

EDF Torness Power Station

Minutes of the fifty-first meeting of the Torness local liaison committee held via Teams on 26 April 2023.

Members in attendance

Russell McLauchlan, City of Edinburgh Council
Councillor Steve Burgess, City of Edinburgh Council
Councillor Dianne Alexander, Midlothian Council
Janie Young, Midlothian Council
Councillor Sandy Scott, Scottish Borders Council
Councillor Norman Hampshire, East Lothian Council
Councillor Donna Collins, East Lothian Council
Scott Kennedy, East Lothian Council
Lynn Crothers, East Lothian Council
Sharon Saunders, East Lothian Council
Alasdair Swan, Dunbar Community Council
Kelvin D'Arcy, East Lammermuir Community Council
Isabelle Watson, Scottish Environment Protection Agency
Diane Hamilton, Scottish Government
Ross Smith, Police Scotland
Grant Ferguson, Fire Scotland
Chris Allan, Borders Health
Ishbel Dale, Stirling University
Shaun McKenna, ONR
Ben Davies, Civil Nuclear Constabulary
Jamie McKenzie, Torness Station Director
Alastair Brockie, Torness Technical and Safety Support Group
Ashleigh Dickson, Torness Community Liaison Officer
Fiona McCall, EDF External Communications Manager

637. Welcome

Mr Jamie McKenzie welcomed everyone present to the 51st meeting of the Torness local liaison committee. He went round the call and asked everyone to introduce himself or herself to the meeting. He discussed the safety message – 'Why is it essential that we prioritise safety'.

Mr McKenzie introduced himself as the acting station director whilst Mr Paul Forrest covers a fleet role. He comes from Edinburgh and has worked in conventional power stations, before coming to Torness over 10 years ago.

He thanked the community for their ongoing support, as Torness would not be the fantastic place it is without the local community.

638. Apologies for absence

Paul Young, City of Edinburgh Council
Councillor Maureen Child, City of Edinburgh Council
Councillor Denis Dixon, City of Edinburgh Council
Councillor Steve Burgess, City of Edinburgh Council
Russell McLauchlan, City of Edinburgh Council
Deputy Provost Margot Russell, Midlothian Council
Jane Young, Midlothian Council
Councillor Sue Kempson, East Lothian Council
Sharon Saunders, East Lothian Council
Councillor Helen Laing, Scottish Borders Council
Jim Fraser, Scottish Borders Council

Kirsty McCrae, Scottish Ambulance Service
Nicola Page, Police Scotland
Lori Shaw, Police Scotland
Quintin Donald, Scottish Executive Rural Affairs Department
Richard Othieno, Lothian Health
David Girrity, Fire Scotland
Ross Smith, Police Scotland
Paul Hammond, Police Scotland

Members' replacements

Group Commander Stephen Mitchell, Scottish Fire replaces Group Commander Andrew Anderson
Kevin Searle, Dunbar Community Council replaces Alastair Swan
Councillor Dianne Alexander, Midlothian Council replaces Deputy Provost Margot Russell
Kirsty Kiln (NHS Borders) has replaced Lorna Paterson
Councillor Hal Osler, City of Edinburgh Council has replaced Councillor Maureen Child
Councillor John Greenwell replaced Councillor Helen Laing, Scottish Borders Council
Councillor Aileen Orr, Scottish Borders Council joined the committee
Councillor Donna Collins has replaced Councillor Sue Kempson, East Lothian Council
Jamie McKenzie has temporarily replaced Paul Forrest as Torness Power Station Director.
Acting Inspector Martin Curran, CNC is covering for Inspector Lorraine Jay
Calum Bannerman has replaced Brian Hood as Torness Site Head of Security

639. Minutes of previous meeting

The minutes of the previous meeting of the committee were approved and accepted as an accurate record.

640. Matters arising

None.

641. Station overview

We are the UK's largest producer of zero carbon electricity, meeting around one-fifth of the country's demand. By generating zero carbon electricity from wind, nuclear and solar we can power the nation, whatever the weather.

We generate low carbon electricity from [five nuclear power stations](#) and more than 34 [onshore wind farms and two offshore wind farms](#), and operate EV charge-points, and combined heat and power plants.

EDF are currently building NNG off the Fife coast and have opened an Operations & Maintenance base in Eyemouth.

Recent energy price increases, driven by global gas prices and the war in Ukraine, are strongly impacting the UK operating environment, creating affordability challenges for customers and significant financial pressures on energy suppliers. We are highly engaged with the Government to identify solutions to help ensure energy is affordable and low carbon. This includes the windfall tax.

Looking back on 2022, at Torness a lot to be proud of. In EDF, safety is our priority; and we focus on nuclear safety as our 'overriding priority'. Our nuclear safety record continues to stand comparison with the best operators around the world and we are very proud of this.

Operationally we had an excellent year; we safely generated 7.2 TWh and exceeded our business plan. Enough zero carbon electricity to meet the needs of every home in Scotland for 9 months.

Across our nuclear fleet, we reached the milestone of safely generating 43.6TWh of zero carbon electricity, meeting our output target for the first time since 2017.

As the UK's only nuclear operator, by generating more than 40TWh we are supporting security of supply in the UK at a challenging time.

It is now over eleven years since the last nuclear or environmental event. This does not happen by chance. Industrial safety practices remain strong and zero harm is absolutely within our reach.

Mr Norman Hampshire: You have had a good year and you still talk about 2028 as an end of generation date. When will you know if you can extend this? What is the future for the site?

Mr McKenzie: 2028 is our best forecast based on our understanding of the graphite core; it will stay as 2028 plus/minus two years but will carry out a further review next year. We will continue to invest in our plant to 2030 – we will carry on investing £20-£30 million annually to ensure it is in the position to generate for as long as it is safe to do so.

Mr Alastair Brockie: Even after we cease generation, there will still be large numbers of high quality jobs at the site.

Mr Hampshire: Torness own a significant amount of land and infrastructure and we need to see what else can be developed. My preference is for a SMR to use existing infrastructure. If it is not going to be for electricity what else can it be used for?

Mr Steve Burgess: If you close in 2028 how many jobs, will continue into decommissioning? You mentioned a further review next year – will these include cracks in the reactor?

Mr Brockie: The life-limiting factor for Torness and all AGR's is the graphite core. We continue to monitor and inspect to ensure we are aware and in control of natural aging. We also need to ensure our modelling is correct; so far, we have had no surprises during inspections. We had started to see some cracks in the core, and if anything, they are slightly later than what our modelling predicted. We are still a long way off from what we would regard as a Nuclear Safety limit.

When we move into defueling there will be a small shrinkage to staff, similar to what we saw at Hunterston.

Mr Shaun McKenna – the date of 2028 is useful for us as it gives the ONR a date to plan for moving forward.

a. Zero Harm

Mr Alastair Brockie spoke to the reports in the pack.

Our aim is to have zero harm to our people. 2022 was challenging but there are no concerns from a nuclear safety point of view.

The two areas I want to point out are industrial safety and environmental safety.

In August 2022, a piece of fire-fighting equipment called a "ground monitor" failed during a training exercise. This resulted in the force of the water causing the ground monitor to move around in an uncontrolled way leading to the injury of three members of EDF staff. All three members of staff are back at work but one did receive broken ribs.

The station did receive an Improvement Notice on the event from ONR. We accepted the recommendations made in the ONR's Improvement Notice and worked quickly to make a number of changes to address the actions outlined. This included changing the equipment used and improving the risk assessments for training exercises. We welcome the ONR's assessment that we have fully complied. Other sites in the fleet also carried out a review of the use of ground monitors in response to this incident.

On the environmental safety side. We had a leakage of some F gasses from air-conditioning units, as an organisation aiming for Net Zero we have managed to turn this round.

With our strong focus on safety we have a very tight definition of harm so we report even the very minor injuries, for example a back injury or a cut to the hand. All events are investigated to ensure we learn from them and are treated seriously.

Emergency Preparedness

There have been no site events whereby the emergency arrangements were invoked since the last meeting.

However, one Operational Alert was declared. This was for an oil/water leak from part of one of the 400KV transformers in July 2022. This equipment is located within a substation owned and operated by SP Energy Networks, within the grounds of Torness Power Station.

The transformer suffered a catastrophic failure and resulted in a release of transformer oil into our drains and sea. East Lothian Council and other partner agencies stood up and helped to managed the incident. We used our own arrangements to make sure the correct focus was applied. Scottish Power did accept responsibility.

Although the leak reached, the coastal outfall via site drains there was no long-term impact on the environment.

We continued with normal programme of emergency exercises, with a range of scenarios including site security issues, fire events, casualty recovery and treatment, and confined space rescues. In the last few weeks, we held a successful demonstration of our arrangements to the ONR during our Level 1 exercise.

Mr Brockie thanked the East Lothian Council, emergency services and partner agencies for their support during exercises and throughout the year.

Ms Dianne Alexander: Do Midlothian Council take part in emergency exercises?

Mr Brockie: Not normally but will do so in Level 2 exercise which is normally every 3 years and it involves setting up SCC at Penston House

Ms Dianne Alexander: Given we have lorries with nuclear waste would a liaison not be beneficial

Mr Brockie: In last few years, we did a transport-based exercise and Midlothian did take part.

Ms Jane Young: We do participate in exercises, which involve in SCC and annual notification process.

Mr Scott Kennedy: Transformer event showed great multi-agency working. Last year we completed a modular exercises for Level 2. We are now working for full Level 2 exercise for June 2024.

Mr Burgess: I thought waste from Torness went via train.

Mr Brockie: High-level waste goes via rail. Low-level waste is transported via road for incineration in south of England. This happens about 4 or 5 times a year in purpose built containers.

Ms Dianne Alexander: If waste is incinerated, is there not a risk it could go up the chimney and into the environment?

Mr Brockie: Yes, that is technically what happens but there is very little left after incineration and the facility have all the necessary authorisations. It is a very effective way to reduce volume and the concentrations are small enough to be permitted.

Ms Isabelle Watson: EA in England will issue permits and operators work within permits. There is waste coming from other groups as well, like hospitals

Ms Dianne Alexander: Where would the ash go?

Ms Watson: Typically to landfill. It is a recognised method.

b. Strong Finance and Ethics

Mr Jamie McKenzie spoke to the reports in the pack.

The UK nuclear generation fleet delivered 43.6TWh of low carbon power during 2022, 1.9TWh higher than in 2021 despite finishing generation at the two oldest stations in the fleet. This was due to strong operational performance, with delivery of outages broadly in line with plan. It also reflects sustained expenditure on maintenance and upgrades made to the stations in prior years, over £1.3billion across 2020-22. 43.6TWh of

nuclear generation means the UK has avoided consuming 9 billion cubic metres of gas and emitting 15million tonnes of CO2 compared to gas-fired power generation.

Hunterston B ended generation in January 2022 and Hinkley Point B in August, each after 46 years of safe and reliable operation and combined output of over 600TWh (enough to supply all UK homes for over 5 years). Both stations are now actively delivering on the defueling contract for Government, with Dungeness B making good progress with its defueling preparations.

As the operator of the fleet, EDF values predictable revenues to ensure costs and investment can be covered and the majority of planned output is sold up to three years in advance, rather than at day ahead wholesale market prices. Looking ahead, the new Electricity Generator Levy will see a levy of 45% paid on revenues from low carbon generators, charged on generation revenues above £75 per MWh.

c. Torness Performance

Operationally 2022 was an excellent year; we generated 7.2TWh and exceeded our business plan. Delivered five offload depressurised refuelling campaigns - all delivered within business plan

We took reactor 2 offline in 2022 for a statutory outage. A statutory outage is like a MOT for the unit, allowing work to be carried out that cannot take place while the reactor is switched on. It is a statutory requirement to allow continued generation of zero carbon electricity from the site.

During the outage, we carried out more than 15,000 separate pieces of work including two gas circulator exchanges, exchange of the turbine generator rotor and extensive graphite inspections. This outage brought around 800 additional contractors to the area to support the work, many of whom stayed in the area providing a boost the local economy. It also represented a £34.8m investment in plant, which will support reliability of Torness.

The outage was successful in terms of safety and quality but we overran by around a week, largely due to resourcing issues. A combination of Brexit, Covid and a shortage of technical skills in the UK meant we were around 150 people short.

We need to ensure our performance is even better in 2023.

Mr Hampshire: There are new power supplies coming in around Torness (sub-stations, converter stations etc) Are you sure none of them will interfere with the safe operation of Torness?

Mr McKenzie: The National Grid consult with Torness and ensure the system is capable of taking the new equipment. We monitor the work around us to make sure there is no impact and we check our safety cases to make sure there are mitigations in place.

Mr Brockie: We have good engagement with both Scottish Power (own the Grid) and SSE (developers of Berwick Bank Windfarm)

Mr Kennedy: EL Council are also alerted to this and should it enter the 3km DEPZ we would include them in the offsite plan.

AGR Lifetime Update

We are now at the stage of operation at the station where changes to the graphite cores can be expected. During the reactor 2 statutory outage, we did not identify any keyway root cracking.

We will continue to regularly inspect the graphite in the reactors and will share those results with the regulator, the ONR. Part of the inspection strategy includes going back to previously observed cracks to check whether they have changed between inspections. Reactor 1 we inspect twice a year. We'll continue keep an eye on the technical information we gather from the station, and make an assessment of whether a further formal review is needed in the future.

Ms Fiona McCall: Hunterston B and Hinkley Point B are now in active defueling. Hunterston went in start

2022 and Hinkley Point B 6 months later. Hunterston are 60% through the first reactor and are on target for end of year and well within 3.5 years for defueling.

Around staffing, we are looking at stations further down the track to learn about how we manage staffing from aspirational conversations and understanding what people want. Working with Magnox on the next steps and progress at older sites will help the sites behind them.

Radioactive waste and discharges

Mr Brockie spoke to the information contained in the pack.

We held the LLC Technical sub group meeting on 23 February where this information was covered in detail. We have the detailed reports if anyone wishes to have a copy. If you would like more information, please contact Ashleigh Dickson.

We have a relatively small amount of waste stored on site; only about 12.8% of our onsite storage capacity is used and we have a process of periodically sending waste away for incineration or other disposal routes.

We have a preference for recycling; we separate out waste and send things like metal away for cleaning and recycling. As a result, we keep our solid waste and arisings to landfill minimal.

The radiation dose of each worker is assessed individually by an electronic personal dose meter. A computer database keeps records for each worker. The average annual dose per worker is 0.019 mSv, which is less than what you would receive on a transatlantic flight.

Torness monitors and records all of the discharges and best practicable means are applied to minimise them. All our discharges are within allowable limits. A report which is a useful reference is the Radiation in Food and the Environment (RIFE) report which is available on the SEPA website and shows all the information for Torness as well as other sites it shows that the dose to a member of the public is almost below the limit of what is measurable.

d. New Nuclear

Hinkley Point C

We are building two new nuclear reactors at Hinkley Point C in Somerset, the first in a new generation of nuclear power stations in the UK providing low-carbon electricity for around six million homes.

The most recent report on the socio-economic impact of Hinkley Point C shows investment in businesses in the South-west, where the station is being built, now stands at over £4bn, however, there are real benefits being felt across the UK.

In Scotland, 119 businesses are supporting the project's supply chain, and these contracts are worth £173m to date, with an average spend of £1.6m.

The first of two nuclear reactors recently arrived at HPC

More than 8,000 workers are now on site every day.

The nuclear power station will be essential in helping Britain achieve net zero emissions by providing reliable low carbon electricity to meet 7% of the country's needs, working alongside wind and solar generation in place of fossil fuels like coal and gas.

Sizewell C

- Our proposals for Sizewell C will see the creation of a 3.2-gigawatt power station to provide reliable low-carbon electricity, which does not rely on the weather.
- Sizewell C has reached its biggest milestone to date with the announcement that the Government is investing £700m in the project

West Burton A to move from fossil fuel to fusion

- Generation at West Burton A has now ended after the station fulfilled its contract to provide emergency back-up to UK power supplies from its last two units.

- The site has now entered decommissioning.
- As West Burton moves through decommissioning and then demolition, the UKAEA will formally begin its journey to fusion, (UK Atomic Energy Agency)
- Will spur investment in the area, a range of educational opportunities, jobs, industry collaboration and ultimately clean energy.
- EDF's West Burton A site in Nottinghamshire is to host the UK's first prototype fusion energy power plant.
- Prototype reactor, which will be constructed at site when the coal-fired station closes.

e. Customers

EDF's energy supply business made a loss of over £200million. In short, the cost of buying the energy for our residential customers was higher than the prices we charged under the SVT cap. Performance in the B2B segment saw an increase in the number of customers supplied with energy (+ 13% meter points on supply).

Despite the challenging market conditions, EDF maintained focus on improving customer service, ranking first in successive Citizens Advice surveys of energy suppliers.

We take our responsibility for the welfare of customers very seriously. The cost of living crisis means we are already seeing an increase in customers worried about debt. We have doubled the money we set aside to help vulnerable customers to £10 million in 2022, and provide support through partnerships with a range of charities and others.

f. Renewables

Our 34 onshore wind farms include 59 turbines at Dorenell Wind Farm near Dufftown, Scotland – currently our largest European onshore wind farm.

The development of the Neart na Gaoithe (NnG) offshore wind farm has achieved a significant milestone in January 2023 with the opening of its state-of-the-art Operations and Maintenance (O&M) base in Eyemouth, Berwickshire. The O&M base will bring up to 50 high quality jobs to Eyemouth Harbour for the 25-year lifespan of the wind farm.

g. People and Communities

We aim to inspire and enable our people to perform as a force for good, driving progress at work and across the communities we serve.

People management is as important to the success of the station as engineering and science. We place strong emphasis on managing the succession of roles and ensure suitably qualified and experienced personnel are available to fill vacancies - guaranteeing continuity of the business.

The station continues to recruit to plan and currently has 500 full time employees. Our training programmes are in excellent shape and are working with our leaders at all levels to strengthen leadership and accountability.

Torness currently has 8 recruits in our four-year Advanced Nuclear Apprentice Scheme and one chemistry apprentice. We have recently completed interviews for our latest intake of apprentices, which will start in September 2023.

Our people are a corner stone of EDF. At Torness, we have a great record of regularly seeking feedback from our employees and responding to it. Every year MyEDF, our annual employee engagement survey, is an opportunity to listen to our employees' views and act on what they say. In 2022, 80% of our employees took the opportunity to tell us what they think and help shape the direction of our business. Our overall engagement score was down but 95% of staff told us that safety is a priority for everyone.

We reopened our Visitor Centre in September 2022. One of the first groups we welcomed was a very special group of engineers who helped build the station more than 40 years ago.

642. Regulatory updates

Shaun McKenna: ONR did give Torness an Improvement Notice in November on the ground monitor event but it was been closed out in February. Torness continues to be compliant and any issues raised are dealt with a timely manner. Looking ahead at our inspection programme they are more targeted and focussed and that we have the end of generation date of +/- 2028. Under emergency planning - there was been an improvement in Level 1 demonstrations and want to acknowledge the investment from the station.

There are links in the pack to our reports.

Isabelle Watson, SEPA – continue with compliance inspections. Work with site during 2022 with F gasses and this will continue. Every year we carry out environmental sampling programme. The RIFE report is available on the SEPA website. We look at in depth results at the LLC technical subgroup meeting.

RIFE report available <https://www.sepa.org.uk/media/594536/rife-27.pdf>

The University of Stirling are undertaking a Habits Survey in the area around Torness nuclear site on behalf of the SEPA. This is to check that SEPA's environmental radioactivity monitoring programmes are optimised for collection of environmental samples at the right locations and frequency to assess the impacts of authorised radioactive waste discharges from the site. Habits surveys are a study of food consumption and occupancy levels and the results of the survey are made publicly available. It will take place over the summer. For more info contact erl@stir.ac.uk

643. Date of next meeting

During 2022 we held a public meeting at Halhil and propose to do so again.

Action – Ashleigh to send out possible dates for a public meeting and next LLC meeting