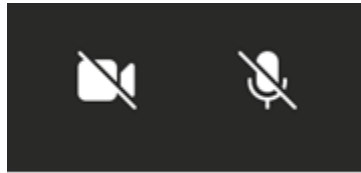




Session etiquette

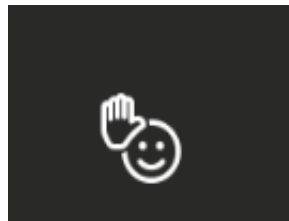
- **Please keep your line on mute during the session unless you are speaking.**

This will help to avoid any background interference and allow the speaker to be fully heard by all.

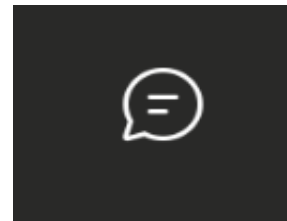


- **Please submit questions throughout the session either via the chat function or use the raise hands function to ask your question in person.**

Both will be monitored throughout the session and we will facilitate Q&A sessions at appropriate points throughout the meeting. Please remember to lower your hand after you have asked your question.



Raise Hand



Chat



Please note that this session **is being recorded** for the purposes of producing a written record of the Q&A. Please be advised that this recording will be deleted once a written record has been produced.

Respecting each other

What you can expect from the Environment Agency

- We will provide an efficient and high-quality service
- We will be helpful, polite and respectful

We are committed to providing a professional and fair service to everyone we work with

In return, we ask that customers respect our staff

- We won't tolerate threatening, abusive or violent behaviour
- Please be respectful of each other's views throughout this meeting and in communications

A large, light green circular graphic on the left side of the page. Inside the circle is a white, stylized figure with its arms raised in a 'V' shape, resembling a person or a plant. The figure is composed of simple, rounded shapes.

Sizewell

Stakeholder Engagement Meeting

7th November 2023

Introductions

East Anglia Team Members



Paul Quinton
East Anglia Business Manager



Stephen Taylor
NNB Team Leader



Simon Barlow
Sizewell C Project Manager



Calum Dow
Engagement Specialist



Simon Engler
Senior Environment Officer



Chris Strachan
Biodiversity and Fisheries Specialist



Darren Rumsey
FRAP Specialist



Ben Selby
Technical Support Officer

National Team Members



Alan McGoff
Nuclear New Build Policy Lead-
Environment and Business



Robert MacGregor
Senior Nuclear Specialist –
Sizewell C site Regulator



Caroline Richards
Senior Stakeholder
Engagement and
Communications Advisor



Declan Roscoe
Programme Support
Office – Delivery Lead



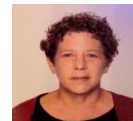
Andrea Hole
Engagement Support Officer



Sharon Goulbourne
Technical Support Officer



Andrea Basten
Senior Habitats Regulations Specialist



Karen Edwards Senior Marine Specialist

Liz Sargent (observer)
Nuclear Specialist – HPC & SZC regulation

Attending as observers



Department for
Energy Security
& Net Zero

Aleksei Rodin

Stakeholder Engagement Manager

Nuclear Power and Industry Team

Nuclear Power, Infrastructure, & Decommissioning Directorate

“Meet the nuclear regulator” meetings

An engagement forum with the Environment Agency

Chair – Paul Quinton on behalf of East Anglia Area

These meetings will enable:

- a better understanding of nuclear regulation and our role as an environmental regulator
- us to provide updates on our work at the Sizewell nuclear sites, on environmental permit applications, variations, and other issues of interest to stakeholders
- you to share views, ask questions of us, and receive answers
- you to better understand how you can provide comments and views on our consultations



Updates from Nuclear Regulators for the Sizewell sites

Nuclear regulation at Sizewell A

- Inspection planned in September on solid radioactive and non-radioactive waste, gaseous and aqueous disposals already carried out this year.
- Turbine hall asbestos removal and demolition – ongoing.
- Permit application for a transfer of land to Sizewell B expected in 2024.
- Minor permit breach relating to management of out of service equipment – no environmental impact.
- Redundant pond fuel skips being radiologically characterised.
- Radioactive discharges remain well within permitted limits.



Nuclear regulation at Sizewell B

- Recent inspections/interactions
 - Outage RO18 arrangements and on operational instruction and control.
 - Plans to use zinc-injection in primary reactor coolant (reduces worker doses) – BAT demonstration.
 - Breach of Total Residual Oxygen permit limit (1ppm vs limit of 0.3ppm) in cooling water discharge – impact minimal as short-term and dispersed. Non-compliance recorded as CCS3.
 - F-gas chiller leak – civil penalty under consideration.
 - Radioactive discharges remain within permitted limits.



Nuclear regulation at Sizewell C

- SZC's arrangements continue to evolve – we continue to engage and assess their effectiveness.
- We are undertaking a series of inspections with ONR on the company's arrangements this autumn.
- RSA permit Information Condition IC20 is due at the end of the year. We will undertake an inspection to assess whether SZC have met the requirement.
- Our inspections will be recorded and made available on the Public Register, as they are for other nuclear sites.
- No radioactive discharges expected until mid-2030s.



Radioactivity in food and the environment

- Radioactivity in food and the environment is safe.
- Levels of radioactivity in food and the environment are low.
- Between 2021-22 there were no significant changes to the radioactivity measured in food and the environment.
- Exposure to the public from all sources of artificial radioactivity in food and the environment was low and well within the legal limit of 1 mSv per year.
- The most significant source of exposure to ionising radiation was from natural radiation.
- <https://www.gov.uk/government/publication/s/radioactivity-in-food-and-the-environment-rife-reports>

Radioactivity in Food and the Environment, 2022



Update on Sizewell C Project

- We continue to be engaged in early-construction phase environmental permit discussions - providing pre-application guidance and direction.
- We expect the applications we receive to be of high quality, allowing us to make decisions to suitable timescales.
- We are working closely with our Natural England colleagues to improve the processes for CROW Act and HRA to ensure the best outcomes for ecology.
- We are developing a new workstream with the Co - site environmental management, We plan to deploy an environment officer to site to influence construction activities from the earliest opportunity.
- We shall be consulted on the discharge of DCO Requirements necessary to support the Project.



Sizewell C – Area NNB Project Team

Meet the team
... and their roles



Stephen Taylor
NNB Team Leader



Simon Barlow
Sizewell C Project Manager



Simon Engler
Senior Environment Officer



Darren Rumsey
FRAP Specialist



Chris Strachan
Biodiversity and Fisheries Spec



Ben Selby
Technical Support Officer



Calum Dow
Engagement Specialist

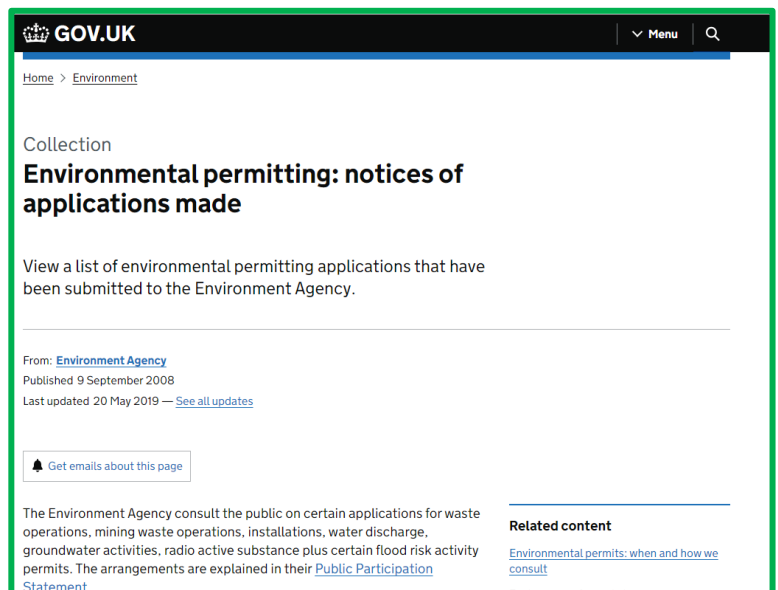
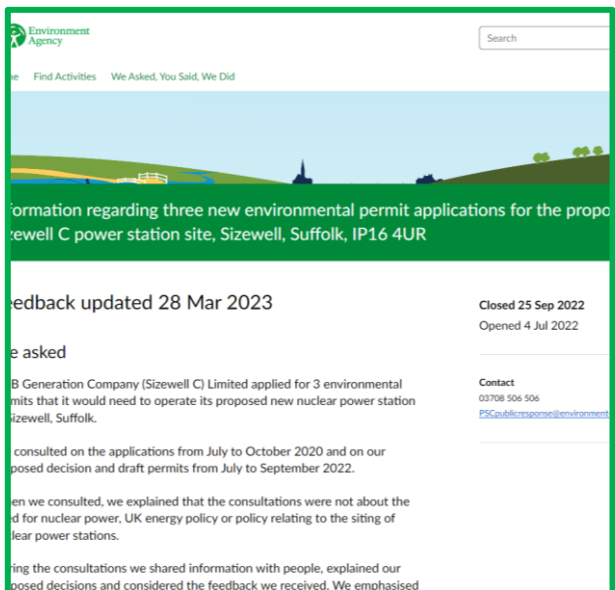
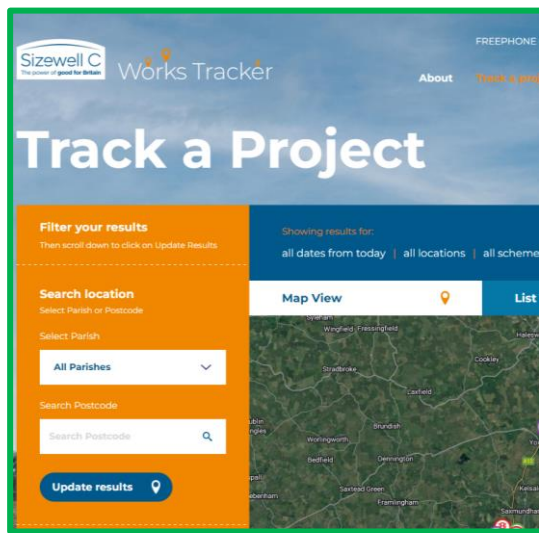


Sizewell C - Construction Permitting

- FRAP granted for works associated with Fen Meadow habitat creation at Benhall.
- Environmental Permits will be required for:
 - Flood Risk Activities
 - Water Discharge activities
 - Air Quality discharges
 - Water Resource Licences
 - Waste Management
- No applications yet submitted. We are reviewing the company's programme as it emerges.
- If granted, we will then regulate for compliance with operating conditions and discharge limits.
- Additionally, we expect to work with the company, and their contractors, to influence environmentally appropriate working techniques... outside of our regulatory control.

Keeping you informed and engaged

- Track a project – company website
- Citizenspace consultation website
- GOV.UK website – notices of applications made
- GOV.UK website - Regulating Sizewell



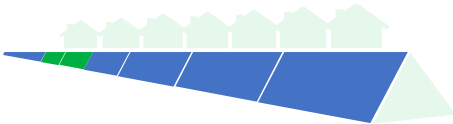
Sizewell C – Flood Risk Activity Permits

Under Environmental Permitting (England and Wales) Regulations 2016, a Flood Risk Activity Permit (FRAP) is required for work...

- in, over, or under a main river



- on, or near, a fluvial flood defence structure



- in a flood plain



- on, or near, a sea defence



We shall publish receipt of applications, for consultation purposes.



New nuclear – national update

Powering Up Britain including the **Energy Security and Net Zero Growth Plans** published following the **British Energy Security Strategy** - confirming government's intention to have secure, clean, affordable British energy for the long term:

- An aim for nuclear to provide 25% of generation (24GWe) by 2050
- One project to financial investment decision this parliament, two more by 2029.
- £2b investment this parliament, £120m enabling fund

Developments:

- **Great British Nuclear (GBN)** established to take projects forward, selecting two small modular reactor (SMR) technologies and two sites to get investment ready. Initial selection of six technologies completed.
- Consultation on deploying new nuclear outside of GBN planned
- New **National Policy Statement** being developed
- Consultation on Sizewell C started **generation licence modifications for RAB** has started

Sites

- **Hinkley Point C** – construction continues of 2 UK EPR – 3.2 GWe
- **Sizewell C** – planning consent for 2 UK EPR station replicating Hinkley. Operational permits issued. Government investment. Regulated asset based (RAB) funding – prequalification of potential investors ongoing.

Generic Design Assessment (GDA)

- In March 2023 we completed step 1 of the Generic Design Assessment of the Rolls-Royce Small Modular Reactor design. Step 2, Fundamental Assessment now ongoing.
- 2 new GDAs expected to commence soon.



Technologies selected:

- EDF
- GE-Hitachi Nuclear Energy International LLC
- Holtec Britain Limited
- NuScale Power
- Rolls Royce SMR
- Westinghouse Electric Company UK Limited



Questions received in advance

Questions/discussion points requested in advance:-

Q1: Question from member of the public

I would like to know if it is true that when Sizewell A was given permission that B and C were also given permission?

Q2: Question from member of the public

I would like to know how seals and fish can escape being boiled alive in the hot water from this thing.

Q3: Question from Minsmere Levels Stakeholder Group

The CPMMP Discharge of Requirements 12 (East Suffolk District Council) and 14 (Marine Management Organisation) were submitted before a final proposed design for the Hard and Soft Coastal Defences (DoR19) have been submitted. As a statutory consultee on these, what is your current position and opinion of the fact that the CPMMP has been proposed without an HCDF/SCDF design being available?

Questions/discussion points requested in advance:-

Q4: Question from member of the public

Where and how the current activities at the proposed Sizewell C site site(s) are sourcing any water requirements they may have (potable or otherwise)?

Q5: Question from member of the public

If the 'soiling mix' and 'ground anchor' test/works require(d) potable water, where that (and any non potable water) was/is planned to be sourced from, how it was/will be transported to the site(s) and the number and type of traffic movement necessitated.

Q6: Question from member of the public

How any water, liquid waste, effluents and other contaminants were/are treated on site(s) and/or the arrangements for their transport to 'another place' for treatment and/or disposal, and the number and type of traffic movements arising from this element of what I believe to be 'early works'.

Questions/discussion points requested in advance:-

Q7: Question from member of the public

Whether there have been any notifiable events on the proposed Sizewell C site(s) since the commencement of 'work' and/or neighbouring/nearby land where it has been directly or indirectly impacted.

Q8: Question from member of the public

If there have indeed been notifiable events; what was their nature, how many were there, what remedial work has been undertaken to deal with any detrimental impacts arising whatsoever, what changes have been made to operating practices to eliminate any future occurrence(s)

Q9: Question from member of the public

Were any sanctions and/or fines or other types of enforcement activity required? If so, what were they?

Questions/discussion points requested in advance:-

Q10: Question from member of the public

Have the recent storm impacts had any unplanned or detrimental impacts on the proposed Sizewell C site(s)?

Q11: Question from member of the public

Has the severity of the recent storm given cause for any appropriate authorities to reflect on potential steps that maybe required on the proposed Sizewell C sites, should such storms become regular occurrences, during construction, operation and decommissioning.

Q12: Question from member of the public

Can you give us an update on the status and source of the proposed tankered water for use in the early years before the temporary desalination plant is operational?

Questions/discussion points requested in advance:-

Q13: Question from member of the public

In the draft WRMP24 there appears to be a possibility that the SZC temporary desalination plant could also feedback to the Saxmundham water tower. Is this your understanding and do you have a regulatory view on this proposal?

Q14: Question from representative of Sizewell Site Stakeholder Group

I would like to ask a question regarding the recent flooding and the implications for the site and for emergency plan as several local roads were not passable.

Questions/discussion points requested in advance:-

Q15: Question from member of the public

Baroness Young made comments on Radio 4's 'Today' programme yesterday (31st October 2023), I now feel it essential that time is made within the meeting to examine the Regulator's view of her comments.

As you know Baroness Young was the **Chief Executive of the Environment Agency** (2000 – May 2008) and therefore a person whose comments I believe should be taken very seriously.

The potential issues her comments raise for both Sizewell B and perhaps more urgently, any Regulatory approvals being sought for Sizewell C (and the 'safeguards' proposed therein) appear very relevant at this time.

I'm sure that you will have been advised of her comments (and the potential implications within them for any 'nuclear on the coast'), but just in case I would refer you to:

- **BBC Sounds**
- **Today programme**
- **Time mark starting 2:33:08**

Questions from Together Against Sizewell C

1. Having personally witnessed the rapid erosion of the coast in front of the SZB and SZC sites over the last 18 months and the loss of over a metre in some places (including at the northern end of the SZC site by the tank traps) over the last week, I would like the EA to answer the following:-

- a) How much erosion has there been in front of the SZC site over the last 24 months?
- b) Can the EA explain why the rate of erosion at Sizewell has increased so rapidly?
- c) At the current rate of erosion, by which date do the EA anticipate that the sea will breach the shoreline and reach the area of SZC's SSSI Crossing?
- d) Is the EA confident that the SZC site is not at risk of flooding by the sea inundating the site and 7.3 metre nuclear platform from the rear during the full lifetime of the site?
- e) The erosion around the tank traps between RSPB Minsmere and the SZC site has increased significantly and is a prime example of what happens when the sea meets a solid object adjacent to softer materials. Obviously, the scale of SZC's hard sea defences, if built, will have a far greater impact on neighbouring properties. Can the EA give their assurance that SZC's sea defences will not have a detrimental effect on adjacent properties over the full lifetime of the site?

2. SZC Co have recently submitted an application to East Suffolk Council (ESC) for discharge of SZC DCO Requirement 19 (ESC ref DC/23/4124/DRR Discharge of Requirement 19) ie they have submitted what is supposed to be the final design of the sea defences. We would like the EA to answer the following:-

- a) TASC note that the documents show a design life of the sea defences till 2120. DCO approval was given on the sea defences having a design life till 2140. Do the EA consider that this should be treated as a material change to the DCO?
- b) 2120 is only 85 years after an assumed operational start date of 2035 (but we all know, based on the experience of EPR construction projects to date, it is likely to be much later). Is the EA content that the design life of the sea defences is only up to 2120 given the operational start date is likely to be later than 2035 and given that spent fuel is expected to be on site for at least 120 years after operations commence.
- c) TASC note that the application refers to a revised spent fuel strategy. Has the EA seen the revised spent fuel strategy?
- d) As the full lifetime of the site is dependent on SZC's spent fuel strategy, do the EA agree that the lifespan of the sea defences cannot be approved until the revised spent fuel strategy is agreed?
- e) Do the EA consider that a revised spent fuel strategy will be a material change to the SZC DCO?

Questions from Together Against Sizewell C

3. Under another Discharge of Requirement, Requirement 2, ESC ref DC/23/4057/DRR Discharge of Requirement 2 (Code of Construction Practice - Site Wide Material Management Plan), TASC note that SZC Co have included the removal of the Bent Hills and Northern Mound in their phase 1 works and installation of the temporary Hard Coast Defence Feature in their Phase 2 works. TASC believe that the temporary Hard Coast Defence Feature needs to be in place before the removal of the Bent Hills and Northern Mound otherwise it risks compromising the SZB sea defences and places anyone working on or using the coastal strip at risk prior to installation of the Temporary Coastal Defence Feature. Can the EA explain their understanding of this situation? If the order of works is as TASC have set out above, we would like the EA to explain why they consider this will not risk compromising the Sizewell B sea defences.

4. In light of the extreme loss of shingle from the beach in front of the Sizewell C site in recent months,

- a) How often do the EA anticipate that SZC C's Soft Coastal Defence Feature (SCDF) will need replenishing if SZC is built?
- b) Do the EA consider that the SCDF will cope with multiple storms?
- c) Where will the shingle needed to replenish the SCDF be sourced and is that source considered sustainable for the full lifetime of the plant?

5. Following the 'Meet the Regulator Meeting' on 15th May 2023, the EA kindly supplied written answers to questions submitted before the meeting including 17 questions that I raised (appendix iii) relating to the SZC Water Discharge Activity (WDA) permit. In answer to my question numbered 13, the final paragraph states "*We have also done a simple average of the number of fish reported on each survey and this is 70,460 fish per day*". Can the EA advise whether the figure of 70,460:-

- a) Represents only dead/moribund fish?
- b) Is the actual figure from the SZB surveys or one that has been adjusted to take into account the greater volumes of water/fish at the SZC intakes?

6. Can the EA explain why the SZC WDA permit biomass limit of 5,600kg per day from the Fish return and Recovery systems with a 78% mortality, is so much greater than the limit of 502kg/day for biomass and 205kg/day dead/moribund biomass in the Hinkley Point C WDA permit?

Questions on the day

Sizewell C – take home messages

- we will regulate to protect people and the environment and support sustainable growth
- we will work on site with the company, and their contractors, to influence environmentally appropriate working techniques
- a significant number of environmental permits are expected over the next few years
- we shall advertise applications on GOV.UK and invite comments
- we shall assess those permits that have high public interest (HPI) and conduct enhanced consultation
- not all applications are likely to be HPI and we shall manage consultations accordingly
- the only applications submitted so far have been FRAPs
- we are reviewing the company's permit application programme and preparing for applications expected over the next quarter

End of meeting