

Sizewell C Plan Project EN010012

NNB Generation Co (SZC) Ltd

Deadline 3

Comments by Suffolk Coastal Friends of the Earth on Response by Northumbrian
Water Limited to Sizewell C Examining Authority Questions -

"W.1.2 - Water Supply Strategy Appendix 2.2D [AS-202]. Provide an update on the delivery of water supply to the Proposed Development and the expected delivery timescales."

"G.1.41 - Water Supply. In [AS 189] you indicate that the provision of the preferred pipeline may have adverse effects in respect of noise, air quality and terrestrial ecology. Please explain how mitigation could be secured for these operations when the pipeline would not appear to be part of the DCO application."

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1. It's clear from [REP2-158](#), the [response by Northumbrian Water Limited](#) (NWL) that it's **totally unrealistic** to supply the projected peak figure of 4 Megalitres/day (Ml/d) of mains water from local resources available to NWL.

1.1 NWL trades locally as Essex and Suffolk Water.

1.2 The applicant states in [AS-202](#) section 3.5.20 that its water supply strategy is-

"The principal supply of water for the Sizewell C Project will come from mains water, provided by Essex and Suffolk Water. This will be drawn from within the Blyth Water Resource Zone, the zone that includes Sizewell C."

2. This figure from NWL's discussions with the Applicant appears to represent a much higher estimate by the Applicant of the water supply requirements, than stated in its application document [APP-601](#).

NWL - "SZC Co's latest peak mains water demand forecast is approximately 4Ml/day during construction and 2.8Ml/day once operational."

APP-601 section 1.2 “Forecast Water Demand” - “between 2.5MI/d and 3.5MI/d” and “approximately 0.5MI/d” respectively.

3. The Statement of Common Ground between the Applicant and Essex and Suffolk Water ([REP2-066](#)) confirms the higher figures. In fact REP2-066 (in line 1 of table 2.1) further states that “The operational demand would increase to 2.9MI/d for two months every 16 months, when one unit is generating electricity and the other unit is in maintenance shutdown”. This peak figure during operation of **5.8 times the estimate in the original application**, is not contested by the Applicant in the SoCG. The Applicant was still populating NWL’s demand forecast spreadsheet at the time the SoCG was published.

4. In the local area, the Environment Agency says the water supply is at, or possibly above, the limit of what can be sustainably extracted.

NWL’s response (in REP2-158 and REP2-066) states “This is because all raw water in our Blyth Water Resource Zone is sourced from the Chalk and Crag aquifers which are assessed by the Environment Agency to be over-licensed and potentially over abstracted.” (“Background” on p1, of response to question W.1.2).

The estimated amount of water required at construction peak is equivalent to adding the domestic supply of **3 more towns the size of Leiston and 2 more towns the size of Saxmundham** to the water demands in the area. [Calculated from figure on Essex and Suffolk Water’s website, “in the UK, the average person uses 150 litres of water a day”; population figures from Wikipedia].

5. It is a clear inference that it would be a **major planning problem**, and completely unacceptable, to allow significant construction work to start before the mains water supply infrastructure is put in place. The construction project’s water demands would be in contention with requirements in the area for existing homes, businesses, agriculture and the natural environment – to say nothing of demand for increased housing.
6. According to APP-601 there would be an initial 14-month period of enabling works when the water demand would be less. The estimate of 1.8 MI/d in that document is presumably no more reliable than the estimate for construction peak (see 2 and 3 above). Even if this figure is used, it is still clearly an enormous demand in the local context, that can’t be met without major water supply infrastructure improvement.
7. NWL states in REP2-066 and REP2-158 that supply can only be provided by a major pipeline bringing water from its resources elsewhere in England. The response also says that this has previously been made clear to the Applicant. The Applicant appears to recognise that this is the only option available for water supply from NWL in the SoCG (REP2-066).
8. All NWL’s reservoirs outside the water-stressed East Anglia region, appear to be in the North Pennines and North York Moors – hundreds of miles away. This is therefore a very big undertaking.

[Note that NWL refers to water coming from their “Northern/Central WRZ” in section 2 of their response, but this doesn’t seem to mean they have water sources in central England. Rather, it appears to refer to

the northern and central parts of their Northumbria area - presumably Kielder Water and Derwent reservoir (near Consett) respectively. Derwent reservoir is approximately 290 miles from Sizewell by road].

While a major water supply project like this would presumably provide other benefits for the growing number of houses in the relatively dry East Anglia region, it must be done properly and can't be rushed. This project in itself will be one that will have impacts on lives, livelihoods and environmental/ecological considerations, and that therefore requires due infrastructure planning process.

9. Pumping water this distance may have considerable energy requirements. It would be for a period of 10 years minimum; the construction track record of this design of PWR shows that it's likely to be much longer. Suffolk Coastal FoE now asks - has the energy requirement to construct the pipeline and pump the water, been factored into Sizewell C's carbon emissions?

Since the ExA states in question G.1.41 "the pipeline would not appear to be part of the DCO application" and NWL's response to this question in REP2-158 is "once the proposed pipeline has progressed to a full feasibility study, it will be subject to NWL's full environmental assessment procedures", it appears that the answer to the question above is No. We therefore request that such an **assessment be done, and included in the calculation of when SZC would start to make a positive contribution** to carbon emissions targets.

10. Timescale to deliver the pipeline.

NWL's response to the ExA's question states - "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."

So, it seems far from certain that the water would be available on the date NWL mentions. But even this **most optimistic late 2024** timescale requires a delay to the start of enabling works.

11. All NNB GenCo's alternative proposed water sources in APP-601 are unacceptable – either to the Applicant itself, or to legally-protected sensitive environmental and wildlife sites.

[Note about one of the original alternatives - Going by the SoCG with the NFU, the Applicant is not pursuing any option to obtain water from any private boreholes belonging to local farmers. The SoCG only mentions ensuring there is no pollution to these private water supplies.]

12. Summary. In the undesirable event of the Sizewell C project going ahead

- The mains water supply cannot be obtained from local resources
- it would be an **unacceptable planning impact** to allow it to take this level of water away from local people, businesses and farms, and so the water supply **infrastructure must be in place first**
- the start of enabling works must therefore be **delayed** until the pipeline is built, and supplying water in the required quantity, quality and reliability to ensure the project can be built and operated safely.
- the pipeline will be approximately 300 miles long, and include pumping works and other associated infrastructure
- This means a delay of at least two and a half years to the Sizewell C project, compared to the Applicant's proposed timetable.

End