

Notice of request for more information

The Environmental Permitting (England & Wales) Regulations 2016

NNB Generation Company (SZC) Ltd (Companies House reference: [09284825](#))

90 Whitfield Street
London
England
W1T 4EZ

Application reference: EPR/CB3997AD/A001 (Sizewell C water discharge activities permit application)

The Environment Agency, in exercise of its powers under paragraph 4 of Part 1 of Schedule 5 of the above Regulations, requires you to provide the information detailed in the attached schedule. The information is required in order to determine your application for a permit duly made on 26/06/2020.

Send the information to the e-mail addresses (and upload it to the EA Sharefile site) specified below by 17/02/2021. If we do not receive this information by the date specified then we may treat your application as having been withdrawn or it may be refused. If this happens you may lose your application fee.

E-mail addresses (please note there is a 10MB file size limit for e-mails):

- 1.) [REDACTED]
- 2.) PSC-waterquality@environment-agency.gov.uk

EA Sharefile site for uploading application and supporting information documents for application EPR/CD3997AD:

- [https://ea.sharefile.com/\[REDACTED\]](https://ea.sharefile.com/[REDACTED])
A specific folder titled 'Sch 5 [No.2] response' has been created for you to upload the additional information response documents/files etc required by this notice.

Postal address (not currently in use due to COVID-19 situation):
Environment Agency, National Permitting Service (Water Quality), Richard Fairclough House,
Knutsford Road, Warrington, Cheshire, WA4 1HT

Name	Date
[REDACTED]	18 January 2021

Authorised on behalf of the Environment Agency

Notes

These notes do not form part of this notice.

Please note that we charge £1,200 where we have to send a third or subsequent information notice in relation to the same issue. We consider this to be the first notice on the issues covered in this notice.

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Please note that we charge £1,200 where we have to send a third or subsequent information notice in relation to the same issue. We consider this to be the third notice on the issues covered in this notice. We will contact you shortly to request this payment. You must pay this extra charge before your application is determined.

The notes in italics that appear after information requests in the attached schedule do not form part of the notice. The notes are intended to assist you in providing a full response.

Schedule

Information requests 1 (a) to 1 (c)

- (a) Please provide a copy of the latest version of technical report:
- **TR316:** Evaluation of chlorination dosing options for Sizewell C

This document has not formally been submitted as part of the WDA application, and is required as part of the formal review and technical assessment of waste streams A and H.

TR316 is referenced within the WDA's Appendix C report (information for the HRA) as reference 2.1, and within Appendix D (WDA compliance assessment report) as reference 1.2.

- (b) Please provide written confirmation that chlorination will only occur after the two pumping station drum screens, AND that the FRR system/waste stream H will not be affected by chlorination.
- (c) As a result of the proposed validation of strategy for control of bio-fouling (as discussed under section 7.3.4, page 271 of Appendix A), please confirm if there is any potential for the proposed chlorination dosing point to be relocated upstream of the drum screens?

This information is required, because if chlorination was to occur at the cooling water intake heads, or impacts on the FRR occurred as a result of an alternative dosing location being used, mortality of entrapped biota will increase, affecting biomass calculations and consequently the water quality impacts.

Information requests 2 (a) to 2 (e)

- (a) Please confirm mortality rates of fish within the 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).
- (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.
- We understand the current version of TR406 is version 6 (dated 27/02/2020), but we are aware that this version is in the process of being updated (to account for the boot strapping method and LVSE factor updates). TR406 has previously been reviewed as part of the DCO submission by our technical staff, and has been identified as including supporting information/evidence that is pertinent to the determination of the WDA permit application.
- (c) Please confirm if there are any implications for the mortality rates used as a result of the boot strapping method and LVSE factors.
- (d) Please provide an explanation to clarify how mortality rates within TR406 were adjusted to account for the potential for discharged fish being entrapped at SZB.
- (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).

Information request 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). This is required for the technical assessment of waste stream H, as the information within this HRA report must be consistent with that within any supporting/referenced documentation.

For example, the HRA contains values for average daily discharge of biomass, and makes conclusions about the likelihood of adverse effect based upon those values. However, we are aware that the values within the HRA report are not those predicted by the latest modelling outcomes (following an initial review of version 2 of TR339, a copy of which was provided via e-mail on the 02/07/2020 outside of the formal WDA permit submission).

Information requests 4 (a) and 4 (b)

Please provide copies of the latest versions of the following technical reports:

- (a) TR381:** Acoustic surveying of pelagic fish off Sizewell (2016).
- (b) TR359:** Sizewell- Pelagic Fish Acoustic Survey Results (2015).

The acoustic data and survey reports from TR381 and TR359 are summarised rather than presented in full within Appendix C report (with TR381 as ref 7.2 within Information for the Habitats Regulations Assessment – 100232391, sections 6.5.12 and 7.3.8), and Appendix D WFD compliance assessment (with TR381 as ref 1.5, within sections 2.4.8 and 5.6.4).

A formal review of these two reports and their evidence is required as part of the technical assessment of waste stream H (as this report is referenced but no evidence is presented within the Appendix C HRA or Appendix D WFD reports). For example to assess locations of fish (for example, Sprat) in relation to thermal plumes during these surveys.

Information 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.

A formal review of this report and its evidence is required as part of the technical assessment of waste stream A (as this report is referenced but no evidence is presented within the Appendix C report).

Information 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 Version 2.

A formal review of this report and its evidence is required as part of the technical assessment of waste stream A (as this report is referenced but no evidence is presented within the Appendix C HRA or Appendix D WFD reports).

Information 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 (assumed to be edition 4, please provide the most up to date version):** Sizewell Chemical Plume Modelling: TRO, CBP's, Hydrazine, DO and Ammonia.

A formal review of this report and its evidence is required as part of the technical assessment of waste stream A (as this report is referenced but no evidence is presented within the Appendix C HRA report).

Information requests 8 (a) and 8 (b)

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 Appendix A along with analysis of August 2009 data”.

We require clarification regarding this reference, and we therefore require the following as part of the technical assessment of waste stream A:

- (a) Please provide a description of the harmonic analysis performed.
- (b) Please provide an explanation of how the 98%ile observed temperature was derived from the harmonic analysis performed.

This information is required to enable us to clearly understand the method by which the 98%ile absolute temperatures have been derived from 98%ile observed temperature and mean uplift, and specifically how the 98%ile observed temperature has been determined.

Information requests 9 (a) to 9 (c)

- (a) Please provide a copy of the latest version of the following report:
 - **SPP103:** Consideration of potential effects on selected fish stocks at Sizewell

A formal review of this report and its evidence is required as part of the Habitats Regulations Assessment (HRA).

Additionally, copies of the following two reports (specified in 13 (b) and (c) below) are also required, as they have not been formally submitted as part of the WDA application (and will be required to assist the HRA). These two reports are either referenced solely within SPP103 (and so have not been formal submitted as part of the WDA application), and additionally within the WDA's Appendix C report (Information for the Habitats Regulations Assessment).

- (b) Please provide a copy of the latest version of the following report:
 - **TR431:** Sizewell SPA/SAC features and associated marine prey species.

This report is referenced within SPP103 section 2.12 (page 21), and the WDA's Appendix C HRA report (as reference 6.26) sections 6.3.14, 6.3.30, 6.3.42, 6.3.48, 6.3.60, 6.3.69, 6.3.80 and 6.3.95.

- (c) Please provide a copy of the latest version of the following report:
 - **TR345:** Sizewell Characterisation Report – Fish

This report is referenced within SPP103 section 2.12 (page 21), and the WDA's Appendix C HRA report (as reference 6.37) sections 6.3.30, 6.3.80, 6.3.95 and 6.5.2.

A formal review of these reports and their evidence is required as part of the technical assessment of HRA and WFD requirements.

Information requests 10 (a) to 10 (f)

Please provide the following information as specified via points **(a)** to **(f)** below. Please provide your responses for requests **(a)** to **(e)** in the format specified within points **1.)** and **2.)**. The information requested via **(f)** below is standalone, and is requested in a specific format (please refer to the supporting text for point **(f)** below for confirmation).

The information requests **(a)** to **(f)** are to allow comparisons to be made between the plume extent (thermal and chemical) and ecological data sets, and for in-combination impact of plumes of different types to be considered.

The additional information requested below is mainly for GIS files, and the relevant underlying raw data, as we consider it will be simpler, quicker and more efficient for us, given these data sets, to undertake the analysis required to make, as yet undefined, comparisons for ourselves, rather than require you (the applicant) to make and report on each comparison, as and when these are defined. This should reduce the potential for additional, future Schedule 5 requests for additional information.

We therefore require, where relevant, for each of the following information requests in points **(a)** to **(e)** below to be provided in **both**:

- 1.)** the GIS file format used in producing the relevant figure or plate within your supporting information documents, and
- 2.)** as raw data from which the GIS layer was produced.

We require both formats to be provided, as we anticipate to use the GIS files directly within the software available to us, but if this is not possible, to derive our own GIS layers from the raw data provided.

Therefore, from your Appendix C report (Information for the Habitats Regulations Assessment – 100232391) and Appendix D report (WFD compliance assessment), please provide your responses to **10 (a)** to **10 (e)** in both formats **1.)** and **2.)**:

- (a)** Flight lines, areas of foraging activity, locations of peak foraging and loafing, and vantage locations as shown in plates 6.1 to 6.4, and 6.6 to 6.13 inclusive.
- (b)** Thermal and chemical plumes as shown in plates 8.1, and 8.3 to 8.6.
- (c)** Breeding colony locations and predicted foraging ranges as in plates 8.1, and 8.3 to 8.8.
- (d)** The vantage locations as provided in figure 6.1
- (e)** The thermal plumes as shown in figures 5.3 to 5.10, and chemical plumes as shown in figures 5.11 to 5.13.
- (f)** From your Appendix C report (Information for the Habitats Regulations Assessment – 100232391), please confirm and provide the 'mean foraging range', and the 'mean maximum foraging range' figures for each species as given in the body of text. Please provide this information in an Excel spreadsheet format.

Information request 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, *Osmerus eperlanus*, impingement at Sizewell.

A formal review of this report and its evidence is required as part of the technical assessment of water quality impacts and WFD requirements (i.e. consideration of thermal related impacts).

Information 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

This technical report is referenced within TR311 (Edition 4) Sizewell Coastal Geomorphology and Hydrodynamics: Synthesis for Environmental Impact Assessment (MSR1/4) 2020 via section 2.3.5 (page 35), and table 3 (page 37). TR311 was provided as part of the WDA permit application submission document as reference 77 (within Appendix E: Supporting Information), and TR431 is therefore required to aid our assessments of waste streams A and H.

Information request 13 (a) to 13 (c)

Please provide a copy of the latest version of each of the following reports:

- (a) **TR520 (understood to be Revision 1):** Sizewell C Influence of the fish recovery and return system on water quality and ecological receptors
- (b) **TR087:** Sizewell - Coastal Survey - Bathymetry and Backscatter Survey Report
- (c) **TR511:** Particle Tracking Study of Impinged Sprat from the Proposed Sizewell C Fish Recovery and Return

We are aware that a copy of TR520 (a new report) was recently shared with our senior planning advisor, and has been identified as including supporting information/evidence that is pertinent to the determination of the WDA permit application in terms of the assessment of waste stream H. Based on the references within TR520, we also require copies of TR087 and TR511 to aid our review of TR520 as part of the assessment of waste stream H.

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