# Welcome



### **Agenda – Community Forum – 18<sup>th</sup> January 2024**

- 1. Welcome and introductions (Chair)
- 2. Meeting note / matters arising from last Forum held on: 21st September 2023 (Chair)
- 3. Project Progress Update (Andrew Cockcroft, Anne Lawrence, EDF)
- 4. Overview of HPC DCO Consultation (Andrew Goodchild, EDF)
- 5. Update: Office of Nuclear Regulation Report (Alun Griffiths, ONR)
- 6. Update: Community Fund (Justin Sargent, Somerset Community Foundation)
- 7. Main Site Forum Update (Chair)
- 8. Transport Forum Update- (Chair)
- 9. Any other business (Chair)
- 10. Date of next meeting 16<sup>th</sup> May 2024



### **Item 3: Project Progress Update**

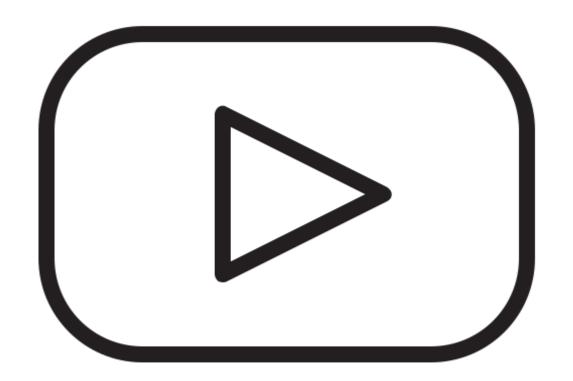
#### **Andrew Cockcroft**

Senior Manager – Community Relations

#### **Anne Lawrence**

Head of Site Nuclear Compliance







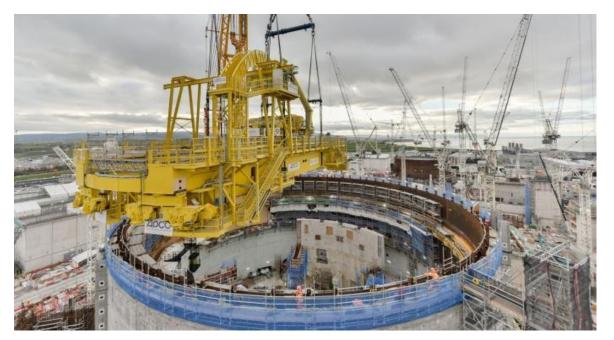
### Safety and Learning





### The Journey to Dome Lift

- The Polar Crane has been lifted into the first reactor building. Weighing in at 750-tonnes, it's one of the heaviest lifts ever carried out on site.
- The crane will rotate 360° on rails at the top of the building and will be used to install heavy equipment during construction, such as the reactor and steam generators. It will also be used when the power station is operational for refuelling and maintenance.





#### Dome Lift

- The 245-tonne steel dome has been successfully lifted into place.
- The lift was carefully planned to take advantage of a weather window to allow the manoeuvre to be completed in low wind conditions.
- The Polar Crane is now protected and the building is now weathertight.
- This accelerates civil construction work to MEH.



### Looking Forward to 2024

Steam generators will arrive at site



The MEH phase will accelerate





We will install the reactor pressure vessel

### People Update

 As Hinkley Point C moves into peak construction and the workforce grows, we will be working with Somerset Council and wider community groups to ensure that we continue to limit any impact on the local area.

#### Wider benefits continue to grow;

- Around 40% of our workforce are local
- 1300 apprentices trained so far with c.70 percent coming from the local area.
- £5 billion has been spent with thousands of local businesses from across the South West
- Centres of Excellence are fully operational and will support the next generation.



# **Thank You**



#### **Item 4: Overview of HPC DCO Consultation**

**Andrew Goodchild** 

Planning Manager



### Material Change Consultation

- Our Proposals
- The Documents and Plans which explain and set out our preliminary assessment of the likely impacts and benefits of our proposals
- The ways in which people can engage with us
- How to respond to the consultation
- Next steps after the consultation



### **Our Proposals**

#### INTERIM SPENT FUEL STORE

A change from a 'wet' interim spent fuel store to a 'dry' interim spent fuel store and associated increase to the building's size.

#### **EQUIPMENT STORAGE BUILDING**

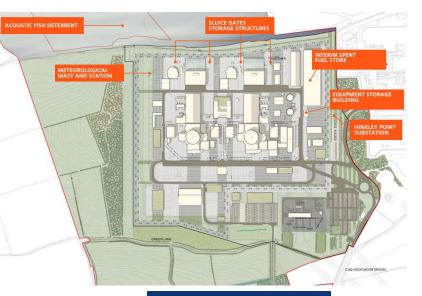
Linked to the storage of interim spent fuel, the replacement of the previously proposed Access Control Building with a new, larger, Equipment Storage Building.

#### METEOROLOGICAL MAST AND STATION

Relocation and redesign of the meteorological mast. Removal of the meteorological station and replacement with an equipment compound.

#### HINKLEY POINT SUBSTATION

Retention of the existing temporary Hinkley Point Substation as a permanent building to supply electricity to Hinkley Point A and Hinkey Point B power stations.



Location of the on-site changes proposed at Hinkley Point C

#### **SLUICE GATE STORAGE STRUCTURES**

Addition of four new storage racks to hold sluice gates and lifting beams that would be used during maintenance periods.

#### **ACOUSTIC FISH DETERRENT**

Removal of the requirement to install an acoustic fish deterrent system associated with the power station's cooling water system.

### HABITAT CREATION AND ENHANCEMENT

Proposals for large scale habitat creation that would include new areas of saltmarsh and associated habitats, the planting of seagrass and kelp and the development of native oyster beds. We also propose some changes to weirs in rivers, helping the migration of fish.



### Interim Spent Fuel Store and Equipment Storage Building

#### What is the proposed change?

The Interim Spent Fuel Store is designed to store spent fuel generated by Hinkley Point C throughout its operation, before longer term disposal or recycling.

After reconsidering the available technologies, we are proposing to change the way in which spent fuel is stored - from a wet storage method in pools, to dry storage in concrete and steel capitars.

We are also proposing to replace the previous Access Control Building with a new Equipment Storage Building to store, transport and handle equipment used when spent fuel is transferred to the Interim Spent Fuel Store.

#### Why do we want to make the change?

In our original plans we decided to propose a wet fuel store, rather than a dry fuel store. Our decision was based upon the operational experience at the time which showed no clear difference in terms of performance or safety between the two technologies, but wet stores were considered easier to inspect.

Now, with greater operational experience in the UK and globally, the advantages of dry storage over wet storage have become clear and has driven the decision to propose this change.

A dry fuel storage system is based on passive cooling, which uses natural airflow to cool sealed concrete and steel canisters. This passive safety method is preferred because it does not require operator intervention or complex mechanical and electrical systems.

The canisters used in dry storage provide the same levels of safety and environmental protection as a wet store. The canisters are very robust and are designed to withstand external hazards. They can even be approached without any protective clothing.

#### What is the result of the change?

The proposed change to the fuel store does not alter the quantities of spent fuel produced by the operational power station. There is negligible change to the radiological impact to members of the public or to the wider environment. The Environment Agency approved the environmental permit for this change in 2022.

One of the main differences between the two storage methods is that a larger building will be required for dry storage. It will be 79m longer, 8m wider and 5m taller to give the space needed for the canisters and enable easy access and maintain good airflow.

The proposed building would be visible by users of the coastal footpath. However, it would be seen against the backdrop of the much larger Reactor Buildings and the rest of the operational Hinkley Point C site.

The 55m high stack is no longer required for a dry fuel store, reducing the visual impact of the building.

#### **Equipment Storage Building**

We plan to remove the Access Control Building associated with the spent fuel store and replace it with a new, larger, Equipment Storage Building in a similar location. The equipment store would remain small in the context of the surrounding buildings and be 31m long, 23m wide and 18m high.



Current design of interim spent fuel store



Proposed design of interim spent fuel store.



### **Meteorological Mast and Station**

#### What is the proposed change?

A meteorological mast and meteorological station were proposed to host instruments and equipment to measure weather conditions such as wind speed, direction and air temperature. The data would provide important information in the event of an emergency.

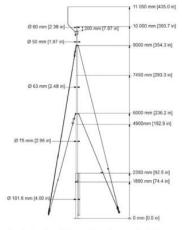
We plan to retain the meteorological mast, but at a lower height and in a new location away from surrounding buildings. We are also proposing to remove the building housing the meteorological station and relocate the equipment outside into small cabinets.

## Why do we want to make the change?

The original location of the meteorological mast was close to surrounding buildings and could have led to inaccurate measurements.

The new location will ensure that the equipment meets the current guidelines set out by the World Meteorological Organisation, which were published in 2018 after the Development Consent Order had been approved.





Indicative drawing of the re-designed meteorological mast.

#### What is the result of the change?

The new location away from surrounding buildings, together with the use of modern systems, means the change would see the mast substantially reduced in height from 50m to 10m.

We will not require a separate building for the meteorological station, so it will be removed from our plans.



The proposed location of the meteorological mast and station close to the Western boundary of the Hinkley Point C site. The location is highlighted in orange.



### **Hinkley Point Substation**

The Hinkley Point Substation is contained within a small building to the northeast of the site, adjacent to the access road to Hinkley Point A station.

The substation should not be confused with the National Grid substation, also known as the Shurton substation, which when operational will supply power from Hinkley Point C to the UK electrical transmission system.

#### What is the proposed change?

The substation currently supplies the construction site with electricity from the National Grid. We are proposing to keep the existing Hinkley Point substation throughout the operation of Hinkley Point C.

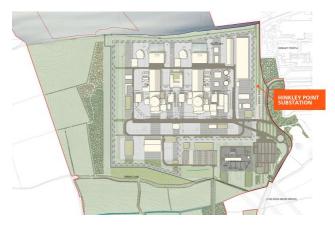
## Why do we want to make the change?

After construction, we have an obligation to provide power to Hinkley Point A and Hinkley Point B power stations as they continue their decommissioning.

The substation has been built with a 60-year design life. It is more efficient and sustainable to retain the substation than to construct an entirely new building.

#### What is the result of the change?

As the substation is being retained there will be no external changes and only very minor modifications to the internal elements of the building are required.





The existing substation at Hinkley Point C



### Sluice Gate Storage Structures

#### What is the proposed change?

We are proposing to add four new storage racks to store sluice gates and their lifting beams when they are not in use.

Sluice gates would support the maintenance of Hinkley Point C's cooling water system by holding back sea water. They would only be used when the reactors are shut down to carry out maintenance and refuelling.

### Why do we want to make the change?

When we made our original Development Consent Order application, the design of the sluice gates had not been finalised. Now this has been completed, we are able to confirm the way in which they would be stored.

#### What is the result of the change?

Sluice gate storage racks would be built close to the Hinkley Point C forebay.

Four new structures would be needed in total – two for each of the reactors. They would be in the form of "toaster" style racks and fixed to a concrete base.

There would be two different sizes of steel rack, the larger being 5.4m high and the smaller 4.5m high. They would sit alongside the much taller Pump House Buildings at the northernmost edge of the site.







Example of a toaster-style storage rack from the Flamanville 3 nuclear power station in France.

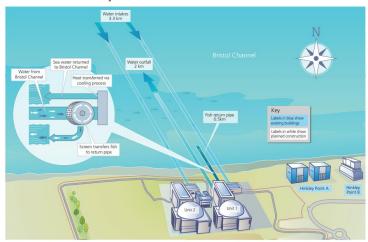


Proposed location of sluice gates storage structures.

### Acoustic Fish Deterrent (1)

#### What is the proposed change?

Hinkley Point C has a range of measures to help protect fish from the plant's cooling water system. They include a fish recovery and return system and special water intakes designed to reduce the number of fish entering the intakes compared with older power stations. An Acoustic Fish Deterrent system was also proposed within the station's original planning application. The deterrent would use underwater sound to help encourage some species of fish to swim away from the intake heads.



An overview of Hinkley Point C's cooling water system and fish recovery and return system.

As part of this application, we are proposing to install the first two fish protection measures and make a change to remove the requirement to install an acoustic fish deterrent system. A number of power stations have taken cooling water from the Bristol Channel in the past. Hinkley Point C will be the first to include any fish protection measures at all.

#### Why the change?

The proposal to remove the Acoustic Fish Deterrent is driven by both safety and environmental factors.

#### **Safety**

The Bristol Channel has poor underwater visibility and one of the highest tidal ranges in the world. Safely installing and maintaining dozens of sound projectors underwater, two miles offshore, is dangerous and would pose unacceptable risks to divers for 60 years.

#### **Environmental**

Evidence provided by our advisors, marine and freshwater science experts, Cefas, shows that the change would have a limited effect on protected fish species in the area. The number of fish harmed per year is relatively low and around that of a small fishing vessel.



### Acoustic Fish Deterrent (2)

#### What is the result of the change?

Marine and freshwater science experts, Cefas have considered the impact of Hinkley Point C on fish stocks in the Bristol Channel without an acoustic fish deterrent system installed. The detailed work concluded that the removal of the acoustic fish deterrent would have a limited effect on protected fish species in the area.

In the natural environment, very large numbers of fish are eaten by other fish, marine birds and porpoises. This mortality is typically 10% to 20% of the adult population per year for longer-lived species and 60% or more for shorter living species. Fishing can also sustainably take at least 10% to 20% of the adult population every year without affecting a species' ability to reproduce and maintain their population levels. For many species, higher levels of fishing is also sustainable.

In comparison, the total amount of all fish estimated to be harmed without the Acoustic Fish Deterrent has been predicted by Cefas to be in the range of 18 to 46 tonnes in a year – In 2022 UK fishing vessels landed 640,000 tonnes of sea fish.

Although the impact on fish populations is limited, we are proposing compensation measures and enhancements for the wider environment. This change provides a more natural, long-term solution that does not risk the lives of divers.

#### Additional fish protection measures

Many power stations have taken cooling water from the Bristol Channel in the past. Hinkley Point C will be the first to include fish protection measures.

Even without an acoustic fish deterrent, Hinkley Point C's water intake system will include a fish recovery and return system and specially designed low velocity, side entry water intake heads.

The design of the intake heads reduces the speed of the water being taken into the cooling pipes and are installed sideways to the tidal flow in the Severn Estuary. This reduces the risk of fish entering the pipes.

The cooling water system has also been designed to carefully transfer fish to a fish recovery and return system that will help to safely return fish to the sea.



The design of the intake heads reduces the speed of the water being taken into the cooling pipes and are installed sideways to the tidal flow in the Severn Estuary. This reduces the risk of fish entering the pipes.



### Habitat Creation and Enhancement Proposals

## Why are we creating and enhancing new habitat?

The creation of new habitat to help protect fish populations and benefit the wider environment replaces our proposal to install an acoustic fish deterrent system.

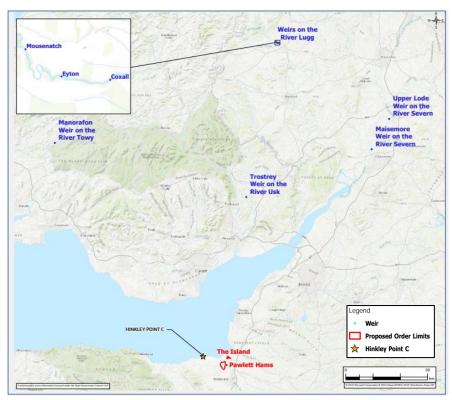
The new habitats would compensate for potential impacts on protected fish species. The proposals include the creation of areas for saltmarsh and associated habitat, seagrass and kelp, plus new native oyster beds and the removal of barriers for migrating fish further upstream in rivers.

The change provides a more natural, long-term solution that does not risk the lives of divers who would be needed to maintain an acoustic fish deterrent system.

As well as helping fish populations within the Severn Estuary, the new habitats will provide a wide range of additional benefits. They will support and grow local populations of birds, plant species, marine mammals, and reptiles. The plans will also help to improve water quality, act as natural flood defences, provide a sustainable carbon store and open access to nature for the local community and visitors.

Four types of compensatory measures are being proposed with a description of each included within this summary.

The package of proposed compensatory measures are long-term initiatives and monitoring will also be important to understand the effects of the compensation and support changes to their future management.





### **Compensation Measures - Saltmarsh**

#### **Saltmarsh Creation and Enhancement**

Saltmarsh is coastal grassland that is regularly flooded by seawater and we are proposing to create or enhance approximately 340 hectares of saltmarsh and associated habitat in two locations along the River Parrett.

Saltmarsh supports fish populations by providing breeding and feeding grounds whilst also helping to develop local populations of birds, plants, marine mammals, and reptiles. The benefits are long term and would extend well beyond the operational life of the new power station.



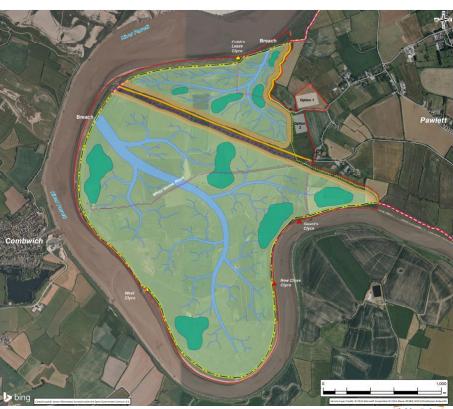
#### Pawlett Hams and "The Island"

Pawlett Hams and "The Island" are both located on the bank of the River Parrett, close to the mouth of the Estuary at Stert Point. Pawlett Hams is located opposite the village of Combwich and "The Island" is located at the mouth of the Huntspill river.

Both sites are suitable for saltmarsh and associated habitats creation because they are low-lying and have an existing network of waterways and drainage. Pawlett Hams has been identified as a suitable site for saltmarsh creation as it is expected to flood in the future due to sea level rise.

We plan to create 313 hectares of saltmarsh and associated habitats at Pawlett Hams and enhance 27 hectares of existing saltmarsh at The Island. The saltmarsh would be created in a similar way to the nearby Steart Marshes, where a "breach" allowed seawater to flood the area, allowing for the creation of a new habitat.

A new saltmarsh could be established within three to six years, whilst enhancement of an established saltmarsh could be achieved within three years.





### Compensation Measures – Marine

#### Creation or Enhancement of Native Oyster Beds

We are proposing to create or enhance around 1-2 hectares of native oyster beds. Suitable areas around the coast of the Severn Estuary will be assessed.

Native oyster beds were once common around the UK coastline, however 95% of them have now been lost. Oysters are an important species that support the wider ecosystem, including reef formation, erosion control, improvement of water quality, raw material supply and food provision.

Discussions on the location and potential approach to the development are ongoing.



Karen Vanstaen - Crown copyright.

#### **Creation or enhancement of Kelp Forest**

We are proposing to create or enhance around 15 hectares of Kelp Forest.

Kelp is a brown seaweed which can form dense submerged forests and is found across the UK.

Kelp is an important species that supports the wider ecosystem, aids coastal defence and plays a vital role in the maintenance of fish stocks. Kelp habitats are also important for a range of recreational activities, such as diving and angling.

Discussions on the location and potential approach to the development are ongoing.



Image is for illustrative purposes only.

#### Creation or enhancement of Seagrass Habitat

We are proposing to create or enhance around 5 hectares of seagrass habitat. Seagrass is a marine plant that grows in shallow waters. In addition to supporting a diverse ecosystem, seagrass meadows would also have numerous wider benefits including coastal protection and improved water quality.

Discussions on the location and potential approach to the development are ongoing.



Image is for illustrative purposes only.



### Compensation Measures – Easement of Fish Migration Barriers

#### What compensation measures are we proposing?

We are proposing the easement of existing barriers to fish migration upstream of the Severn Estuary. Weirs in rivers can create barriers to the movement and migration of fish and this can be harmful to local fish populations by limiting access to their spawning or feeding habitats. The restoration of natural river environments is seen as a vital consideration in the management of fish populations.

We have worked with organisations such as the Environment Agency, Natural England and Natural Resources Wales to identify existing weirs in rivers that are acting as barriers to fish migration.

Several methods could be used to ease the passage of fish. They include the complete removal of a weir, the partial removal of a weir or the installation of fish passes.

#### Where would the work take place?

We are proposing works on three weirs:

- · Maisemore Weir on the River Severn
- · Trostrey Weir on the River Usk
- One further weir on either the River Lugg (Mousenatch Weir, Eyton Weir, Coxall Weir), River Towy (Manorafon Weir) or River Severn (Upper Lode Weir)

#### Planning approval for the changes proposed to weirs

The proposed development to weirs located in England will be included in the Development Consent Order Material Change application. Planning consent for changes to weirs in Wales will be sought from the relevant Local Planning Authorities via a Town and Country Planning application. Proposed developments in the Severn Estuary and wider Bristol Channel will also require a Marine Licence.



Maisemore Weir on the River Severn - Copyright Environment Agency.



Trostrey Weir on the River Usk.



### Consultation Documents and Plans (1)





### Consultation Documents and Plans (2)

- The Consultation Overview Document provides a detailed explanation of our proposals and summarises how to respond to the consultation
- The Preliminary Environmental Information Report covers both On and Off Site Changes
  - Each chapter describes the preliminary assessment of the likely significant environmental effects of the project as changed by the proposed changes to determine whether there are any new or materially different likely significant effects compared to those assessed in the original Environmental Statement, and any mitigation being considered to avoid, prevent or reduce and, if possible, offset those effects
  - Plans and Figures to support the preliminary assessment and proposed order limits for sites to be included in application
- Non-Technical Summary of the Preliminary Environmental Information Report
- The Shadow HRA Evidence Report considers the impact of the proposed changes on designates sites protected by the Habitats Regulations
  - HRA Process, Approach to assessment, Baseline, Stage 1 Screening, Stage 2 Shadow Appropriate
    Assessment, Stage 3 No Alternative Solutions, Imperative Reasons of Overriding Public Interest
    and Proposed Compensation Package



### How to engage with us during the Consultation

### In-person consultation events

#### Thursday 11 January 2024

Victory Hall, 32 Tower Hill, Stogursey, Somerset, TA5 1PL **3pm - 7pm** 

Thursday 18 January 2024

Cannington Court, Church Street, Cannington, Bridgwater, TA5 2HA **12pm - 5pm** 

A virtual consultation exhibition is available 24/7 on our website

#### Monday 22 January 2024

The Green at Wembdon, Homberg Way, Wembdon, Bridgwater, TA6 7BY 11am - 3pm

#### **Tuesday 30 January 2024**

Pawlett Village Hall, Old Main Road, Pawlett, Somerset, TA6 4RY **4pm - 8pm** 

These are drop-in events and visitors are welcome to join at any point throughout the opening times.

### Online consultation events

**Tuesday 16 January 2024** Using Zoom **12pm - 2pm** 

Wednesday 24 January 2024 Using Zoom 6pm - 8pm

Thursday 1 February 2024 Using Zoom 10am - 12pm

All links to join the online events are available from the website.

A Hard Copy of the Consultation Materials are available to view at our Visitor Centre at Cannington Court

To view the detailed information and plans, please visit: **www.edfenergy.com/hpc-dco** 



### How to respond to the Consultation

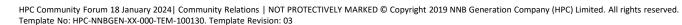
- If you wish to comment on our proposals an online Feedback Form is available on our website at <a href="https://www.edfenergy.com/hpc-dco">https://www.edfenergy.com/hpc-dco</a>
- Alternatively, you can give feedback in one of the following ways:
  - Email your comments to: <u>edfenergy@hpcenquiries.com</u>
  - Post your written responses to:
     Freepost SEC Newgate UK Local HPC Consultation 2024
  - Call our Freephone number during normal office hours:
     0333 009 7070
- The deadline for formal statutory consultation responses to be received by us is
   23:59 on 29 February 2024



### **Next Steps**

This consultation is the beginning of the process. The application will eventually be decided by the Secretary of State for Energy Security and Net Zero. The diagram below shows the steps in the process that would likely be completed over the next two years.







# **Thank You**

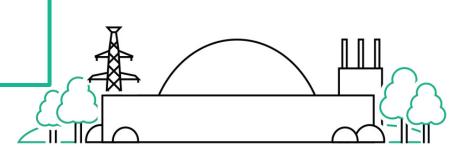




#### **Item 5: Update: Office of Nuclear Regulation Report**

ONR Community Forum Report Highlights

Alun Griffiths January 2024 Update



### **ONR Report Q3/4 2023**

In this period, routine inspections of the Hinkley Point C site covered the following:

- plant construction and/or commissioning;
- emergency preparedness;
- nuclear safety committee functioning
- quality assurance and records;
- organisational capability, including the function of the Internal Regulator;
- conventional (non-nuclear) health and safety, including life fire safety;
- security

### **ONR Report Q3/4 2023**

ONR continues its engagement with the project via regular site inspections, visits and meetings at NNB GenCo (HPC) Ltd's offices and supplier locations across the following themes:

- design and safety case;
- organisational capability (including supply chain and quality);
- pre-operations;
- conventional health and safety and fire safety; and
- security.

These inspections, along with routine contact with other international regulatory bodies provide ONR with valuable intelligence on the progress NNB GenCo (HPC) Ltd is making developing its competence and capability to manage the design, procurement, and construction of HPC and will inform future permissioning decisions.

### **Permissioning**

- RPV installation will be a major permissioning point, using primary powers.
- In advance of major permissioning points ONR will apply flexible permissioning to allow the start of a number of other activities.
  - ONR concluded flexible permissioning in relation to the lifting of the dome onto the unit 1 Reactor Building. The conclusion of ONR inspection and assessment activities was that the licensee had demonstrated that its decision-making process for release of this dutyholder hold point was clear, rational and robust.
  - ONR applied flexible permissioning to the release for shipment of the first two steam generators from Framatome. ONR performed a series of inspections and assessed the licensee's relevant safety submissions to conclude that the risk of shipment to further downstream activities was low.

#### **Non-routine matters**

- The investigations into the tragic fatality that occurred on site in November 2022 and the separate event at site that resulted in a worker sustaining injuries as a result of a rebar mesh wall falling continue.
- At this time, we are unable to provide further details about the ongoing investigations as these remain live inquiries.
- Enforcement Notices have been served under the Regulatory Reform (Fire Safety)
   Order 2005 in relation to breaches identified during a routine inspection. The notices were served on:
  - NNB GenCo as the Principal Contractor
  - Contractors Bouygues Travaux Publics SAS and Laing O'Rourke Construction Limited, the joint venture partners in BYLOR JV.
  - Contractor REEL UK.
- These notices were served in relation to conventional health and safety matters and not nuclear related safety matters. Enforcement Letters had previously been served.

### **Item 6: Update: Community Fund**



# Update

January 2024

Justin Sargent Somerset Community Foundation





Grants awarded		
Programme	Awarded*	No. of grants
Strategic grants	1,542,823	11
Small grants	726,699	183
Otterhampton	363,180	16
Open Grants	6,513,412	70
Community Development	10,000	2
	9,156,114	282

<sup>\*</sup> For the period 2017 - 2026





## Recent Examples





# Burnham and Highbridge Community Association







# Stogursey Youth Club







### **Contacts**

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### **Item 7: Main Site Forum 19 October 2023**



### **Item 8: Transport Forum 16 November 2023**



### **Item 9: Any other business**



### Item 10: Date of next meeting: 16th May 2024



# **Thank You**

