



**REPORT of  
DIRECTOR OF STRATEGY, PERFORMANCE AND GOVERNANCE**

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**to  
COUNCIL  
23 JUNE 2020**

**BRADWELL B PROJECT – STAGE 1 CONSULTATION**

**1. PURPOSE OF THE REPORT**

- 1.1 To seek endorsement to a recommended response to the Stage 1 Consultation relating to the proposed Bradwell B power station proposals, as set out within the appendices of this report.
- 1.2 The Joint Member Bradwell Board recommends that a joint consultation response (**APPENDIX A**) be provided representing the views of both Maldon District Council and Essex County Council. The Board also endorsed the specific response now recommended to Council. The joint response has also been considered and endorsed by the Council’s Bradwell B Power Station Working Group. Accordingly, following collaborative working between each authority, the recommended joint response is before Council for approval.

**2. RECOMMENDATIONS**

- (i) That the Council endorses the Officer recommended response to the Stage 1 Consultation, as set in **APPENDIX A (Appendices 1 and 2)** this report, as the Council’s response to the consultation; and
- (ii) That the Council endorses that the consultation response be a joint response with Essex County Council.

**3. SUMMARY OF KEY ISSUES**

**3.1 Background**

- 3.1.1 In 2010 the Government announced that Bradwell was one of eight sites it considered suitable in principle for the siting of a new nuclear power station. Currently CGN and EDF are partnering in the development of the station and have formed a jointly owned company, Bradwell B Power Generation Company Limited (BRB).
- 3.1.2 The development of a new nuclear power station falls within the scope of the ‘Nationally Significant Infrastructure Projects’ (NSIPs), as set out in the Planning Act 2008. In these instances, the developer applies directly to the Secretary of State for a Development Consent Order (DCO) rather than to the Local Planning Authority for

planning permission. Maldon District Council will be a consultee as part of the DCO process.

3.1.3 The Council considered BRB's consultation on the draft Statement of Community Consultation (SoCC) at its 13 February 2020 meeting and a joint response with Essex County Council was issued on 14 February 2020. BRB published its SoCC on 4 March 2020 and two stages of pre-application consultation were proposed in advance of the submission of the DCO application. The first of these two consultations, known as the Stage 1 Consultation, was also commenced on 4 March 2020.

3.1.4 The Stage 1 Consultation was originally planned to run for twelve weeks from 4 March to 27 May 2020, but following the outbreak of the Coronavirus COVID-19 pandemic public exhibitions were cancelled and the Stage 1 Consultation deadline extended to 1 July 2020. BRB have also introduced supplementary engagement tools to seek to mitigate the loss of public exhibitions.

### 3.2 **The Stage 1 Consultation**

3.2.1 The Stage 1 Consultation published by BRB says that it contains information on its initial proposals and options at this early stage of the nuclear power station proposals, providing the opportunity for all to let BRB know their views on them. The Stage 1 consultation document has been made available to Members and is available to all on the following link: <https://bradwellb.co.uk/consultation-documents/>. The Stage 1 consultation document is 141 pages long and identifies specific questions where feedback is requested. A short summary of the consultation follows below but Members are directed to the BRB consultation for its full content.

3.2.2 The consultation explains that the National Policy Statement for Nuclear Power (NPS EN-6) identifies an urgent need for new nuclear power stations and identifies Bradwell as a potentially suitable site for a new nuclear power station. The Stage 1 Consultation is non-statutory and presents BRB's vision and emerging proposals for the Bradwell B project to enable feedback to be taken into account as proposals develop. This builds on BRB's engagement plans with stakeholders.

3.2.3 The consultation clarifies that there are parts of the proposals are not likely to be influenced by consultation because they are driven by important technical considerations such as safety and efficiency. However, there are many parts of the proposals which will be influenced as a result of responses to the consultation or further technical and environmental studies. The parts of the project which are not likely to be influenced by the consultation are specified as:

- The principle of building a new nuclear power station on land adjacent to the existing Bradwell power station (as a matter of Government policy);
- The approximate siting of the new power station, as shown in the indicative masterplan for the Bradwell B permanent development;
- Technical details including:
  - The use of UK HPR1000 nuclear technology;
  - The proposed deployment of two reactors;
  - The adoption of indirect cooling.

- The principle of the type of the ‘associated development’ needed to support the construction of the Bradwell B power station including:
  - Accommodation for construction workers close to site;
  - Local highway improvements;
  - Marine transport facilities;
  - Temporary park and ride and freight management facilities;

3.2.4 The consultation outlines the Bradwell B project as including the following:

- **The Power Station Permanent Development** - the proposed new nuclear power station on land within the main development site (adjacent to the existing Bradwell station) which will be developed with two UK HPR1000 nuclear reactors, together with associated plant and ancillary structures and features of the power station.
- **Temporary Construction Facilities** - these are temporary facilities required for construction on the main development site and for the duration of the construction period.
- **Off-site Power Station Facilities** - these are permanent facilities away from the main development site, which are essential for the safe operation of the power station.
- **Associated Development** - development on and off-site to support the construction and/or operation of the power station, for example park and ride facilities for construction workers, freight management facilities, temporary worker accommodation and road and junction improvements.

3.2.5 The main development site includes the land that would be occupied by the permanent power station and land required for construction. The main site covers approximately 230 hectares and lies immediately to the south and east of the existing Bradwell power station. The site is next to the Blackwater Estuary on the Dengie Peninsula, approximately 9 miles (15km) east of the town of Maldon and north-east of the village of Bradwell-on-Sea. The consultation indicative main development site plan is reproduced overleaf:



Figure 1: Indicative main development site

- 3.2.6 The power station is proposed to be located on the higher ground to the south-east of the existing Bradwell power station. The consultation says that the proposed layout takes account of the environmental constraints of the site and local area and that the proposed new sea defences around the power station will be designed to withstand flooding from 1 in 10,000 year extreme weather events. It is proposed to use modern low-plume ‘hybrid’ cooling towers with a preference expressed for circular cooling towers with approximate dimensions of 120-165m in diameter at the base and 50-60m high. BRB are also considering creating a new landscape which would provide ecological mitigation and make a positive contribution to biodiversity.
- 3.2.7 The indicative permanent masterplan illustrated in the consultation is reproduced in Figure 2 overleaf:

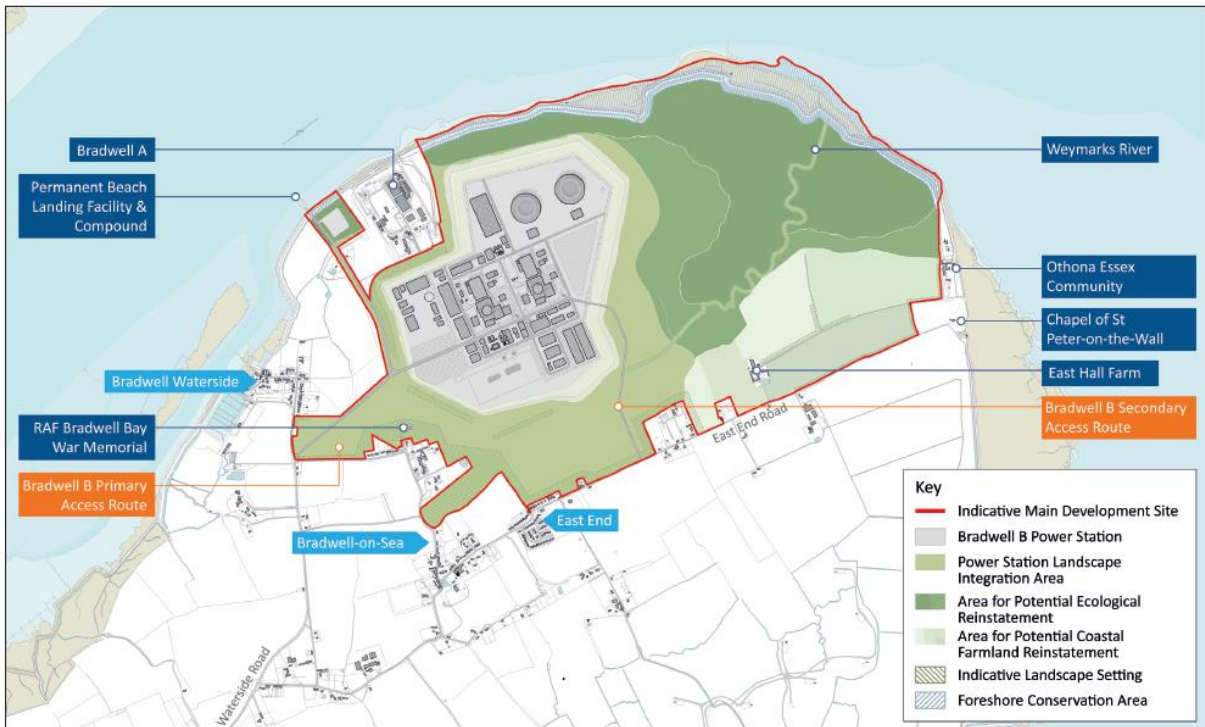


Figure 2: Indicative permanent masterplan.

3.2.8 The consultation anticipates that construction of the power station would take between 9 to 12 years to complete. Figure 3 below provides an indicative construction phase masterplan indicating potential beach landing facility locations and the extent of the site required during the construction phase.

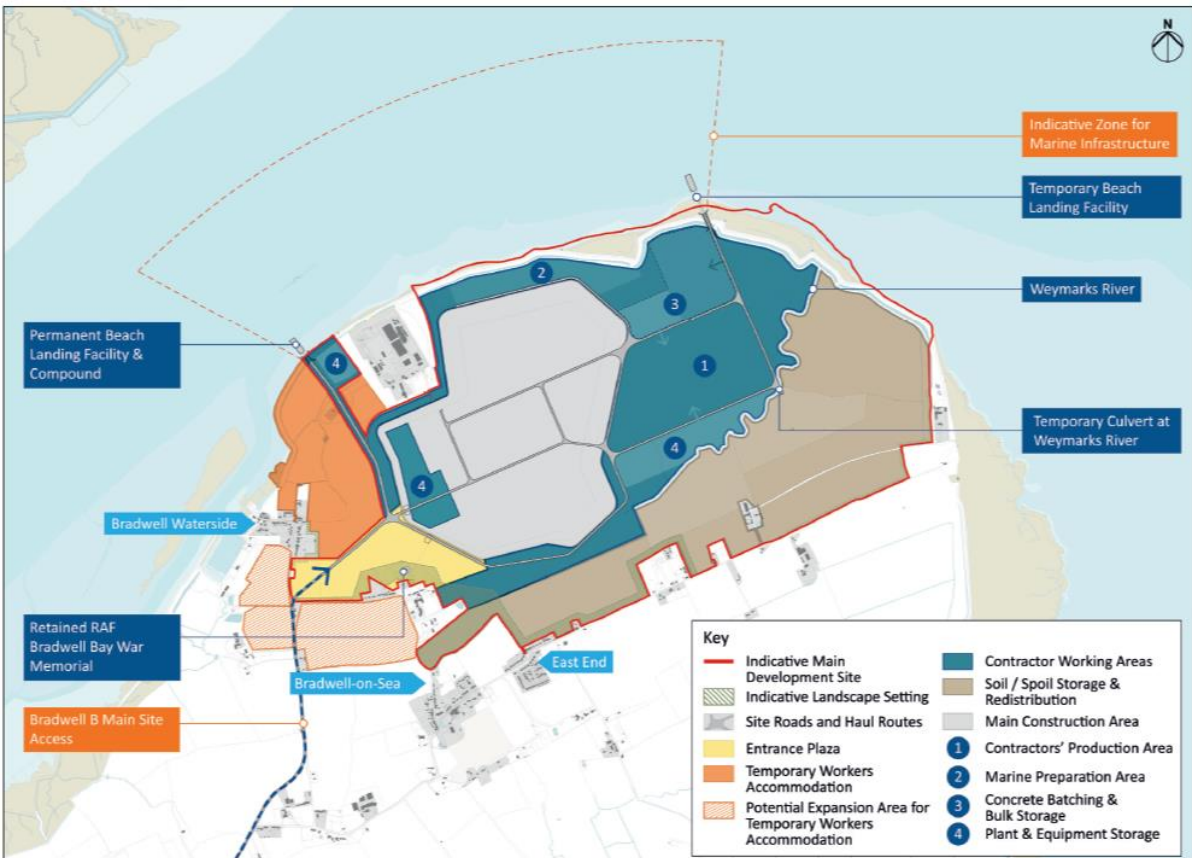


Figure 3: Indicative construction phase masterplan



- 3.2.9 The main development site would also include a connection to a new 400kV substation to be provided by National Grid. The consultation clarified that a new connection will be required to export the electricity generated by the new power station to the National Grid. This will be subject to a separate DCO application and consultation by National Grid Electricity Transmission and is outside of the scope of BRB's Stage 1 Consultation.
- 3.2.10 The consultation identifies the following transport strategy objectives:
- Maximise the use of marine and / or rail transport over road transport for movement of freight, where cost effective and deliverable within the Project timescales;
  - Reducing the distance the construction workforce need to travel and promoting sustainable transport modes;
  - Deliver appropriate demand management measures, where feasible, in preference to highway infrastructure improvements; and
  - Implement highway improvements or other measures to mitigate any residual transport effects of the Project to an acceptable level.
- 3.2.11 The consultation advises that BRB consider that marine transport could make a major contribution to its strategy to minimise the amount of freight transported to the site by road. Marine transport options are considered with the Beach Landing Facility the preferred option.
- 3.2.12 With reference to rail connections the consultation identifies physical constraints with the local branch line to Southminster and identifies that there may be significant capacity constraints, particularly around Shenfield, which limit the availability of new freight paths. BRB says that using rail to transport construction freight via the local branch does not appear to be viable, although requires further discussion with Network Rail to fully understand the constraints associated with the use of the branch line for rail freight and to identify the types and locations of possible rail interventions that could be carried out. The consultation outlines that there is more potential to transport construction workers by rail, subject to provision of 'rail and ride' bus services by the Project at key railway stations, such as at Southminster. BRB will be exploring this fully as part of their transport studies.
- 3.2.13 During construction there could be between 9,100 and 10,600 workers needed on site, of which 3,000 are expected to come from the local area. The consultations states that the initial proposals would achieve a sustainable transport modal split for the Bradwell B construction workers. This would result from the provision of temporary workforce accommodation close to the main development site and through the provision of direct buses and park and ride facilities that will help minimise the daily use of private car by construction workers. A Construction Workforce Travel Plan would be developed in outline.
- 3.2.14 It is proposed to build temporary workforce accommodation close to the main development site to accommodate up to 4,500 of the non-home-based construction workers required for the Bradwell B project. Potential locations for an accommodation campus are shown close to the main construction site.

- 3.2.15 Potential locational options for park and ride sites are identified in the consultation as a series of search areas. Park and ride facilities would play an important role during the construction of the Project, intercepting workforce trips by car reducing the amount of worker traffic on local roads between the park and ride facilities and the main development site and reduce potential environmental effects. Six search areas are identified, with two between Cold Norton and Mayland, a third west of Maldon, and three within the Chelmsford City Council administrative area close to the A414 junction with the A12, west of South Woodham Ferrers and at the junction of the A132 and A130. BRB anticipate needing one large site (20-30ha in size), accommodating around 1,600 spaces, in the search area between Cold Norton and Mayland, and potentially one or more smaller facilities in the other search areas.
- 3.2.16 The consultation advises that the development of the Bradwell B power station would require the movement of substantial volumes of construction materials to the main development site. The total tonnage of construction materials required for the Project is expected to be in excess of 6,000,000 tonnes which would include Abnormal Indivisible Loads (AILs), bulk materials such as aggregate and cement for the manufacture of concrete as well as fill material for raising site levels, steel reinforcement and a range of other materials for example steelwork for the construction of temporary and permanent buildings, utilities, lighting and fencing materials.
- 3.2.17 BRB advise that an essential part of its strategy for the movement of freight is the modal split between marine, rail and road transport modes during construction. Its initial view is that it can deliver at least 50% of bulk construction materials to the main development site by sustainable modes. Initial work indicates that this target could be met by marine transport. Rail could potentially play a role, through delivery of freight to muster ports for onward transit to the main development site by sea. There will still be a requirement for bringing freight to the site by road, and this would necessitate a range of highway improvements, options for which are set out in the consultation. The consultation estimates that there will be between 500-700 two-way HGV movements on average per day during the peak construction period.
- 3.2.18 BRB are proposing to develop one or more freight management facilities for HGV holding areas, to help regulate the timing and flow of vehicles to the Bradwell B site. These could provide parking for approximately 100 -150 HGVs on sites of between 10-15 hectares. The consultation identifies three search areas where freight management facilities could be located. Two of the search areas for the freight management facilities coincide with the park and ride search areas between Cold Norton and Mayland and the other located near the junction of the A130 with the A132 within the Chelmsford City Council administrative area.
- 3.2.19 The consultation considers what interventions may be required to establish an appropriate HGV route between the strategic road network and the main development site during the main construction period. Two strategic routes are considered, or a combination of routes, which are summarised as follows:
- **Route 1:** a route from the A130/A132 junction via the South Woodham Ferrers ring road, Lower Burnham Road, Fambridge Road, the B1018 and Steeple Road to site. Route 1 is principally aligned to the use of the existing highway, with a series of potential bypasses around settlements and sensitive receptors in addition to online highway and junction improvements; and

- **Route 2:** a route from the A130/A132 junction via the South Woodham Ferrers ring road, Lower Burnham Road, the B1010 with a series of alternative off-line section options to link back into the eastern part of the Route 1 near the site. This Strategic Route option would require a combination of on-line highway improvements and new sections of off-line highway alongside junction improvements.

3.2.20 In the first few years of construction, before the park and ride and freight management facilities will be operational, or major highway improvements have been completed, the consultation proposes to use the existing highway network as far as possible alongside improvements to the existing highway and implementation of HGV management measures. An ‘in and out routing loop’ for HGVs between the strategic road network and the main development site is proposed. This would result in HGVs travelling from the strategic road network to Bradwell via the A12 through Danbury and south of Maldon then to the B1018 to the Cold Norton roundabout on through Latchington, Mayland, Steeple and to the main site and then return the same way until the Cold Norton roundabout turning south to B1012 to South Woodham Ferrers and the A132 to the A130. This approach is designed to minimise the need for two-way HGV movements on the same parts of the local road network.

3.2.21 The road-led approach in the early years proposes a number of road mitigation measures including:

- Freight management strategy to implement several HGV management measures including timing of HGV movements and potential load consolidation;
- On-line physical works within the designated highway boundary to be agreed with ECC such as additional signage, improved signalling at junctions and additional pedestrian crossings through sensitive communities;
- Localised junction and highway works at identified pinch points on the existing highway network which may or may not require targeted third party land outside of the designated highway boundary; and
- Environmental management measures to reduce potential impacts on communities and sensitive receptors, such as residential properties, community facilities, conservation areas and listed buildings.

3.2.22 The consultation advises that once operational, the power station would generate approximately 2.2GW of electricity, enough to power around 4 million homes. It would create approximately 900 permanent jobs, with a further 1,000 jobs during periods of outage for maintenance and refuelling. It should be operational for a minimum of 60 years however spent fuel is likely to be stored on site beyond the operational life of the station.

3.2.23 The consultation says that the Bradwell B Project would deliver lasting socio-economic benefits for this region. The cumulative effect of the increased investment, trade, wages, jobs, skills, productivity and transport improvements, new homes and improved community facilities will together create a step-change in opportunities for local people, businesses and local communities. Construction of the Project would involve significant investment over 7-10 years, creating tens of thousands of jobs during construction as well as up to 1,200 apprenticeships during construction.



During its 60 year operational life the Bradwell B power station would employ a permanent workforce of around 900 people (with an additional 1,000 roles during outages around every 18 months during operation).

3.2.24 The consultation says that to maximise socio-economic benefits, the Bradwell B Project will operate in line with a set of core principles:

- Deliver on NPS aspirations - an effective and efficient infrastructure project, that attracts a high quality workforce and employs local people where possible.
- Deliver economic and social outcomes that help raise aspirations and local opportunities in Essex, increase productivity and promoting social mobility.
- Link skills and training initiatives with the supply chain - promote competency in existing businesses to ready them for supply chain opportunities.

3.2.25 The consultation says that workers could also create demand for community facilities and services such as health and leisure, which will be considered in more detail with stakeholders during 2020. Based on refined estimates of the likely construction workforce, as information becomes available and estimates on where workers are likely to live, the next step will be to work with stakeholders to define and quantify effects on existing communities and services and to develop a strategy that maximises local benefits as well as providing appropriate mitigation.

3.2.26 The consultation says that because of the rural setting of the development, many construction workers are expected to travel from up to 90 minutes for existing residents (home based workers), or within 60 minutes for workers moving to the area to help with the construction (non-home based workers). This 60 minute travel time area includes the towns of Maldon and Chelmsford, and smaller communities across the Dengie Peninsula, from Burnham-on-Crouch and Southminster, to Bradwell-on-Sea itself. Demand for housing from the construction workforce could lead to issues in the local housing market and BRB want to achieve a balance so that a reasonable proportion of housing capacity is used, but without displacing or pricing out local residents.

3.2.27 As BRB has at Hinkley Point C and Sizewell C, it is looking closely at how best to accommodate non-home based workers. Some of the workers expecting to be on the Project for a long time may choose to buy a home in the area. Others who are staying for a shorter time may choose tourist accommodation such as hotels, or caravan parks. Many of them are likely to want to rent a home or rooms in a shared house. The majority of project provided accommodation will need to be close to the main development site and this is intended to be provided within a temporary campus site accommodating around 4,500 worker bed spaces.

3.2.28 On accommodation, BRB priorities will include:

- Refining estimates of the likely construction workforce, including peak numbers, how that builds up over time, and how it breaks down by different trades and skills.
- Updating the gravity model to include new information as it becomes available, including the latest thinking on transport options.

- Using gravity model outputs to refine the mitigation – a campus and other Project-provided accommodation, and also the other ways in which interventions could be made to help the local housing market.
- Work with Maldon District Council, Essex County Council and other local stakeholders to understand the effects on local accommodation, including tourism.

### 3.3 Planning Policy

- 3.3.1 Nationally Significant Infrastructure Project (NSIP) are covered by the Planning Act 2008, which advises the Secretary of State that any decision starts with relevant National Planning Policies. This is different to the legislative basis for planning applications under the Town and Country Planning Act 1990 which starts on the basis that decisions are made in accordance with the development plan.
- 3.3.2 National Policy documents therefore provide the key basis for decision making on planning applications for DCOs for nuclear power station projects. These are the:
- Overarching National Policy Statement for Energy, July 2011 (NPS EN-1); and
  - National Policy Statement for Nuclear Power Generation, July 2011 (NPS EN-6).
- 3.3.3 NPS EN-6 explains that there is an urgent need for new nuclear power stations and that nuclear power forms an important element of the strategy towards achieving a more decarbonised, secure and diversified electricity sector by 2050. NPS EN-6 identifies Bradwell B as one of eight potentially suitable sites for a new nuclear power station in England & Wales before the end of 2025. NPS EN-1 confirms that all planning applications for nuclear power stations should be assessed on the basis that the Government has demonstrated that there is a need for this infrastructure.
- 3.3.4 The Secretary of State must also have regard to other relevant matters, and this would include the Local Development Plan. Where there is a conflict between an NPS and Local development Plan NPS EN-1 makes it clear that the NPS would prevail for the purposes of decision-making.
- 3.3.5 Maldon District Council’s Local Development Plan (LDP) was adopted in July 2107. The LDP however has only one policy reference to a new nuclear power station, under Policy D4:
- “The Council will strongly support the principle of the development of a new nuclear power station at Bradwell-on-Sea.”*
- 3.3.6 Paragraph 3.43 of the adopted LDP states:
- “Given the uncertainty of the project, the possibility and impacts of a new nuclear power station in the District will not be considered further at this stage. The situation will be monitored by the Council, and if required local planning policy may be reviewed to consider any future power station proposals.”*
- 3.3.7 The Council has begun work on a Bradwell B Development Plan Document to address development needs potentially arising from the Bradwell B development, but

there are no specific detailed Bradwell B policies to inform the consultation response. Officers have however had regard to relevant national and local planning policies to inform the consultation response.

### 3.4 **The Development Consent Order (DCO) Process**

- 3.4.1 The project is at Stage 1 pre-application public consultation stage which is the first of a minimum two-stage process of pre-application consultation. After the pre-application consultations BRB will then decide whether to proceed to submit a DCO application to the Planning Inspectorate. After submission, an Examination would then be held by the Planning Inspectorate. At that point, there will be the opportunity for the local authorities and others to raise any unresolved issues through representations to the Planning Inspectorate. Maldon District Council will also be required to submit a Local Impact Report. The Planning Inspectorate would then publish a report with a recommendation to the Secretary State for a decision. It is for the Secretary of State to decide whether to approve or refuse the application. BRB has indicated that they hope to submit its DCO application in 2022.
- 3.4.2 The Stage 1 Consultation acknowledges that some of the proposals are at any early stage of development and that more detailed strategies to address effects of the development will need to be developed. Where possible, BRB state in their Stage 1 consultation document that these will be provided at later stages of the consultation process however, for some more complex areas, the full detail may not be available until the DCO application.
- 3.4.3 Following the Stage 1 consultation, BRB will consider all responses received and use them along with further technical work and environmental studies to inform the development of their plans. BRB will then publish their preferred options in a statutory Stage 2 pre-application consultation. This will identify the land likely to be affected by the proposals, preferred sites for highways improvements, freight management facilities and park and ride sites, and the preferred strategies for Jobs and Skills Strategy and Worker Accommodation. The Stage 2 consultation is expected to be in 2021 although BRB may undertake additional limited, focused stages of further consultation where necessary.
- 3.4.4 Between stages of consultation BRB will be engaging with technical consultees and key stakeholders to progress assessments and to inform the development of its proposals.

### 3.5 **The Consultation Response**

- 3.5.1 The recommended response to BRB's Stage 1 Consultation is attached at **APPENDIX A** to this report. It comprises a short five-page core response with the following two appendices:
- **Appendix 1** provides topic based comment based upon technical input from officers from both Councils.
  - **Appendix 2** provides direct answers to the key questions BRB asked within the main Stage 1 Consultation document.

- 3.5.2 The Stage 1 Consultations highlights that the construction and operation of a Bradwell B power station could have considerable local, regional and national benefits. It could also have negative impacts. The consultation response seeks to welcome and maximise the benefits from the proposals whilst also seeking to avoid or minimise potential negative impacts.
- 3.5.3 The response seeks to highlight the importance of sustainable development, whilst acknowledging the importance of National Policy Statements and other national and local planning policy. A positive lasting legacy from the development is considered essential if it is to become an example of sustainable development.
- 3.5.4 The response is necessarily high level as the Stage 1 Consultation arrived early in BRB's development of its proposals and the consultation generally lacks supporting evidence or information. The DCO process is based upon evidence, and so the recommended response consistently calls for evidence on baseline assessments and impact assessments and stakeholder discussions to support positive future engagement. More developed strategies are also requested, for example, on transport to support sustainable transport of both freight and people.
- 3.5.5 The consultation response confirms the Council's in principle support for the development and welcomes detailed discussion across a wide range of topics to support the Council's ongoing engagement with the DCO process.

#### **4. CONCLUSION**

- 4.1 The Stage 1 Consultation by BRB has come at an early stage of the Bradwell B power station scheme's development and the DCO process. The consultation is welcomed as an introduction to the emerging proposals and will support future engagement between the Council, and other stakeholders, going forward as more robust strategies, baseline assessments and impact assessments are prepared.
- 4.2 The recommended Council response to the Stage 1 Consultation will provide a firm basis for future pre-application discussions with BRB as the project progresses beyond this early stage of consultation.

#### **5. IMPACT ON STRATEGIC THEMES**

- 5.1 The development of the proposed nuclear power station impacts all of the Council's thematic strategies of Prosperity, Place, and Community and many of the priorities contained within them.

#### **6. IMPLICATIONS**

- (i) **Impact on Customers** – The proposed nuclear power station could have significant benefits and impact on Maldon residents and businesses. The consultation response seeks to maximise the benefits and minimise any adverse impacts.

- (ii) **Impact on Equalities** – It is the responsibility of BRB to satisfy itself that requirements for equality impacts assessments have been undertaken.
- (iii) **Impact on Risk** – The Council risks not being able to influence the development proposals and the significant impacts it will have on its area and local communities if it does not respond to the consultation and engage in the process going forward.
- (iv) **Impact on Resources (financial)** – The response to the consultation has been accommodated within existing resources. Additional financial resources may be required to effectively engage in the process going forward.
- (v) **Impact on Resources (human)** – The response to the consultation has been accommodated by existing officers, albeit impacted by the current coronavirus pandemic. Additional officer resources will be required to effectively engage in the process going forward.
- (vi) **Impact on the Environment** – There are potential environmental benefits from positively engaging in the pre-application consultation with BRB but no significant direct environmental impacts from issuing a consultation response.
- (vii) **Impact on Strengthening Communities** – The Council’s consultation response will support this objective. The Bradwell B proposals could have a significant impact on communities within the District.

**Background Papers:**

BRB Stage 1 Consultation

The Planning Act 2008

Overarching National Policy Statement for Energy, July 2011 (EN-1)

National Policy Statement for Nuclear Power Generation, July 2011 (EN-6)

**Enquiries to:** Paul Dodson, Director of Strategy, Performance and Governance.