



100892421  
Revision 01  
EA-SZC-21564N

## NOT PROTECTIVELY MARKED

Environment Agency  
c/o The Joint Programme Office  
New Reactor Programme  
4S.2 Redgrave Court  
Merton Road Bootle  
L20 7HS

**File Ref:** 100892421  
**Unique Number:** EA-SZC-21564N  
**Your Ref.:** EPR/CB3997AD/A001

1<sup>ST</sup> June 2021

**For the attention of** [REDACTED], **Senior Permitting Officer**

Dear [REDACTED],

### FOR INFORMATION: NNB GENERATION COMPANY (SZC) LIMITED APPLICATION FOR WATER DISCHARGE ACTIVITY OPERATIONAL ENVIRONMENTAL PERMIT FOR SIZEWELL C – ENVIRONMENT AGENCY SCHEDULE 5 NOTICE

Further to your Schedule 5 Notices requesting further information dated the 2<sup>nd</sup> of October 2020, 18<sup>th</sup> of January 2020, 15<sup>th</sup> of March and 23<sup>rd</sup> of April 2021 (Application Reference: EPR/CB3997AD/A001), please find below the information requested for the Sizewell C Water Discharge Activity (WDA) Permit Application.

Further to the items below that refer to report SPP111 Version 2, this report has been updated following comments from the Environment Agency regarding the treatment of bulk (overnight) samples and the removal of invalid data. SPP111 (Version 2) details these changes and provides a comparison with both the previous version of SPP111 (Version 1) and TR339 (the full technical report describing the impingement data). The removal of additional bulk samples in Version 2 of SPP111 has a very minor influence on the impingement predictions for most species. The eight species contributing to the top 95% of impingement saw a mean annual increase of 0.7% compared to the results in SPP111 Version 1.

TR520 Version 3 (Water quality effects of the fish recovery and return system) uses data from SPP111 Version 1 to determine moribund biomass from the Fish Recovery Return system and this assessment is used to support the Habitat Regulation Assessment and Water Framework Directive assessments included in the WDA permit application. While SPP111 has been updated since the last version of TR520, the difference observed is minor and considered immaterial to TR520 and the negligible to minor effects described in the assessments. Therefore, we do not propose to update TR520 at this time.

No.	EA Information Request	SZC Response
Sch 5 no.1. Item 1a		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.

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Sch 5 no.1. Item 1b		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.1. Item 1c		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.1. Item 2a		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.1. Item 2b		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.1. Item 2c		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.2. Item 3		The Information for the HRA and the WFD assessment to support the WDA permit application have previously been provided as part of this request. Whilst the overall findings of these assessments remain the same, updated copies have been provided to align with adjustments made to TR520 version 3.
Sch 5 no.3. Item 1	Please provide an interface area estimated for SZC based on the same, or equivalent approach to that used for SZB, for example using the Telemac model or ANSYS models or alternatively, for the SZB analysis to be repeated but with $\Delta y$ drawn from the point at which the inward velocity exceeds $0.3 \text{ m s}^{-1}$ .	An updated revision of report SPP099 (Version 5) has been provided to address this request. A new section (Section 4.3 - Alternative approaches to modelling the SZB intercept area) has been added to this version of the report, and discusses the different approaches, alternatives and reasons for the differing approach between the two different head designs at SZB and SZC.  A copy of the report SPP099 (Version 5) – ' <i>Predicted performance of SZC Low Velocity Side Entry intakes</i> ' has been uploaded to the EA ShareFile.
Sch 5 no.3. Item 2		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.3. Item 3a		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.

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Sch 5 no.3. Item 3b		Whilst a response to this request has been made previously, the report SPP111 Version 2 and 'raw data' provided with it supersedes the previous submission.
Sch 5 no.4. Item 3	Please clarify the disagreement between SPP111 and 'TR339 Data comp WB Cefas 2014-2017.xlsx', stating whether the number of pumps or number of screens has been used, and if the later providing the number of pumps in operation for each survey.	The information to address this request is provided in Section 2.2.2 (Pump corrections between 2014-2017) of report SPP111 (Version 2).  A copy of the report SPP111 (Version 2) - <i>Sizewell C impingement predictions corrected for Sizewell B raising factors and cooling water flow rates</i> has been uploaded to the EA Sharefile.
Sch 5 no.4. Item 4	<p>Comparison of frequency of overflowing bulk samples between Cefas and Pisces surveys.</p> <p>There are 128 Pisces surveys and 77 Cefas surveys, 205 in total.</p> <ul style="list-style-type: none"> <li>- of the Pisces surveys 27 are reported to have overflowing bulk samples (SPP111), an overflow rate of 21% (27/128).</li> <li>- of the Cefas surveys 55 are reported to have overflowing bulk samples (TR339), an overflow rate of 71% (55/77).</li> </ul> <p>Please explain how the bulk sample overflow rate varies so markedly between the two sets of surveys (Pisces to Cefas), given that both contractors employed substantially the same survey methodology?</p>	<p>The information to address this request is provided in Section 2.1 (Overflowed bulk samples) of report SPP111 (Version 2).</p> <p>A copy of the report SPP111 (Version 2) - <i>Sizewell C impingement predictions corrected for Sizewell B raising factors and cooling water flow rates</i> has been uploaded to the EA Sharefile.</p>

Currently, Items 10a and 13c from Schedule 5 Request No. 2 and item 2 from Schedule 5 Request No. 4 are still outstanding. They will be sent as soon as they become available.



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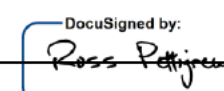
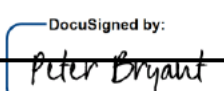
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Yours sincerely,



SZC Conventional Environment Lead  
NNB Generation Company (SZC) Limited

Copy: RIO, JPO, 

NNB GenCo Review	Name	Signature
Peer Check	Ross Pettigrew	 FCE24F4AF9FA4FD...
Independent Verification	N/A	
Approval	Peter Bryant	 264697DF8BF748E...

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Appendix 1

Enclosures for the Sizewell C Water Discharge Activity Permit Application Schedule 5 Information Request

	Document Title	Document Version Number	EDRMS Reference Number	EDRMS Version Number	Protective marking	Transmitted via
1.	SPP099 Predicted performance of SZC LVSE intakes	05	100810223	002	NOT PROTECTIVELY MARKED	Teamcenter
2.	SPP111 Sizewell C impingement predictions corrected for Sizewell B raising factors and cooling water flow rates	02	100875984	002	NOT PROTECTIVELY MARKED	Teamcenter
3.	SZC WDA Appendix C - Information for the Habitats Regulations Assessment	-	100891432	001	NOT PROTECTIVELY MARKED	Teamcenter
4.	SZC WDA Appendix D - WFD Compliance Assessment.	13	100891433	001	NOT PROTECTIVELY MARKED	Teamcenter
5.	Raw Data for SPP111.v2	-	100894160	001	NOT PROTECTIVELY MARKED	Teamcenter