



# Site Stakeholder Group AGM

Dungeness B Annual Report – 10 January 2019

Assembly Rooms, New Romney

---

## Introduction and plant update



**Ian Stewart, Station Director**

We will remember 2018 as a busy and challenging year at Dungeness B Power Station. In reality, it has been a year of two phases. From January through to August our underlying trend for improved performance, output and reliability was much in evidence, as we continued to move closer to world-class performance levels. And, from the end August onwards our story has been defined by a large and complex programme of maintenance work on both units 21 and 22, and the general fabric of the plant including work on corrosion and steam pipework, to allow us to ensure Dungeness B will continue to safely and reliably generate low-carbon electricity until 2028 – and possibly beyond.

Key themes for 2018 have been the amount of investment into the plant to meet those lifetime aspirations, and the hugely encouraging performance improvement. We have been running with more than 80 different projects across the plant – from improvements to boilers, a new nitrogen plant, and a major upgrade to our main control room simulator, to name but a few. We are investing in the fabric of the plant and our aspiration is to underpin our lifetime ambitions and achieve a best-ever output of 8TWh. We know with the investment, and the professionalism of our staff, that these aspirations are achievable. Total investment in the plant totalled a remarkable £98m during the year, which shows the confidence the company has in Dungeness B's future.

The indicators are positive across the board. Our financial results in August were outstanding. Output was 5.4TWh – a full 1TWh ahead of plan, with costs below plan. But this outstanding performance has given way to one of the busiest outage periods for many years at Dungeness B. In this second phase of 2018 our people were safely carrying out more than 12,000 individual pieces of maintenance and improvement work during the outage. Much effort is also going in to steam line remedial work and corrosion repair work. Although this impacts our annual financial performance, the level of investment in Dungeness, with the full support of EDF Energy, is a clear sign of our determination to continue to produce safe, reliable generation to 2028 and beyond.

I would like to take this opportunity to pay tribute to our staff and contract partners. Their attitude and commitment has been first class all year – and particularly throughout the current period of maintenance. We have been joined by some 1200 extra specialist workers during the current outage programme – and their contribution brings a significant boost to the regional economy, and we thank them too for their professionalism and positive attitude.

---

Despite the current shutdown, which will continue through until the end of February, and a series of five off-line refuelling outages (all delivered ahead of time), we still successfully delivered just over 5.7 TWh of low-carbon electricity to the National Grid in 2018, more than 2017 - and enough to power 5% of UK homes. This is the equivalent of generating enough electricity for the whole of Kent more than two times over. From quarter 1 through to quarter 3 we had the lowest losses in the EDF Energy fleet, and at year end we achieved the second-best ever output in an outage year. These are all very encouraging signs.

However, safety is, and always will be our over-riding priority at Dungeness and our efforts in this area are worthy of note. Dungeness B was the biggest improver in the EDF Energy Fleet in our annual nuclear safety culture survey. We also improved significantly in our employee engagement survey results and sit ahead of other stations in this regard. As a result of continuing focus on maintaining high levels of industrial safety, which was underpinned by ongoing training and inspirational safety awareness events, our safety record remained excellent through 2018.

As I mentioned previously during 2018 and into 2019 we are carrying-out enhanced inspection and remediation of back-up systems susceptible to the effects of environmental corrosion. During this accelerated corrosion inspection and repair programme, corrosion was discovered in conventional, safety-related pipework required to provide feed water to the boilers in the remote possibility of an earthquake or seismic event.

The Office for Nuclear Regulation (ONR) has been closely monitoring this work through an extensive inspection regime.

While the issue is not a nuclear reportable event, EDF Energy has rated the corrosion issue as level 2 on the International Nuclear and Radiological Event Scale (INES).

An INES Level 2 rating can describe a radiological issue – but in this case it relates solely to an incident of deficiency in back-up safety provision – namely systems needed in case of seismic and other external hazards occurring (there was no direct impact or harm from this shortfall).

As always we will keep you updated on this work via updates to the SSG, along with full details of our return to service dates for both reactors when the remedial work is complete.

I look forward to 2019 as a year for continued improvements and stable output and reliability, as Dungeness B continues its trend towards world-class performance.

## **Environment**

There have been no environmental events at Dungeness B to report in 2018.

---

The Environment Agency visited site over the year for routine inspections as per the station's Nuclear License conditions.

## Safety

Safety is the station's overriding priority and 2018 has been a good year from a safety perspective. As of 7 January 2019, the station has had:

- 2241 Nuclear Reportable Event free days
- 1485 days since the last environmental event
- 216 days since the last lost time Incident
- 126 days since the last contractors' Lost Time Incident

## Apprentices

For 2018 the station was delighted to welcome a new group of four apprentices, including two young women. They have now settled into their first year at the New National College for Nuclear, Cannington, Somerset.

In November, six apprentices graduated from the scheme after four years of training. Harry Hollis was awarded the much-coveted 'Apprentice of the Year' award for the station and collected his prize from EDF Energy's CEO Simone Rossi at the ceremony in Worcestershire.

The station is recruiting new apprentices for 2018 with applications closing on 15 January.

In November, the recruitment team ran a drop-in fortnight for prospective apprentices to have an informal chat with station staff to find out more about the scheme.

## Promoting STEM

EDF Energy is continuing to work in partnerships to encourage more youngsters, particularly girls to take up



**Dungeness B's 2018 apprentices - Rebecca Godden, Tia Brant, Ciaran Healy, Conor Raine**



**Dungeness B's Harry Hollis (right) receives his Apprentice of the Year award from EDF Energy CEO, Simone Rossi**

---

STEM subjects (science, technology, engineering and maths) at school in a bid to improve diversity in the workplace and inspire the next generation of engineers.

Via our Visitor Centre, and in tandem with local Primary and Senior schools and with support from the wider educational establishment including universities, Dungeness B has been a driving force in this agenda for some time.

Some of the successful initiatives include popular school holiday STEM clubs, complete with a plant tour and business enterprise activity, and our Be Creative themed craft events – for example learning about flower power/bees and the environment. These free sessions have proved very popular and are now a regular feature in the Visitor Centre calendar.



**Local schoolchildren enjoy Dungeness B's first-ever Science Festival in December**

Dungeness B provides Business Enterprise Advisors for local schools including the Marsh Academy in New Romney, Homewood in Tenterden and North in Ashford.

The station and its apprentices also support several careers fairs in the region. Already for 2019 the station has bookings to attend career fairs in Tenterden, Folkestone and Ashford - in addition to attending the STEM Learning "Big Bang" event in Sandwich, on 1 March.

The introduction of "Apprenticeship week" for both the general public and education establishments to attend the station Visitor Centre and take a plant tour and a tailored Q & A session on the Apprenticeship scheme has also been beneficial in engendering interest in a career in engineering.

Our Visitor Centre Coordinator Alison Prentice is the STEM lead at Dungeness and has grown a team of approximately 30 STEM ambassadors on site. Our Finance Manager at Dungeness Sarah Horsfall is the Leadership team STEM champion. The station team is particularly excited to be "adopting" Folkestone School for Girls & North School Ashford in addition to Lydd Primary during 2019 – and will work especially closely with the schools in promoting STEM activities, inspiring the next generation & raising safety awareness.

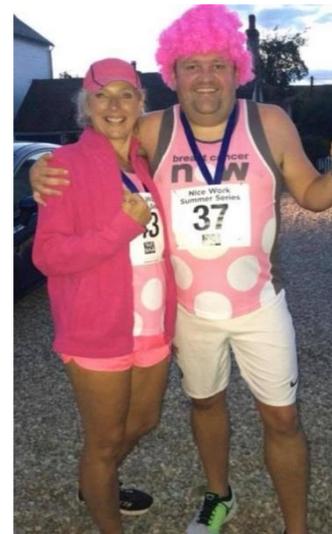
## **Charity fundraising**

EDF Energy continues to enjoy a close working partnership with its official charity partner, Breast Cancer Now. So far EDF Energy staff has raised an incredible £343,274 across all power stations, corporate

offices and other support centres. Dungeness B staff has taken the charity to their heart – and so far have raised nearly £14,000 for the charity over the past two years.

At Dungeness B staff found a variety of ways to raise money – and awareness, for the work of the charity. A rousing “Last Night of the Proms” was organised by staff at All Saints church in Lydd. Favourite local choir The Haywardians entertained a packed church with favourites such as “Land of Hope and Glory and “Jerusalem”, helping to raise £860. In addition our recent Dungeness staff Christmas raffle raised a fantastic £2092.

And in another great charity effort Dungeness B Visitor Centre guide Lesley Clancy took up the charity challenge – by training and mentoring Chris Cavanagh of the station’s operations team to run his first 10k run. Chris eventually finished with a respectable time of just over 31 minutes. The pair raised a whopping £1100 between them.



EDF Energy’s employee fundraising target is £100,000 each year and the company will match fund up to £50,000 each year of the partnership making a total target of £450,000.

“Through this exciting partnership, EDF Energy employees will be a force for good, helping to stop breast cancer taking lives,” said a spokeswoman from the Charity. Breast Cancer Now believes that through action now, by 2050, everyone who develops breast cancer will live and live well.

## Visitor centre activity

As the visitor centre gears up for a very special milestone next month – its 30,000th visitor - staff are looking at more and more ways to interact with the community, encourage youngsters to learn about engineering, energy, and climate change , and partner with organisations for mutual benefit.

The popularity of seeing inside the station is increasing, and staff at the visitor centre has also developed “virtual tours” for when operational activities mean foot tours of the site are not possible.



**Local Year 5 and 6 pupils having a great day out at the first Dungeness Science Show**

---

A huge range of activities take place at Dungeness B's visitor centre. Highlights have included the station's first School Science Show in December. More than 200 children from four local Primary Schools took part in a range of interactive sessions supported by the University of Kent and the Royal Engineers.

Even with foot tours of the site limited due to extended maintenance outages, the visitor centre has still welcomed more just short of 5,000 visitors during 2018 – and had more than 6,500 external interactions with the general public out in the community.

The centre also hosted other events, such as the Poppy Power Be Creative activity day. The Poppy Power sessions were organised to coincide with the *Let's Cover the Marsh in Poppies* initiative which brought together local scout groups, churches, businesses and the general public, with the aim of covering the Romney Marsh area in thousands of hand-made poppies.



The tributes to the fallen on the 100<sup>th</sup> anniversary of The Armistice also involved support from the Royal British Legion, which organised presentations at the Visitor Centre for local children, and for the visit of veterans from the Second World War, who re-counted their personal stories, to visitors. A special 'soldier silhouette', made by the Sea Cadet's' Mark Godden, formed a centrepiece of activities, along with a wall of hand-crafted poppies.

## Local community and sponsorship

2018 has seen Dungeness B Visitor Centre team undertake three Force for Good Community activities including mowing a wildflower meadow and scattering the seeds on a new field in Lydd to attract bumblebees, painting at the Rare Breeds Farm in Woodchurch and wrapping/writing Christmas cards at the Romney Day-care Centre in New Romney.

Throughout the year, the station has supported many local events and attended 28 events in Kent & Sussex including the Romney Country Fair & Lydd Club Day as well as taking science on the road to local primary schools in Lydd, Dymchurch & New Romney.

---

The station has also provided some financial support to Lydd Club Day, Romney Country Fair, Hythe Festival, Rye Jazz Festival and Light up New Romney Christmas event, as well as signage for Dungeness RNLi Visitor Centre.

The station has also helped Dungeness film youth project, Acorn Community Allotment project in New Romney, Grasshoppers football tournament at Brookland and provided a disabled seat for *blokarting* at The Varne Water Sport Centre. Other recipients include Folkestone Boxing Club, science equipment for Lydd Primary & Christchurch Academy, and just recently a defibrillator to be installed in partnership with RHD Railway & Dungeness Angling Society at RHDR Dungeness.

## Dungeness estate

EDF Energy is very proud of its association with the Dungeness estate, which the company has owned since 2015, and is committed to being responsible landowners of this unique landscape.

The company's Land Quality Management Team continues to work to support the area through roadway improvements, signage, rubbish clearance and biodiversity improvement programmes.

Habitat work continues in the Long Pits area and ongoing work aimed at keeping the estate looking in top condition is always a high priority. This work can vary from repair work on sleepers and keeping car parks and laybys neat and tidy. It also involves politely engaging with visitors, dog walkers, drivers etc to ensure the estate retains its charms for visitors and local alike.

The teams continue to work hard on preserving the biodiversity of this special landscape. Some 133 hectares of the land around the power station is accredited with the Wildlife Trust's Biodiversity Benchmark. This brings its own challenges with regards to litter and damage - and the station continues to work closely with the Romney Marsh Countryside Partnership to ensure the estate is well maintained and looked after.

## Company News

### Hinkley Point C update

Construction at Hinkley Point C continues to progress well and we are pleased to have hit all our milestones for 2018, including beginning the pour of the foundations of the Unit 1 nuclear reactor. The first concrete pour for the base of Hinkley Point C's unit one reactor has in fact been successfully completed.

This 4,500 tonne platform provides the stable foundations for the reactor and safety systems. It is made from high quality nuclear concrete, reinforced with steel from South Wales.

---

This final major milestone for 2018 means the project remains on track to complete unit one's platform in summer 2019. The pour followed approval by the regulator, the Office for Nuclear Regulation.

We now have 3,600 people working on site at any one time and the project is creating jobs in the South West and throughout British industry.



**Some 3,600 people are constructing Hinkley Point C**

The progress gives us confidence in making the case for **Sizewell C**, where we have just launched our third phase of public consultation. This will run until the end of March. Momentum is building up for this project inside Government and within EDF Group. We estimate Sizewell C can be built cheaper than Hinkley C by utilising around 80% replication, and with efficiencies of using a mature supply chain which has gained experience building Hinkley Point C. A grid connection is already in place at Sizewell, adding to the potential to deliver the project cost-effectively.

### **First EPR Reactor goes into commercial operation**

CGN and EDF Energy announced during December that unit 1 of Taishan nuclear power plant became the world's first European Pressurised Reactor (EPR) to enter into commercial operation. This milestone was reached on 13 December, following a successful test which involved continuous operation of the reactor at full power for 168 hours, marking the achievement of all prerequisite conditions for the reactor's safe operation.

Comprising two 1,750MW EPR reactors, Taishan nuclear power plant is the biggest cooperation project to have taken place between China and France in the energy sector. Taishan's two reactors are capable of supplying the Chinese power grid with up to 24 TWh of electricity a year, equivalent to the annual electricity consumption of 5 million Chinese users, while at the same time preventing the emission of 21 million tons of CO<sub>2</sub> a year.