

# APPLICATION BY NNB GENERATION COMPANY (SZC) LIMITED FOR A DCO GRANTING CONSENT FOR THE SIZEWELL C PROJECT

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### **TOGETHER AGAINST SIZEWELL C (TASC) IP NO. 20026424**

#### **SUMMARY OBSERVATIONS & COMMENTS**

#### **RELATING TO ISH 6: COASTAL GEOMORPHOLOGY**

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Before running through the agenda items, TASC would like to express our disappointment that, despite having been specifically invited by the ExA to this ISH, neither Natural England nor the Marine Management Organisation were in attendance. In our opinion this has reduced the effectiveness of this hearing. We are concerned that this non-appearance is due to lack of financial and human resources resulting from government funding and might result in a less robust scrutiny of the Applicant's plans.

#### The assessment of the coastal impacts of the Proposed Development:

# (a) Whether the potential coastal impacts of the Proposed Development can be satisfactorily assessed from the information submitted by the Applicant?

The ISH confirmed TASC's opinion that it was premature to consider the full coastal impacts of the proposed development when the Applicant's full detailed plans are unknown. Their plans are constantly changing and so many revisions have been made. This makes it extremely difficult to assess consequences, including flood risk assessments and impacts on the Heritage Coast and the AONB. The Applicant now tells us that certain parts of the sea defences will be pared back by 15 metres and the HCDF toe moved back 5 metres. The constant changes do nothing to instill confidence in the Applicant's ability to protect their site or prevent harm to others. In fact, if previous assertions by the Applicant are incorrect/inadequate by their own admission, why should interested parties be expected to find their current or future claims credible?

#### (b) If not, what additional information would be required?

TASC found it incredible when Mr Dolphin, speaking on behalf of the Applicant, stated that [after 9 years since consultations/planning started] the modeling for the SCDF is "underway" but even then, will only be taken up to 2140. TASC say this assessment will not be adequate as it is not expected to cover the date up to which spent fuel may well still be stored on the SZC site or the date up to which structures and contaminants are still in situ i.e. it will not cover the full active lifetime of the plant. TASC believe that the Environment Agency stated at the ISH, the Applicant will 'extend the modelling for the full extent of the lifetime to the

end of decommissioning the site'. However, as we have stated above, modeling up to 2140 does not necessarily recognise the full active lifetime of the site i.e. up to the time that all structures and contaminants have been removed from the site. TASC find it totally unacceptable that the modelling for the SCDF will not be available until Deadline 7 and, even then, will only take us up to 2140. TASC consider the adequacy of and the impacts arising from the sea defences are so fundamental to the whole project, that the Applicant needs to prepare final definitive proposals urgently. There then should be a full independent expert assessment of the coastal geomorphology which is reported direct to PINS followed by a further ISH on Coastal Geomorphology.

- (c) Update on the additional details of the hard coastal sea defence feature (HCDF) design to be provided at Deadline 5.
  - As stated above, PINS should already have full detailed descriptions and plans of this major feature of the proposed development.
- (d) The assessment principles adopted by the Applicant

During the ISH, Mr Dolphin speaking on behalf of the Applicant spoke of recent work that had been undertaken that would inform the Applicant's proposals. These included drone footage, Sizewell A radar and pebble movement studies. In TASC's opinion, these are further examples of short-term assessments when the Applicant should be looking longer-term. The Suffolk coast has undergone massive changes in the last 300 years (as explained in Nick Scarr's Written Representation [REP2-393]) and there is no justification to assume that huge changes will not occur in the next 150 years when radioactive waste is still likely to be stored on site, especially when considering the impacts of climate-change.

The implications of the Proposed Development on the strategies for managing the coast as set out in the Shoreline Management Plan (SMP)?

- (a) The SMP policy boundary between MIN 12.2 and 13.1.
- (b) The MIN 13.1 policy to 'Hold the Line to 2105', and whether the more seaward position of the HCDF and the SCDF for Sizewell C relative to the Sizewell A and B sites would be in conflict with the SMP

Mr Patterson, on behalf of East Suffolk Council, confirmed that the location of the HCDF is in conflict with the SMP and acknowledged the conflict between building further into the SSSI in the West as opposed to building further East i.e. closer to the shoreline and impacting on more of the Heritage Coast. TASC consider that this conflict confirms what many IPs have been stating for years, the site is too small for the SZC proposal.

Speaking for the Applicant, Mr Dolphin attempted to provide reassurance that their plans for the SCDF would enable the 'Hold the line to 2105' SMP policy but TASC consider he failed in this endeavor, especially when he said the monitoring would pick up if the SCDF failed to perform as predicted, causing even more doubts and uncertainties about these proposals. TASC believe that the precautionary principle should apply, as the unpredictability surrounding the severity of impacts of climate change coupled with the uncertainties of introducing vast amounts of foreign materials onto the Heritage Coast in an AONB, should weigh heavily against these plans.

Potential impacts on coastal processes and geomorphology including those arising from the proposed HCDF and the soft coastal sea defence (SCDF) and the temporary and permanent beach landing facilities (BLFs) and associated activities:

(a) The potential for consequential adverse and/ or beneficial impacts on coastal processes arising from these features and activities.

TASC have similar concerns to those expressed by various parties at this hearing including: how far seaward the proposed HCDF would be built; the seaward position and risk to the toe being undermined by the sea; concerns that non-native materials may be used in the sea defences (we reference here the large geotextile sandbags used as part of the sea defences, which were installed at Thorpeness between 2008 and 2010 and which can now be found strewn up and down the Suffolk coastline); the scale of construction (including the impact on the AONB and Heritage Coast) and potential impacts on coastal processes in the event that the height of the sea defences needs to be raised in line with the adaptive design involving the toe being moved up to 17 metres towards a rising sea level; the apparent lack of assessment relating to the construction of the HCDF on soft (peat) ground. Surely, if the Applicant is planning to proceed on the basis that a vast soft coast sea defence feature will be lost to the sea, exposing the imposing concrete structure that is the HCDF, it must call into question the viability and vulnerability of the entire site and the SZC proposals.

- (b) The vulnerability of the coastline to erosion with particular regard to the role played by the Sizewell-Dunwich banks and the Coralline Crag outcrop.
  - TASC consider the way that the Applicant has dealt with the protective nature of the offshore banks is typical of the manner in which they have approached much of the whole project i.e. they change their position constantly - at a SZC site visit during the preexamination phase (around the time of the 3<sup>rd</sup> consultation) EDF's representative told TASC members that rising sea levels and increased storm surges predicted as a result of climate change, would not be a problem for the SZC site due to the comprehensive protection from damaging waves afforded by the offshore banks; by the time the DCO application was submitted, some instability in the northern part of the Dunwich-Sizewell Bank was recognized although modelling would be based on the Dunwich-Sizewell bank affording permanent wave protection. TASC consider that the Applicant has not fully recognized the reduction in protection that will be provided by the Dunwich-Sizewell Bank if it erodes and/or we experience rising sea levels and increased storm surges. Storm conditions normally impact the Sizewell C site from a north-easterly direction, not an easterly direction as is currently modelled. TASC believe that the Applicant needs to model a more realistic scenario with reducing protection from the Dunwich-Sizewell Bank and storms arriving from a north-easterly direction.
- (c) The spatial scale of the coastal processes assessment and whether the geomorphic context should be regarded as extending beyond Sizewell Bay? and,
- (d) Whether other locations, such as Southwold, Thorpeness and Aldeburgh, should be included in the baseline monitoring and mitigation proposals?
  - TASC agree with the Alde and Ore Association and Bill Parker, in that assessments and monitoring should be extended much further south, at least to Slaughden and north to Benacre Cliff. The assessments need to be carried out now so there is a baseline to compare with the results from monitoring. The movement of materials along the Suffolk coast means that there is a connectivity that needs to be incorporated in assessments of coastal processes. TASC were not reassured by Mr Dolphin's claims on behalf of the Applicant, that erosion at Benacre cliff will result in accretion further south-TASC understand that Benacre Cliff has eroded during the last 30 years without accretion at Sizewell.
- (e) The potential impacts upon the Minsmere frontage, and the role of the Minsmere sluice.

(f) For the permanent BLF, during the construction phase, the impacts of any dredging, and the barge berthing platform.

### (g) Cumulative impacts.

Once the Applicant finally arrives at a complete set of proposals for all matters affecting the coast and coastal processes, then TASC would like to see an overall assessment of the cumulative impacts of the SZC development, as well as an in-combination assessment of the cumulative impact with other major projects affecting east Suffolk.

The adequacy of the proposed climate change adaptation measures, and the resilience of the Proposed Development to ongoing and potential future coastal change during the Project's operational life and any decommissioning period

TASC repeat the point made earlier that the climate change impacts need to be assessed beyond decommissioning so as to include the maximum period during which spent fuel will still be stored on site. As expressed by Professor Blowers, the impacts of climate change are unpredictable in terms of magnitude and timing so any resilience built into the project can only be a guestimate at best-adoption of the precautionary principle should apply. The Applicant tries to reassure us that impacts from climate change will be slow and provide time for managed adaptation of the sea defences and the SSSI crossing. Yet, on the same day as this ISH there were floods in Germany which have been described as more extreme and happening quicker than anyone had predicted: "Dieter Gerten, professor of global change climatology and hydrology at the Potsdam Institute for Climate Impact Research, said. "We seem to be not just above normal but in domains we didn't expect in terms of spatial extent and the speed it developed." This follows on from extreme weather events all over the world that are beyond previous predictions. The following reports illustrate the unpredictability of the impacts from climate change: <a href="https://www.theguardian.com/environment/2021/jul/16/climate-scientists-shocked-by-scale-of-floods-in-germany">https://www.theguardian.com/environment/2021/jul/16/climate-scientists-shocked-by-scale-of-floods-in-germany</a>

https://twitter.com/i/status/1415996053086691332

and this one dealing specifically with nuclear installations:-

 $\underline{\text{https://nuclearconsult.com/wp/wp-content/uploads/2021/06/Climate-Change-UK-Nuclear-June-2021.pdf}$ 

Mitigation and controls including the Coastal Processes Monitoring and Mitigation Plan (CPMMP):

- (a) Draft DCO Requirement 2, and the Code of Construction Practice (CoCP), Part B, Section 12.
- (b) Draft DCO Requirement 7A and the CPMMP.
- (c) Draft DCO Requirement 12B.
- (d) Draft DCO Article 86.
- (e) Whether any additional requirements, including those relating to the Marine Technical Forum (MTF), the MAP, the BLF and funding arrangements would be necessary to address adverse physical changes to the coast?

TASC agree with the National Trust that the MTF membership should include large landowners such as the RSPB and National Trust, in addition to the local parish/town councils representing the relevant coastal communities.

## (f) Whether it would be necessary and reasonable to make provision in the draft DCO for the removal of the HCDF at decommissioning?

TASC agree with others that there should be a provision for the removal of the HCDF, together with all associated infrastructure. However, we just want to clarify that reference to decommissioning means after all the spent fuel and all contaminants have been removed from the site i.e. it is ready to be returned to a green-field site. The DCO or Deed of Obligation needs to provide the mechanism for funds to have been set aside for this purpose. TASC would also like to see included in the DCO/Deed of Obligation a duty so that the site's operator has an obligation to maintain the SCDF and to maintain monitoring, until the same date i.e. until the site it clear of all structures and contaminants.

During the ISH, TASC alongside other interested parties, raised concerns about the role of Cefas in the DCO process as it was felt that, being a statutory body, greater weight might be given by the ExA to their comments as compared with any other hired consultant. It was disclosed that Cefas are reported to be receiving 50% of their non-government income from EDF so it is a legitimate concern of interested parties-it is human nature not to bite the hand that feeds you. TASC was disappointed that there was not an open and frank discussion about Cefas's status within the examination.