unit power (RUP) of 485 GNN (Gross Net Net) for reactor 3 and 480 GNN for reactor 4.

- > Reactor 3 100% excluding losses from planned shutdowns and refuelling
- > Reactor 3 91.10% no allowance for planned events, including refuelling
- > Reactor 4 100% excluding losses from planned shutdowns and refuelling
- > Reactor 4 65.63% no allowance for planned events, including refuelling

Number of channels re-fuelled on both units: 16 plus 6 shuffled channels.

Number of flasks despatched: 11

(Source: station records.)

5. Staff

- > 477 full-time EDF employees
- > 11 ex-Horizon apprentices
- > 20 agency staff
- > 200 full-time contract staff

6. Community relations

Sponsorship and Donations

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

- > Watchet Boat Owners Association (a donation towards the cost of a new boat launch trolley)
 - > Little Crickets Nursery, Bridgwater (a donation for new play equipment)
 - > Fiddington Parish Council (a donation to cover the cost of a new village name sign)
 - > Watchet Town Football Club under 12s (a donation for new kits for the team)
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- > St Mary's Primary School, Bridgwater (a raffle prize for Christmas raffle)
- > Young Musical Theatre Company, Somerset (sponsorship of production of 'Oliver')

Charities, community and non-for profit groups who wish to apply for support from Hinkley Point B's Sponsorship and Donations groups should contact Dave Stokes at dave.stokes@edf-energy.com.

Charity fundraising

Staff and contract partners at Hinkley Point B are continuing to raise money for EDF's charity partner, Prostate Cancer UK. Currently the power station lie in first place in the EDF fundraising league after raising and banking £37,914 for the popular charity. Since EDF launched its four-year partnership with Prostate Cancer UK back in January 2020, the company has raised over £393,000.

Mike Davies
