

100856837  
Revision 01  
EA-SZC-21538N

**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:** 100856837  
**Unique Number:** EA-SZC-21538N  
**Your Ref.:** EPR/CB3997AD/A001

17 February 2021

***For the attention of [REDACTED], NNB Permitting Coordinator***

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 Notification of Request for More Information dated the 18<sup>th</sup> January 2021 (Application Reference: EPR/CB3997AD/A001) please find below the information requested for the Sizewell C Water Discharge Activity Permit Application. Please note that we are still awaiting data for Questions 1(a) to 1(c), 2(c) to 2(d), 10(a) to 10(f) and 13(c).

No.	EA Information Request	SZC Response
2(a)	Please confirm mortality rates of fish within the fish recovery and return (FRR) system. This information is required as part of the technical assessment of waste stream H, as mortality rate(s) will affect moribund biomass (and may alter water quality impacts).	Mortality rates of fish within the FRR are provided in Section 4.7 of TR406 Version 7 (11/11/2020) and Section 2.0 of TR520 Version 1 (29/10/2020).  TR406 Version 7 (11/11/2020) and TR520 Version 1 (29/10/2020) are provided as part of the Schedule 5 request.
2(b)	Please provide a copy of the updated version (understood to be version 7) of technical report TR406 (version 7): Impingement predictions based upon specific cooling water system design.	TR406 Version 7 (11/11/2020) is provided as part of the Schedule 5 request.

100856837  
Revision 01  
EA-SZC-21538N

**NOT PROTECTIVELY MARKED**

No.	EA Information Request	SZC Response
2(e)	Please provide an explanation to clarify the travel time through the FRR system and provide a copy/copies of any report(s) that confirm this information, along with the relevant section/paragraph and/or page number(s).	<p>Transit time through the cooling water and fish recovery and return (FRR) system is 53-89 minutes (Section 16.1.22 and Table 24 of Hinkley Point C Cooling Water Infrastructure Fish Protection Measures: Report To Discharge DCO requirement CW1 and Marine Licence Condition 5.2.31). For SZC, the transit time through the FRR system particularly (HCB and HCF) will be shorter.</p> <p>Hinkley Point C Cooling Water Infrastructure Fish Protection Measures: Report To Discharge DCO requirement CW1 and Marine Licence Condition 5.2.31 is provided.</p>
3	Please provide an updated version of your Appendix C report (Information for the Habitats Regulations Assessment – 100232391) to take account of the outcomes of the latest version of TR339 (version 3).	<p>The HRA has been updated with the results presented in TR520 Version 1 (29/10/2020). Whilst not identified for the Water Framework Directive (WFD) this comment is relevant to it and therefore the WFD has also been updated in line with TR520. The latest version of TR520 uses both the updated TR406 Version 7 (11/11/20) and TR339 Version 3 (28/10/2020) to inform the predicted impingement values fed into the waste stream H assessment presented in the HRA and WFD appendices.</p> <p>TR520 Version 1 (29/10/2020), TR406 Version 7 (11/11/20), TR339 Version 3 (28/10/2020), Water Discharge Activity Permit Application Appendix C – Information for the Habitats Regulations Assessment and Appendix D – WFD Compliance Assessment are provided as part of the Schedule 5 request.</p>
4(a)	Please provide copies of the latest versions of the following technical reports: TR381: Acoustic surveying of pelagic fish off Sizewell (2016).	TR381 Version 2 (09/07/2019) is provided as part of the Schedule 5 request.

100856837  
Revision 01  
EA-SZC-21538N

**NOT PROTECTIVELY MARKED**

No.	EA Information Request	SZC Response
4(b)	Please provide copies of the latest versions of the following technical reports: TR359: Sizewell- Pelagic Fish Acoustic Survey Results (2015).	TR359 Version 2 (22/02/2016) is provided as part of the Schedule 5 request.
5	Please provide a copy of the latest version of the following report, as referenced (as ref 8.2) within Appendix C report (Information for the Habitats Regulations Assessment – 100232391, sections 8.4.9 and 9.4.1): Jacobs. 2008. Experimental Study of Juvenile Fish Avoidance of Thermal Increments. Report to RWE Npower, Job No. B0822100. Jacobs Engineering, Southampton.	Jacobs Report Version 2 (30/05/2008) is provided as part of the Schedule 5 request.
6	Please provide a copy of the latest version of the following report, as referenced within Appendix C report (as ref 8.1: Information for the Habitats Regulations Assessment – 100232391, sections 8.4.9 and 9.4.1), and within Appendix D WFD compliance assessment (as ref 1.6, within tables 2.3 and 5.12, and sections 5.5.53 and 5.5.55): TR483: Synthesis of evidence for SZC Water Framework Directive (WFD) and Habitats Regulations Assessment (HRA) marine assessments.	TR483 Version 6 (15/12/2020) is provided as part of the Schedule 5 request.
7	Please provide a copy of the latest version of the following report, as referenced (as ref 9.12) within Appendix C report (Information for the Habitats Regulations Assessment – 100232391, section 9.4.21). TR303: Sizewell Chemical Plume Modelling: TRO, CBP's, Hydrazine, DO and Ammonia.	TR303 Version 8 (24/05/2019) is provided as part of the Schedule 5 request.
8(a)	The following reference is made within [86] TR301 (Sizewell Thermal Plume Modelling Stage 2 Review), page 27, paragraph 1:  "The results of harmonic analysis of the SZB intake temperatures over 2007 – 2009 are presented in	The reference made within TR301 regarding the harmonic analysis was included by error and the whole paragraph should be deleted. As the reader will note, Appendix A does not present the results of a harmonic analysis.

100856837  
Revision 01  
EA-SZC-21538N

## NOT PROTECTIVELY MARKED

No.	EA Information Request	SZC Response
	<p>Appendix A along with analysis of August 2009 data".</p> <p>We require clarification regarding this reference, and we therefore require the following as part of the technical assessment of waste stream A. Please provide a description of the harmonic analysis performed.</p>	
8(b)	Please provide an explanation of how the 98th percentile observed temperature was derived from the harmonic analysis performed.	<p>The observed 98th percentile temperature was not derived from harmonic analysis. A full description of the derivation of the 98th percentile absolute temperatures is provided in SPP098.</p> <p>SPP098 Version 1 (24/04/2020) has been provided as part of the Schedule 5 request.</p>
9(a)	Please provide a copy of the latest version of the following report: SPP103: Consideration of potential effects on selected fish stocks at Sizewell.	SPP103: Consideration of potential effects on selected fish stocks at Sizewell and the references cited within have been submitted as part of the DCO application. We understand that the abstraction impacts are not being assessed as part of the WDA permit application.
9(b)	Please provide a copy of the latest version of the following report: TR431: Sizewell SPA/SAC features and associated marine prey species.	TR431 Sizewell SPA/SAC features and associated marine prey species has been submitted as part of the DCO application. We understand that the abstraction impacts are not being assessed as part of the WDA permit application.
9(c)	Please provide a copy of the latest version of the following report: TR345: Sizewell Characterisation Report – Fish.	<p>TR345 Sizewell Characterisation Report – Fish has been submitted as part of the DCO application. We understand that the abstraction impacts are not being assessed as part of the WDA permit application.</p> <p>TR 345 Revision 4 has been provided as part of the Schedule 5 request.</p>

100856837  
Revision 01  
EA-SZC-21538N

## NOT PROTECTIVELY MARKED

No.	EA Information Request	SZC Response
11	Please provide a copy of the latest version of the following report: SPP101 (current version is understood to be revision 3, please provide the latest revision: Implications of tidal elevation and temperature on smelt, <i>Osmerus eperlanus</i> ).	SPP101 Version 3 (28/10/2020) has been provided as part of the Schedule 5 request.
12	Please provide a copy of the latest version of the following report: TR498: Sizewell C - suspended sediment concentration at the proposed cooling water intake locations.	TR498 Version 3 (28/01/2021) has been provided as part of the Schedule 5 request.
13(a)	Please provide a copy of the latest version of each of the following reports: TR520 (understood to be Revision 1): Sizewell C Influence of the fish recovery and return system on water quality and ecological receptors.	TR520 Version 1 (29/10/2020) has been provided as part of the Schedule 5 request.
13(b)	Please provide a copy of the latest version of each of the following reports: TR087: Sizewell - Coastal Survey - Bathymetry and Backscatter Survey Report.	TR087 Edition 3 Version 4 (04/06/2014) has been provided as part of the Schedule 5 request.

Should you have any questions or comments we will be happy to provide further information on this as part of our ongoing Level 4 interactions.

Yours sincerely,

[Redacted]  
SZC Conventional Environment Lead  
NNB Generation Company (SZC) Limited

Copy: RIO, JPO, [Redacted]

NNB GenCo Review	Name	Signature
Peer Check	Ross Pettigrew	DocuSigned by: Ross Pettigrew FCE24F4AF9FA4FD...
Independent Verification	N/A	
Approval	Peter Bryant	DocuSigned by: Peter Bryant 96487DBDF0F547A...

100856837  
 Revision 01  
 EA-SZC-21538N

## NOT PROTECTIVELY MARKED

### Enclosures:

	Document Title	Version Number	EDRMS Reference Number	Protective marking	Transmitted via
1.	TR406: Impingement predictions based upon specific cooling water system design	7	100856842, rev 001	NOT PROTECTIVELY MARKED	Teamcenter
2.	TR520: Sizewell C Influence of the fish recovery and return system on water quality and ecological receptors	1			
3.	Hinkley Point C Cooling Water Infrastructure Fish Protection Measures: Report To Discharge DCO requirement CW1 and Marine Licence Condition 5.2.31 is provided.	1			
4.	TR339: Sizewell Comprehensive Impingement Monitoring Programme 2009 - 2017	3			
5.	Appendix C – Information for the Habitats Regulations Assessment	2			
6.	Water Discharge Activity Permit Application Appendix D – WFD Compliance Assessment	1			
7.	TR381: Acoustic surveying of pelagic fish off Sizewell (2016).	2			

100856837  
Revision 01  
EA-SZC-21538N

## NOT PROTECTIVELY MARKED

8.	TR359: Sizewell- Pelagic Fish Acoustic Survey Results (2015).	2			
9.	Jacobs. 2008. Experimental Study of Juvenile Fish Avoidance of Thermal Increments. Report to RWE Npower, Job No. B0822100. Jacobs Engineering, Southampton.	2			
10.	TR483: Synthesis of evidence for SZC Water Framework Directive (WFD) and Habitats Regulations Assessment (HRA) marine assessments.	6			
11.	TR303: Sizewell Chemical Plume Modelling: TRO, CBP's, Hydrazine, DO and Ammonia.	8			
12.	SPP098 Cefas BEEMS Scientific Position Paper SPP098 Derivation of the Thermal 98th Percentile	1			
13.	TR345: Sizewell Characterisation Report – Fish.	4			
14.	SPP101: Implications of tidal elevation and temperature on smelt, Osmerus eperlanus, impingement at Sizewell	3			
15.	TR498: Sizewell C - suspended sediment concentration at the proposed cooling water intake locations	3			
16.	TR087: Sizewell - Coastal Survey - Bathymetry and	4			



100856837  
Revision 01  
EA-SZC-21538N

**NOT PROTECTIVELY MARKED**

	Backscatter Survey Report				
--	------------------------------	--	--	--	--