

## About this consultation

### IP16 4UR, NNB Generation Company (SZC) Ltd: environmental permit consultation

**The aim of this consultation is to ask whether you have any comments relevant to the permit application**

We want to make the best decision when permitting. Listening to the views of others helps us to take account of concerns, or local environmental factors, that we may not be otherwise aware of.

We are seeking comments on the water discharge activities (WDA) environmental permit application for NNB Generation Company (SZC) Ltd. Please use the reference number below when making comments on this application.

- Application reference: EPR/CB3997AD/A001
- Regulated facility type: Water discharge activities
- Regulated facility location: Sizewell C Power Station, Sizewell, IP16 4UR

#### Non-Technical Summary

Refer to the non-technical summary which explains this application, in non-technical language.

This should include a summary of the regulated facility, the key technical standards and control measures arising from the risk assessment. The non-technical summary can be located within the following supporting information document submitted by the applicant, a copy of which is provided for review on the Citizen Space page for this WDA permit application:

- SZC WDA EP WDA application support document and Appendix A - Site Maps, Plans and Drawings (ref: 100232385) within pages 1 to 5 (Pages 2 to 6 of the PDF document)

#### Additional details provided to aid your review of the application and supporting information documents

For information, details regarding the structure of the applicant's water discharge activities (WDA) permit application forms and support documents is provided within the following section of the application:

- SZC WDA EP WDA application support document and Appendix A - Site Maps, Plans and Drawings (ref: 100232385), within section 7.1 and table 1.7.1: Content of the application technical reports and supporting data on pages 21 to 22 (pages 22 to 23 of the PDF document)

We have included details within table 1 below (on pages 4 to 6) to aid the review of the 73 application documents and supporting information documents submitted to us by the applicant. Table 1 can be used to locate those application documents which are of interest to the reader/reviewer, and it provides an indication of each document's length by specifying the number of pages within each application document (this may indicate how much time resource will be required to review each document if it is of interest).

The Environment Agency WDA permit application forms (Part A, Part F, Part B2 and Parts B6) are provided within Appendix F of the application. As you will see from table 1, we have amended the order of the submitted WDA permit application documents on our Citizen Space page to provide copies of the Environment Agency WDA permit application forms after the main application support document (listed as SZC WDA EP WDA application support document and Appendix A - Site Maps, Plans and Drawings (ref: 100232385)).

A brief breakdown of the order of the WDA permit application documents and supporting information documents submitted by the applicant that we have hosted on the Citizen Space page for this application is provided below:

- **Sizewell C WDA permit application cover page**
- **Main WDA support application document and Appendix A** (SZC WDA EP WDA application support document and Appendix A - Site Maps, Plans and Drawings (ref: 100232385): This application document includes the following numbered sections and Appendix A (which includes site maps, plans and drawings of the site location and discharge points):
  - 1.) Introduction
  - 2.) Source of discharges from proposed activities
  - 3.) Pollution control measures and application of BAT
  - 4.) Emissions and monitoring
  - 5.) Environmental Risk Assessment
  - 6.) Managing the Water Discharge Activity
  - 7.) Forward Action Plan (FAP)
  - 8.) References and Acronyms
- **Appendix F documents:** Environment Agency permit application forms (Part A, Part F, Part B2 and Part B6)
- **Appendix B document:** H1 screening assessment
- **Appendix C documents:** Habitats Regulations Assessment and supporting figures
- **Appendix D documents:** Water Framework Directive Assessment and supporting figures
- **Appendix E documents:** Supporting information documents referenced throughout the WDA permit application documents. The documents referenced in table 1 for Appendix E includes same the reference number format [XX] utilised throughout the applicant's WDA application documents.

### What the response will be used for

We will take your consultation responses into consideration as part of our determination of the permit. If we decide to grant the permit we will explain how we made our decision and how we have addressed the concerns that were raised.

We will only issue a permit if we believe that harm to the environment, people and wildlife will be minimised and that the operator has the ability to meet the conditions of the permit. Providing a business can prove that the proposed activities meets all the legal requirements, including environmental, technological and health requirements, then we are legally obliged to issue a permit, even if some people do not approve of the decision.

### How to Respond

**In response to the COVID-19 outbreak we are following Government advice to manage the risks of Coronavirus to our organisation, to protect the health, safety and wellbeing of our staff and sustain our critical operations. In line with government advice, our office is now closed and our staff are working remotely, therefore we are unable to receive responses by post.**

If you would like to comment online, please use the online consultation tool in Citizen Space.

If you'd prefer to submit your response by email, email [psc-waterquality@environment-agency.gov.uk](mailto:psc-waterquality@environment-agency.gov.uk)

### How we will use your information

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We will look to make comments received publicly available at our Environment Agency public facing office.

All comments which are made publicly available will exclude email addresses and telephone numbers. Any comments where confidentiality has been claimed will not appear on the public register.

In accordance with the Freedom of Information Act 2000, we may be required to publish your response to this consultation, but will not include any personal information. If you have requested your response to be kept confidential, we may still be required to provide a summary of it.

### **Consultation Principles**

We are running this consultation in accordance with the criteria set out in the government's [Consultation Principles](#).

If you have any queries or complaints about the way this consultation has been carried out, please email: [PSCpublicresponse@environment-agency.gov.uk](mailto:PSCpublicresponse@environment-agency.gov.uk)

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**Table 1 for reference purposes by the reader/reviewer**

Table 1 contains a list of the 73 Sizewell C WDA permit application (EPR/CB3997AD/A001) and supporting information documents submitted by the applicant, and which are provided for viewing, review and comment on the WDA Citizen Space page in the following order.

<b>Table 1: List of the 73 Sizewell C WDA permit application and supporting information documents submitted by the operator, and provided on the Citizen Space page</b>					
<b>Doc number</b>	<b>Appendix ref</b>	<b>Docs in appendix</b>	<b>Document name/description (and reference number)</b>	<b>Page(s) per doc</b>	<b>Total pages per appendix</b>
1	N/A	1	Sizewell C (SZC) Project: Water discharge activity (WDA) environmental permit application cover page	1 page	1 page
2	Appendix A	1	SZC WDA EP WDA application support document and Appendix A - Site Maps, Plans and Drawings [ref: 100232385]	327 pages	327 pages
3	Appendix F	1	EA permit application form part A: About you	7 pages	180 pages
4		2	EA permit application form part F1: Charges and declarations	8 pages	
5		3	EA permit application form part B2: General – New bespoke permit	11 pages	
6		4	EA permit application form part B6: Waste stream A [Trade effluent composed of returned abstracted cooling water]	19 pages	
7		5	EA permit application form part B6: Waste stream B [Trade effluent from operations within the nuclear island waste monitoring and discharge system] and waste stream C [Trade effluent from the steam generator blowdown system]	19 pages	
8		6	EA permit application form part B6: Waste stream D [Trade effluent from the turbine hall and uncontrolled area floor drains (excluding blowdown from the steam generator blowdown system)]	19 pages	
9		7	EA permit application form part B6: Waste stream E [Trade effluent from the site drainage system (including drainage from road and roof surfaces, uncontaminated water from oily water network and atmospheric condensate from chillers)]	19 pages	
10		8	EA permit application form part B6: Waste stream F [Trade effluent from the production of demineralised water]	19 pages	
11		9	EA permit application form part B6: Waste stream G [Treated domestic sewage effluent from the site's administration and mess facilities]	19 pages	
12		10	EA permit application form part B6: Waste stream H [Fish recovery and return 1]	19 pages	
13		11	EA permit application form part B6: Waste stream H [Fish recovery and return 2]	19 pages	
14		1	SZC WDA Details of Directors (from Companies House for reference: <a href="#">09284825</a> ): This provides the details required within question 5c of EA permit application form part A (About you)	2 pages	
15	Appendix B	1	Appendix B: H1 Screening assessment [ref: SZC – SZC02000-XX-000-REF-100038]	150 pages	150 pages
16	Appendix C	1	Information for the Habitats Regulations Assessment (HRA) [ref: 100232391]	239 pages	265 pages
17		2	HRA Table B.1 (Appendix B)	7 pages	
18		3	HRA Figure 2.1 [Location plan]	1 page	
19		4	HRA Figure 4.1 [European sites scoped-in to the HRA screening process]	1 page	
20		5	HRA Figure 5.1 [Surface annual maximum excess temperature for Sizewell B and Sizewell C]	1 page	
21		6	HRA Figure 5.2 [Seabed annual maximum excess temperature fir Sizewell B and Sizewell C]	1 page	

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Table 1: continued							
Doc number	Appendix ref	Docs in appendix	Document name/description (and reference number)	Page(s) per doc	Total pages per appendix		
22	Appendix C continued	7	HRA Figure 5.3 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell C]	1 page	265 pages		
23		8	HRA Figure 5.4 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell C]	1 page			
24		9	HRA Figure 5.5 [95 <sup>th</sup> percentile of TRO concentrations at the surface from the operation of Sizewell C]	1 page			
25		10	HRA Figure 5.6 [95 <sup>th</sup> percentile of Bromoform concentration at the surface from the operation of Sizewell C]	1 page			
26		11	HRA Figure 5.7 [95 <sup>th</sup> percentile of Hydrazine concentrations at the surface. This is after the release of 69 NGL-1 of Hydrazine in pulses of 2.32H from Sizewell C]	1 page			
27		12	HRA Figure 6.1 [The location of coastal vantage points (VPS) used for surveys to determine the distribution and flight activity of marine birds]	1 page			
28		13	HRA Figure 6.2 [Harbour seal density in the Greater Sizewell Bay Area (Data from Russell et al., 2017)]	1 page			
29		14	HRA Figure 6.3 [Grey seal density in the Greater Sizewell Bay Area (Data from Russell et al., 2017)]	1 page			
30		15	HRA Figure 7.1 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell B and Sizewell C in relation to the Alde, Ore, and Butley estuaries SAC and Ramsar site]	1 page			
31		16	HRA Figure 7.2 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell C in relation to the Alde, Ore, and Butley estuaries SAC and Ramsar site]	1 page			
32		17	HRA Figure 7.3 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell B and Sizewell C in relation to the Minsmere –Walberswick Ramsar]	1 page			
33		18	HRA Figure 7.4 [98 <sup>th</sup> percentile for surface water temperature exceeding 2°C and 3°C increase due to the operation of Sizewell C in relation to the Minsmere-Walberswick Ramsar]	1 page			
34		19	HRA Figure 7.5 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell B and Sizewell C in relation to Orfordness-Shingle SAC]	1 page			
35		20	HRA Figure 7.6 [98 <sup>th</sup> percentile for surface water temperature exceeding a 2°C and 3°C increase due to the operation of Sizewell C in relation to Orfordness-Shingle street SAC]	1 page			
36		21	HRA Figure 9.1 [Location of the Sizewell C main development site and the southern, North Sea SAC]	1 page			
37		Appendix D	1	Water Framework Directive (WFD) Compliance Assessment [ref:100232392]		112 pages	129 pages
38			2	WFD Figure 4.1 [Cooling water discharge outfall location, FRR discharge location and WFD waterbodies]		1 page	
39			3	WFD Figure 4.2 [Cooling water discharge outfall location, FRR discharge location and protected areas]		1 page	
40			4	WFD Figure 5.1 [Data collection sites]		1 page	
41			5	WFD Figure 5.2 [Seabed biotopes]		1 page	
42			6	WFD Figure 5.3 [Thermal plume areas against the Suffolk coastal waterbody (Uplift, Sizewell C only, surface)]		1 page	
43	7		WFD Figure 5.4 [Thermal plume areas against the Suffolk Coastal Waterbody, (Uplift, Sizewell B only, surface)].	1 page			
44	8		WFD Figure 5.5 [Thermal plume areas against the Suffolk Coastal waterbody (Sizewell C and Sizewell b, surface)]	1 page			

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Table 1: continued					
Doc number	Appendix ref	Docs in appendix	Document name/description (and reference number)	Page(s) per doc	Total pages per appendix
45	Appendix D continued	9	WFD Figure 5.6 [Thermal plume areas against the Suffolk Coastal waterbody (Uplift Sizewell C only seabed)]	1 page	129 pages
46		10	WFD Figure 5.7 [Thermal plume areas against the Suffolk Coastal waterbody (Uplift Sizewell B only seabed)]	1 page	
47		11	WFD Figure 5.8 [Thermal plume areas against the Suffolk Coastal waterbody (Uplift Sizewell B and Sizewell C, seabed)]	1 page	
48		12	WFD Figure 5.9 [Temperature differential between the SZB + SZC model and the SZB only model, calculated by (SZB+SZC) – SZB only = temp difference (seabed)]	1 page	
49		13	WFD Figure 5.10 [Temperature differential between the SZB+SZC model and the SZB only model, calculated by (SZB + SZC) – SZB only = Temp. Difference (Surface)]	1 page	
50		14	WFD Figure 5.11 [TRO concentrations in relation to WFD waterbodies]	1 page	
51		15	WFD Figure 5.12 [Bromoform concentrations in relation to WFD waterbodies]	1 page	
52		16	WFD Figure 5.13 [Hydrazine concentrations in relation to WFD bodies]	1 page	
53		17	WFD Figure 5.14 [Adjoining WFD water bodies]	1 page	
54		18	WFD Figure 5.15 [Location of saline monitoring point against WFD waterbodies]	1 page	
55	Appendix E	1	[2] NNB Generation Company (SZC) Ltd, Company Manual	42 pages	1,297 pages
56		2	[53] EDF BEOM 006 Control of Marine Fouling	89 pages	
57		3	[57] Anglian Water Pre-Planning Assessment Report PPE-0074925	7 pages	
58		4	[58] BEEMS TR131 Water Quality Literature	42 pages	
59		5	[59] BEEMS TR189 Marine Water Quality	159 pages	
60		6	[60] BEEMS TR314 Marine Water Quality (Supplementary Water Quality Monitoring Data 2014/2015).	86 pages	
61		7	[76] BEEMS TR346 Sizewell Characterisation Report – Phytoplankton	42 pages	
62		8	[77] BEEMS TR311 Ed.4. Sizewell Coastal Geomorphology and Hydrodynamics: Synthesis for Environmental Impact Assessment (MSR1/4). 2020	167 pages	
63		9	[79] BEEMS TR473 Coralline Crag Characterisation. Cefas. Lowestoft	37 pages	
64		10	[81] BEEMS TR431 SPA/SAC Features and Marine Prey	50 pages	
65		11	[83] Review of Maximum Chemical and Radiochemical Discharge and their Limits During Operation	36 pages	
66		12	[85] BEEMS TR302 Thermal Plume Modelling: GETM Stage 3	91 pages	
67		13	[86] BEEMS TR301 Sizewell Thermal Plume Modelling Stage 2 Review - Selection of Preferred Sizewell C Cooling Water Configuration	83 pages	
68		14	[89] BEEMS TR306 Marine Synthesis MSR2/2	171 pages	
69		15	[92] BEEMS TR387 Investigation of Hydrazine Toxicity	56 pages	
70		16	[109] BEEMS TR385 Modelling Effects of Phytoplankton.	29 pages	
71		17	[112] RHDHV Sizewell C Eels Regulation Assessment.	76 pages	
72		18	[113] NNB Generation Company (SZC) Ltd, Management System Manual.	31 pages	
73		19	[114] NNB Generation Company (SZC) Ltd, Quality Policy	3 pages	

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