

## BRADWELL B

# Community Forum – 17 May 2022

## Meeting Note



### **Attendees:**

Asheldham and Dengie Parish Council  
Bradwell B Action Network (BAN)  
Blackwater Against New Nuclear Group  
(BANNNG)  
Bradwell-on-Sea Parish Council  
Brightlingsea Town Council  
Chelmsford College  
Environment Agency  
Essex County Council  
Essex Federation of Small Businesses  
Great Baddow Parish Council  
Heybridge Parish Council  
Latchingdon Parish Council  
Maldon District Council (including some ward  
members)  
South Woodham Ferrers Town Council  
Sense of Place  
West Mersea Town Council  
Woodham Ferrers & Bicknacre Parish  
Council

### **Chair – Sandra Fryer**

### **Bradwell B Project Team**

Qianyou Pan, Bradwell B  
Matt Squire, Bradwell B  
Olivia White, Bradwell B  
Neil Burke, Bradwell B  
Tim Miller, Bradwell B  
Gang Chen, General Nuclear System Limited (GNSL)

### **Community Forum Secretariat**

Michelle St Martin, Bradwell B  
Elizabeth Smith, Bradwell B

## Item 1: Welcome

- At the start of the meeting an interim Chair, Olivia White, was in place, due to the permanent Chair being slightly delayed. However, the meeting proceeded as planned. The attendees were welcomed to the Community Forum and everyone was thanked for their time. The proceedings of the meeting were set out and presenters for the evening were introduced.
- The attendees were notified that a recording of the meeting would be taken solely to aid the development and accuracy of the meeting notes. This recording will not be circulated to members of the Community Forum and will be deleted once the meeting notes are approved.
- It was noted that apologies had been received from:
  - Cllr Mike Mackrory, Chelmsford City Council
  - Katherine Ball, Federation of Essex Colleges
  - Tillingham Village Council
- Comments on the notes from the last Community Forum were requested. No comments were received.

## Item 2: Bradwell B update

Qianyou Pan (Peter), Project Development Director, provided an update on the project covering the following items:

- Generic Design Assessment (GDA) completed
- Feasibility studies
- Ground investigation and load testing works
- Bradwell B Information Office
- Socio-economic benefits update

This was followed by an update on engineering and feasibility from Matt Squire, Project Engineer, and an update from Neil Burke, Senior Planning Consents & Permits Manager, on the Oyster Research commissioned by Bradwell B and undertaken by Essex University.

Olivia White, Senior Communications Manager provided an overview of the Energy Security Strategy in terms of nuclear.

## Item 3: Q&A

### CGN UK involvement in UK nuclear

**Cllr. John Akker, West Mersea Town Council, submitted a written question ahead of the Forum asking “In view of the investors report by EDF published recently and the stated view that ‘there is great uncertainty around development perspectives of the Bradwell project’, will you post a statement immediately after the meeting about the future and the funding of the project?”**

Bradwell B team response: We will write up the notes of the Community Forum and issue these to members in the coming weeks, as well as publishing them on the Bradwell B website. No separate statement will be made at this point. CGN UK work with EDF on four projects; the GDA for the UK HPR1000, which is now completed, Hinkley Point C, Sizewell C and Bradwell B. There is no change in these arrangements. We continue to discuss with Government the development of these projects.

**Cllr Akker later expressed that with current headlines, a heightened public relations profile is required from the project.**

Bradwell B team response: The project would update Forum members if there were any changes to the status of the Bradwell B project.

### Project timeline

**Tony Fittock, Latchingdon Parish Council, asked about the deliverability and timeframes for the project if Sizewell C is approved?**

Bradwell B team response: We do not have a published public timeline for the Bradwell B project. Our Development Consent Order (DCO) work is currently paused as the project focusses on feasibility work. Prior to final investment decision, we would have to work towards the completion of the DCO work, including one or more further stages of public consultation.

Developers and the supply chain need to work together to make sure there are the people and suppliers to work on projects. At Bradwell B, we are continuing to attend meetings with the South East Local Enterprise Partnership, notably their Major Project's Group, which brings together projects in the area to talk and understand the needs of different projects. We continue to talk with Sizewell C about their supply chain and workforce plans, so that we can learn lesson from them and people can move between projects.

**Tony Fittock noted the Planning Inspectorate webpage for the project does not include any recent S51 advice and asked if the project had met the Planning Inspectorate recently.**

Bradwell B team response: We have not had any recent meetings with the Planning Inspectorate, this is linked to the pause in the DCO activities.

**Cllr Lagan, Maldon South, Maldon District Council, asked for clarity on the project timeline and stressed the need for the project to be open and honest with the community. Cllr Lagan noted his comments in the meeting were his own, not those of Maldon District Council.**

Bradwell B team response: In terms of key deliverables, we know what we need to do and how long these may take, for example for the DCO and Site Licence processes. For the DCO, our work is currently paused so we do not have the timings up to Final Investment Decision. We understand with media reporting about the project, local people will have questions and potentially concerns about what is happening. We will keep talking to community via the Community Forum and update you when we have more details.

**Matthew Neall, Bradwell-on Sea-Parish Council, commented that senior members of the project team had recently left the project and stated the UK Government does not want Chinese investment in UK critical infrastructure. He noted a recent Maldon District Council housing planning application, which may go ahead if the power station is built and stated the lack of certainty around the project was stressful for the community.**

Bradwell B team response: We acknowledged the personnel changes. There is still a project team and the project is still live.

Bradwell B is identified under the national policy statement as a potential site for nuclear development. Our role on the Bradwell B project is to develop the site. Regardless of technology, a power station on this site will have particular construction issues, which need to be explored and understood. We are continuing to work on the project and believe we can move forward with the site and technology proposed.

## Oyster research

**Cllr Massey, South Woodham Ferrers Town Council, questioned if “environmental projections” in the presentation slides about oyster research was a typo.**

Bradwell B team response: Yes, that is a typographical error, it is meant to read environmental protections. The presentation has been updated on issue to Community Forum members.

**Cllr Massey asked about warm water outflows and if the project can use the hot water constructively, rather than cooling it.**

Bradwell B team response: The water discharge from the power station is low-grade heat, meaning that its usefulness for other applications is limited. Using the heat has been previously considered on other projects. For example, on the Wylfa project, a direct cooling power station, the possibility of using the water for municipal heating was explored, but it was deemed not cost effective to recover the heat. At the current time, for Bradwell B and hybrid cooling, we do not feel there are any other options on how to manage the heated water, other than cooling but it is something we will continue to look at.

**Professor Andy Blowers, BANNG, asked if differences in vulnerability between native and rock oysters have been studied as part of the research?**

Bradwell B team response: The focus of the study was on commercial oysters (native), not rock oysters. The team recognises the potential sensitivities of native species rather than farmed species.

**Professor Andy Blowers commented that he hoped the oyster research would be published soon. He asked if the oyster research considered the implications of hybrid cooling against direct cooling and if the proposals for hybrid cooling were feasible and cost effective?**

Bradwell B team response: Regarding the thermal plume for indirect cooling, it is not a more concentrated discharge; it is actually a much lower thermal load overall, meaning much less heat being discharged into Blackwater Estuary. As the project moves forward, we will undertake much more detailed modelling assessment and will need to demonstrate there is no perceptible impact in regards to discharge whether it be direct (which we are not progressing) or hybrid cooling (which we are progressing).

Regarding discharge out to sea, the images (slide 16 in the presentation) show a point of discharge and what the impact would be at that specific point. High thermal load associated with once through direct cooling has a much higher thermal load, whereas when using hybrid cooling there is a low thermal load, which we currently understand would have a negligible effect on the Blackwater Estuary. We originally started the work on the oyster beds on the perception that we would be discharging a high thermal load.

Regarding if it is feasible to use hybrid cooling, we went through a lot of work before we went to the Stage 1 public consultation, including technical feasibility. There is a cost associated with hybrid cooling, in terms of parasitic load (i.e. electricity needed to manage that system), but our estimations are within our acceptable range in regards to cost of design. The proposals will be worked up in detail as the project progresses.

**Professor Andy Blowers clarified his comments about the implications of the hybrid system, stating the implication of hybrid cooling on terrestrial environment both into**

**the atmosphere and ground would be considerable in terms of steam, plume and the towers.**

Bradwell B team response: We will continue to work on understanding the impacts of the project. To date cooling has been considered in a lot of detail, including looking at similar sites elsewhere, which are operating near identical systems. We understand the plume physics well. The estimation of the number of days the plume would be visible is extremely low, and any steam discharge from such a plume would be highly unlikely to provide any impact on near farmland or the wider area.

We submitted an Environmental Impact Assessment Scoping Report to the Planning Inspectorate, where we presented our information on the potential impacts of the cooling water, which suggested impact of the plume from the towers as being negligible. That was accepted as being the likely case. We need to provide further evidence through the DCO work. We await any evidence others could provide as we progress with the project either in public consultation or post application in the examination stage.

**Professor Blowers stated that there is a long way to go with the hybrid cooling work and the uncertainties seem considerable and asked if the project was to continue this would be one of the main issues in terms of determining the outcome of an application.**

Bradwell B team response: From an Environmental Impact Assessment perspective, we would suggest it is incredibly unlikely that the hybrid cooling towers would provide any sort of acceptable impact in regards to farmland, protected species or people. With large scale construction projects such as Bradwell B, there are potentially considerable impacts, which have to be considered very seriously, but we do not believe this is one.

**Cllr. John Akker, West Mersea Town Council, asked about the impact on fisherman, noting the Gordon Ramsey visit to the Mersea for a recent TV programme. Cllr Akker asked that the information by the University of Essex is made available in full and that the project keep local oysterman fully involved in discussions. He also requested that information about the cooling towers is made available in an understandable format.**

Bradwell B team response: Early in the project in 2018/2019, it was through going out and talking to the oyster fishermen, coupled with our initial fishery surveys and economics work that we understood the importance of oyster fishing and also the potential impact on the marine wildlife in the Blackwater Estuary as a result of once through direct cooling. We took on the development of the project with hybrid cooling so we would not cause an impact on the Blackwater Estuary. In respect to the oyster research specifically, we continued the work with the University because it had started, but from our perspective, it is not relevant, as our proposals are for hybrid cooling and we will not have the type of effect that direct cooling will have. We understand that we will need to demonstrate this through science in our future impact assessments.

Regarding the cooling towers, please refer back to the stage 1 consultation material <https://bradwellb.co.uk/previous-consultation/> .

We do acknowledge we need to make the information clear. We would like to clarify that discharge from cooling towers is water vapour, no radiological discharge there is no contact with the cooling system and the radioactive parts of the plant. There would be visible water vapour, which would on occasion under certain climate conditions occur, outside of that we expect no visible effect from the cooling towers.

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## Ground investigation works

**Matthew Neall asked if there was a plan to start the GI and load test work and is one of the considerations for starting the work the feasibility of the site actually progressing to build?**

Bradwell B team response: We are still in the planning phases of the GI and load test programming. The date to commence site works is not yet finalised. We will update the forum members later this year on the timelines for the work. If feasibility work demonstrates, for some reason, that the project is not feasible at the site, then we would not progress the GI and load test work, but at this stage, we do not see any reason why the feasibility would suggest this.

### **Item 4: Generic Design Assessment**

Gang Chen from General Nuclear System Limited and Olivia White provided an overview of the Generic Design Assessment for the UK HPR1000 which completed in February 2022.

Information regarding the responses to public comments can be found <https://www.ukhpr1000.co.uk/more-information/common-comment-themes/>

### **Item 5: Questions**

#### Stage 1 consultation

**Tony Fittock from Latchingdon Parish Council asked about the stage 1 proposals, where the project stated half of the construction material would be coming via marine transport. He asked that given the concerns about oysters and the estuary, would it be more or less likely that this strategy would be adopted, as many residents are concerned about the number of lorries driving through the villages during construction.**

Bradwell B team response: It is very important for the success of the project that as much materials as possible is brought in by marine transport, to minimise impact of local roads but also for cost and logistics. Nothing has changed in our ambition of 50% or more to be transported by sea. There would be a lot of impact if the majority of materials were brought to site by road. There are a number of ways to mitigate impacts of materials travelling by road, for example the freight management facilities, proposed in our initial consultation proposals.

**Julie Baker, West Mersea Town Council, asked the project to consider the arrival of all the shipping that could pollute the water and oysters.**

Bradwell B team response: We have proposed a range of different marine options. The impacts and effects of those will need to be assessed as those options are developed. Any project will have the same issue of getting people and materials to site and all these impacts will need to be assessed and will be looked at in due course when specific feasibility topics are taken forward as we move forward.

## Generic Design Assessment

**Cllr Lagan, Maldon South, Maldon District Council said that the 73 public comments indicates a failure to engage due to the complexities of the information being communicated. He stated there was a need to ensure plain English and clarity in information.**

Bradwell B team response: We acknowledge there is a lot of complex information for people to understand both in terms of the GDA and stage 1 proposals. To help people, we try to present information in different formats and levels of complexity. With the GDA, we needed to provide the full submissions for people, which are complex documents. We try to help people understand information through ways such as the Community Forum. In terms of the stage 1 consultation, we had a large number of responses and for the GDA our understanding is the number of public comments received were of a similar level to other GDAs. Across the board more could be done to make things clear, engaging and accessible for people.

**Cllr Lagan asked if the GDA is a golden goodbye to CGN?**

This question was not addressed in the Community Forum session.

Post forum response from the Bradwell B team: The Bradwell B project is continuing and we continue to work to bring the project forward. The GDA is undertaken before a developer has formed detailed proposals for a specific site, allowing the regulators to identify potential design or technical concerns early and ask the designer to resolve them. The GDA is one of the various permissions, consents and licenses that are needed to build a nuclear power station.

## Other technology

**Cllr Lagan, Maldon South, Maldon District Council asked if there is a plan for Small Modular Reactors on the site if Bradwell B does not go ahead.**

Bradwell B team response: We are developing the site for our proposed technology. There has been a lot in the media about SMRs and in particular Rolls Royce SMRs. Technically these are not small, they are about 470MW, which means that a significant amount of cooling water would be needed. If you had three or four of these SMRs on the site, then you would potentially have the same cooling water demand as two of our proposed units. Our understanding is that Rolls Royce is particularly focusing at the moment on the Nu-gen site up in Cumbria and in North Wales, particularly the Wylfa site and Trawsfynydd site.

**Julie Baker, West Mersea Town Council, If the problems in Ukraine escalate would we need to bring Bradwell B forward to supply our power.**

Bradwell B team response: We cannot speculate about geopolitics but the Government has made it clear in its Energy Security Strategy that they want nuclear and have ambitions for nuclear. Nuclear though, as acknowledged by Government, is not a quick process. We will continue to discuss with Government about Bradwell B.

**Item 6: Final remarks from the Chair.**

The Chair thanked everyone for their attendance, contributions, confirmed a note of the meeting, and slides will be circulated.

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Next meeting will be later this year in autumn and the team will be in touch with members in late summer with a potential date.