



Together Against Sizewell C

TASC Responses to EXA's question on potable water supply in respect of Deadline 3; 24th June 2021, Development Consent Order inquiry process for Sizewell C.

TASC's IP no: 20026424.

Responses to EXA's question on potable water supply

1. For at least 10 years, TASC members have been asking for information about the potable water supply for Sizewell C. The Applicant and Essex and Suffolk water, a subsidiary of Northumbrian Water Limited (NWL), have both evaded this question throughout the consultation period. Now that they have at last been forced to reveal the extent of the plans, it is clear that the water strategy consists of nothing more than an insubstantial sketch devoid of detail. The water strategy is pivotal to the application and it is shocking that at this late stage the Applicant has presented such threadbare plans.
2. The ExA question W.1.2 asks Essex and Suffolk water to "Provide an update on the delivery of water supply to the Proposed Development and the expected delivery timescales."
3. The answer to the ExA from Northumbrian Water (NWL) confirms that the plans to bring water 28kms from an entirely separate Water Resource Zone (WRZ) are in the initial drafting stage.

*"On an indicative basis only, NWL consider that it may be possible to deliver the scheme by September 2024 at the earliest. This projection is however subject to additional ongoing work."*¹

*"The proposed pipeline is still at an outline stage and so NWL has not yet carried out its own impact assessments."*²

4. A water resource zone is defined as an area within which all customers are exposed to an equal risk of their shared water supply being compromised or restricted.

*"Within a WRZ, all parts of the supply system and demand centres (where water is needed) should be connected so that all customers in the WRZ should experience the same risk of supply failure and the same level of service for demand restrictions."*³

5. However, Essex and Suffolk Water customers within the Northern Central WRZ have not been informed of the plans to supply to Sizewell C from their WRZ, as

¹ [EN010012-004722-DL2 - Northumbrian Water Limited \(Trading as Essex & Suffolk Water\) - Responses to the ExA's Written Questions \(ExQ1\).pdf \(planninginspectorate.gov.uk\)](#)

² [EN010012-004722-DL2 - Northumbrian Water Limited \(Trading as Essex & Suffolk Water\) - Responses to the ExA's Written Questions \(ExQ1\).pdf \(planninginspectorate.gov.uk\)](#)

³ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, para 2.2

these were not included in the 2019 Essex and Suffolk Water Resource Management Plan (WRMP). Therefore customers are unaware of the possible implications for the security of their water supply. There has been no discussion on what will happen when, as is highly likely, water shortages occur during drought years and supplies to households are restricted through hosepipe bans etc., because the power station, if built, would have to take priority over other customers due to the essential need for the water for the primary cooling circuits.

6. Essex and Suffolk Water forecast that the Northern Central WRZ water available for use will steadily decline due to the impact of climate change on the river Waveney.⁴ Although the forecast only extends to 2060, the trajectory indicates that this decline would continue beyond that date. A simultaneous forecast suggests that demand for water will rise steadily. Essex and Suffolk Water state that this increase will be a modest 1 ML/day, but if the demand from Sizewell C of 4 ML/day during construction and 2.8 ML/day once operational is added to these figures⁵, the gap between supply and demand narrows considerably.
7. The impact of climate change on the availability of water (the deployable output) is higher on water bodies sourced from surface water in comparison to those sourced from groundwater. Approximately 70% of the water supplied in the Northern Central WRZ is from surface water⁶, and the river Waveney contributes a substantial portion of this. The river Waveney's deployable output has been assessed as having a high vulnerability to climate change.
8. The contribution of uncertainty of the impact of climate change on supply and demand gradually increases over the planning horizon. The significance of uncertainty of impact of climate change on the River Waveney is forecast to increase from 9.3% in 2019/20 to 21.0% in 2059/60⁷, which indicates that the reliability of the water supply beyond that date will become increasingly questionable, and certainly cannot be guaranteed for the lifetime of the power station.
9. In the 2019 WRMP, Essex and Suffolk Water stated that the Applicant required a maximum additional demand of 2 ML/day⁸ for Sizewell C. It transpires that the Applicant is now asking for 3.5 ML/day for a sustained period of 20 months.⁹
10. This increase in demand is based on experience at Hinkley Point C. However, the Applicant has been involved in constructing similar reactors at Flamanville and Olkiluoto, and so would be expected to have a reasonable understanding of the water requirements prior to the start of the Hinkley Point C build. It is

⁴ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, page 16

⁵ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, page 13

⁶ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, para 2.1.5

⁷ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, page 284

⁸ <https://www.nwg.co.uk/responsibility/environment/wrmp/current-wrmp-2015-2020/> Essex and Suffolk Final Water Resource Management Plan, para 11.3.2

⁹ [Szc PROJECT - DCO GUIDANCE DOCUMENT \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/szc-project-dco-guidance-document/) para 1.2.2

disquieting to see that their forecasts have a considerable margin of error and this makes it difficult to have confidence in any of the figures they have submitted.

11. The NWL response to the ExA questions states that Sizewell C's latest peak mains water demand forecast is that approximately 2.8MI/day would be required once the station is operational. The Applicant has claimed that the station would require 0.5 MI/day during operation¹⁰. It is not clear from the answers of either the Applicant or NWL what they consider constitutes peak demand. If peak demand is 2.8MI/day but the average use is 0.5MI/day, it stands to reason that for substantial periods of time less than 0.5MI/day must be required, however no profile of the water use has been supplied by the Applicant so it is difficult to marry up the figures and understand the discrepancy between them.
12. NWL state in their answer that they predict that the earliest date that it would be possible to supply water to Sizewell C from the planned Northern/Central pipeline would be September 2024. It may well be that the pipeline could take substantially longer than this to plan and install. The Applicant proposes to begin construction work for Sizewell in 2022, so they would need to find an alternative water supply for the early years of the build. Neither NWL nor the Applicant appear to have addressed where the water would come from for these initial years of construction, as it is not referenced in the Applicant's submissions to the ExA, NWL state that they are "currently preparing a supply profile to confirm what water we might be able to supply between April 2022 and September 2024", but further studies are not expected to be completed on the until August 2021.
13. The installation of the pipeline would be concurrent with the Sizewell C construction, but because the plans are so vague there is no way of assessing whether the work on the pipeline would have an impact on the cumulative effects of the project. The Applicant suggests that if this were to be the case, potential mitigation measures would include 'adherence to seasonal working windows.'¹¹ This would add to the installation time and lengthen the period required for an alternative source of supply, but it is impossible to know what effect this would have because the necessary studies that should be available now in order for respondents to make informed comments have not been carried out.
14. The lack of timely detailed information once again leaves respondents in the frustrating position of having to comment on plans that have not yet been drawn up, and we are obliged to wait until deadline 4 to hear about any details of the proposals from the Applicant. This is unacceptable given that the issue of the water supply has been flagged up so long ago, and it has been known for 2 years that the water cannot be supplied from the Blyth WRZ. According to East Suffolk Council, regular monthly meetings have been taking place with the Applicant, the Environment Agency and Essex and Suffolk Water¹², in which case it has to be asked, why has so little been achieved?

¹⁰ [SZC PROJECT - DCO GUIDANCE DOCUMENT \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk) para 1.2.2

¹¹ [EN010012-002917-SZC Bk6 6.14 ESAdd V1 Ch10 Cumulatives.pdf \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk) 10.4.239

¹² [Sizewell C Local Impact Report \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk) , para 20.41

15. The applicant's response to the ExA's question G.1.5 concerning which matters are relevant for the decision maker states that the ExA should "work on the assumption that the relevant pollution control regime and other environmental regulatory regimes, including those on land drainage, water abstraction and biodiversity, will be properly applied and enforced by the relevant regulator."

16. It is therefore imperative that the responses of the relevant regulators carry a great deal of weight. The Environment Agency is at the forefront of the regulatory regime, and it has stated quite clearly that:

"The water supply options described do not provide evidence to demonstrate that a suitable and ecologically sustainable source of water can be provided to the Sizewell C Project.¹³"

17. The fact that the Environment Agency has deemed that the Applicant has not made sufficient progress to demonstrate that their plans are workable at this late stage of the consultation should lead to a pause in the process while the Applicant undertakes the required studies and draws up detailed plans that respondents are properly able to scrutinize, but unfortunately the examination timetable has a prescribed deadline that appears to be immovable regardless of the fact that the Applicant is ill-prepared for the examination process.

18. TASC members, having observed how the Applicant has operated throughout the consultation process, may perhaps be forgiven for believing that the Applicant has been deliberately tardy in setting out the details of their plans. They may feel that this ploy has allowed the Applicant to pass through the planning process so far with a minimum of scrutiny – because it is difficult to critique plans that have not yet been formulated. The Environment Agency, Local Authorities and other regulatory bodies will be under a great deal of pressure to sign off on the project in accordance with the set timetable, leaving the Applicant to pack away matters into the Rochdale envelope that they would prefer to keep closed to the public eye.

19. If the role of the Environment Agency is to be respected as an independent regulator, TASC would suggest that it is inconceivable that the Sizewell C project can go much further without heed being paid to the many warnings from the Environment Agency and NGO's concerning the lack of clarity in the Applicants plans, for example the Environment Agency have stated:

"3.1 It is our view that currently the supply options described still do not provide the detail that is necessary to provide the Examining Authority with the assurance that a sustainable source of water, that through use will not cause ecological harm, can be provided to the Sizewell C Project¹⁴."

And:

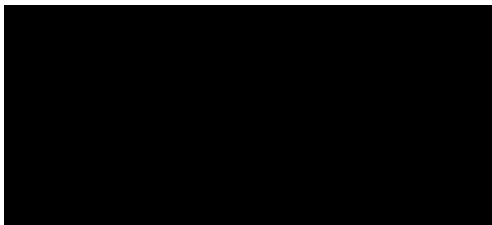
"We are not able to reach a conclusion on the cumulative effect within the Sizewell C project or with other projects as some of the information described or

¹³[Environment Agency Written Representation on Sizewell C Development Consent Order \(planninginspectorate.gov.uk\)](http://planninginspectorate.gov.uk) page 3

¹⁴[Environment Agency Written Representation on Sizewell C Development Consent Order \(planninginspectorate.gov.uk\)](http://planninginspectorate.gov.uk)

expected to have been submitted has not been provided.¹⁵

20. The conclusions drawn by the Environment Agency are echoed by all of the other statutory bodies which have each highlighted that the Applicant has provided so little detail of the water supply strategy that it is impossible to regard the plans as credible, for example, Natural England's response states:
21. *“Natural England welcomes proposals for a new abstraction/water use strategy to be designed to ensure no adverse effects on any protected sites or watercourses. However, until the Water Industry National Environment Programme (WINEP) study is undertaken by Essex and Suffolk Water and the resulting assessments (including HRA) reviewed in this regard, this issue remains unresolved and outstanding.¹⁶”*
22. TASC and other local groups concerned with the planning process have patiently and consistently raised the same issues time and time again throughout the many stages of consultation, and have quite frankly been treated with contempt by the Applicant who does not appear to have any compunction to address our concerns. The common thread running through the answers to the ExA questions with regard not only to the water supply, but to every aspect of this project is that the plans lack detail, studies and reports are inadequate, and commitments to mitigation are vague and unenforceable. TASC believes that the manner in which the Applicant has conducted the consultation process has fallen far short of the standard of public engagement expected and has resulted in a process allows the developer to evade the sort of detailed scrutiny that a project of this scale and consequence demands.



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Chairman TASC, for Emma Bateman, TASC member

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¹⁵Ibid 9.13

¹⁶ [EN010012-004857-DL2 - Natural England - Written Representations \(WRs\).pdf \(planninginspectorate.gov.uk\)](#)