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Environment Agency

Wendy McKay

Lead member of the Panel of Examining Inspectors
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Our Ref: 20026727

Your Ref: EN010012

Date: 12 October 2021

By email only

Dear Ms McKay

Planning Act 2008 – Section 88 and the Infrastructure Planning (Examination Procedure) Rules 2010 – Comments on Deadlines 8 and 9 Coastal Processes Submissions

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for the Sizewell C Project

For Deadline 10 (12th October) the Examining Authority (ExA) have requested comments on additional reports submitted by NNBGenCo (SzC) Ltd at Deadline 9 and Deadline 8, which include the following reports:

- [REP8-096] Deadline 8 Submission - 9.13 Sizewell C Coastal Defences Design Report
- [REP9-020] Deadline 9 Submission - 9.31 Storm Erosion Modelling of the Sizewell C Soft Coastal Defence Feature using XBeach-2D and XBeach-G - Revision 3.0

REP8-096 Coastal Defences Design Report revision 2.0
We note that this report refers to modelling of a 1 in 10,000 year joint probability event combining extreme surge, wave and tide conditions to assess impacts on beach level. We welcome this work, and support the principle of modelling conditions more extreme than those included in TR545 Ed.3, but note that the outputs will not be available for review until after the close of the DCO examination. We are therefore unable to comment on the full range of conditions used to determine the design of the coastal defences at this time.

REP9-020 Storm Erosion Modelling of the Sizewell C Soft Coastal Defence Feature
We are pleased with the inclusion in this edition of the RCP8.5 sea level rise projection extended to 2140, as well as modelling of the adaptive HCDF design, and we are in agreement with a number of the conclusions of the assessment. However it is our view that there are a small number of gaps in the assessment relating to what we consider to be reasonable worst case scenarios for impacts to coastal geomorphology. In particular:

- Modelling of a more severe storm scenario than the Beast from the East sequence, which is the most extreme storm modelled and which equates to a 1 in 107 year return period for cumulative wave energy.
- Further analysis of the risk posed by two or more severe events occurring sequentially and without a safe operating window in between for delivery of mitigation measures such as beach renourishment. We note for example that no modelling has

been provided which utilises the eroded beach output of a previous model run, and would therefore simulate sequential storms without mitigation.

This is in line with comments raised in both our reviews of previous editions of TR545 and our responses at Issue Specific Hearings 6 and 11, and reflects our view that the risk of both of these scenarios is expected to increase as the impacts of climate change become more severe. We understand from discussions with the applicant that work is ongoing to address some of these areas, which we welcome, however this will not be available until after the close of the DCO examination.

Yours sincerely

[redacted]

Simon Barlow
Project Manager
Sizewell C Nuclear New Build
Environment Agency

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