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Environment Agency

Wendy McKay

Our Ref: 20026727

Your Ref: EN010012

Date: 3 September 2021

Lead member of the Panel of Examining Inspectors
National Infrastructure Planning
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cc. michele.gregory@planninginspectorate.gov.uk

By email only

Dear Ms McKay

Planning Act 2008 – Section 88 and the Infrastructure Planning (Examination Procedure) Rules 2010 – Deadline 6: Deferral of Environment Agency response to Deadline 7

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

For Deadline 7 (3rd September) the Examining Authority (ExA) have requested comments on all documents submitted by NNBGenCo (SzC) Ltd at previous deadlines.

Sizewell Link Road Flood Risk Assessment Addendum [REP5-045]

The report builds upon the Sizewell Link Road Flood Risk Assessment Addendum [REP2-026] which we responded to in our Written Representation in June 2021 [REP2-132]. The updates provide some useful clarifications but do not significantly change our position overall, so please refer to our Written Representation for further detail.

- There remains an increase in flood risk at crossings SW1 and SW3, and the applicant has clarified that this is entirely within the site boundary. We do not consider the increase in flood risk to be significant at these locations.
- There also remains an increase in flood risk at crossing SW6, both within and outside of the site boundary, which we do not consider to be significant. We are aware that the applicant has undertaken further analysis of this crossing that may reduce the impact of offsite flood risk, but we have yet to receive this. We are also aware othat the applicant is engaging with the landowner regarding the increase in offsite flood depths.
- There remains an increase in flood risk at SW7 which affects the B1122 which is in the jurisdiction of Suffolk County Council. We are aware that the applicant has been engaging with Suffolk County Council on this matter due to the impact on highways, but otherwise we do not consider this to be significant.

SZC Co. Comments on Submissions from Earlier Deadlines (Deadlines 2-4) Appendix I: Sizewell C Main Development Site Flood Risk Assessment: Additional Hydrological Review [REP5-120]

In the EA Written Representation in June 2021, we were concerned there were aspects of fluvial hydrology that had not been satisfactorily assessed. Following engagement with the applicant and their consultants, the Additional Hydrological Review appendix was submitted at Deadline 6. We are satisfied that this resolves our concern and that the Main Development Site Flood Risk Assessment is therefore supported by a sound evidence base.

SZC Co. Comments on Submissions from Earlier Deadlines (Deadlines 2-4) Appendix J: Future Adaptation of the SSSI Crossing in the DCO Submission [REP5-120]

The proposal is to no longer raise the SSSI crossing from 7.3mAOD to 10.5mAOD by 2090, instead the revised proposal is to erect a vertical wave wall on top of the crossing to a height of 7.8mAOD by 2090 and to 8.6mAOD by 2140.

The document sets out the flood risk to the SSSI crossing, and demonstrates why the revised crossing design will ensure that the overtopping rates enable safe pedestrian and vehicular access across the SSSI crossing until 2140, based on the reasonably foreseeable climate change scenario. With the raised wall heights, the overtopping rates for the 1 in 1000 year event with reasonably foreseeable climate change events are 0.8 l/s/m in 2090 with a wave wall crest at 7.8mAOD, and a rate of 1 l/s/m in 2140 with a wave wall at 8.6mAOD. This will provide safe access for both pedestrians and vehicles. Without the raised wave wall the crossing would be unsafe to pedestrians in the 1 in 200 event in 2140, and in the 1 in 1000 year event in 2090.

The report states that after 2140 the activities on the site will be related to the final non-nuclear decommissioning requirements, which would be subject to separate and subsequent planning application, which would consider the continued need or otherwise for the SSSI crossing. Therefore the crossing has been designed so that it can be adapted should access be required after 2140. However the occupation of the site in this stage would be non-essential and therefore it is likely that the access to the site would be managed through operational systems that would prevent access from any workforce prior to and during a storm event.

The document also details how the 'External Hazards Safety Case' which supports the Nuclear Site Licence application to the Office of Nuclear Regulation has been developed. This demonstrates that the 'safe shutdown state' can be achieved 'with no reliance on 'external structures, equipment or personnel'. It states the following: *In the case of a 1:10,000-year design basis coastal flooding event under reasonably foreseeable climate change, this is achieved through on-site protection measures such as the site elevation, sea defences and surface water drainage system. The nuclear plant would be autonomous and therefore would operate or be placed in a safe shutdown state for a prolonged period in the event of a severe environmental event. As such the external hazards safety case makes no claim on the proposed SSSI crossing to be capable of being adapted (e.g. raised) in future to reduce overtopping rates in response to actual climate change.*

The report does not consider the flood risk to the SSSI crossing in the credible maximum climate change scenarios. The report does not make clear whether the SSSI crossing is required to provide safe access in the credible maximum flood events up to 2140, and if so whether safe access would be able to be provided based on the revised wall heights. This may need to be clarified for emergency planning purposes.

Yours sincerely

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Simon Barlow
Project Manager
Sizewell C Nuclear New Build
Environment Agency

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