

SIZEWELL C DEVELOPMENT CONSENT ORDER EXAMINATION

CHANGE 19 – TEMPORARY DESALINATION PLANT

DEADLINE 8 SUBMISSION

THEBERTON AND EASTBRIDGE PARISH COUNCIL (TEPC) IP: 20026558

MINSMERE LEVELS STAKEHOLDERS GROUP IP: 20026696 AND

STOP SIZEWELL C IP: 20026489

1. Change 19 – Deadline 8 Submission

- 1.1 We are, once again, disappointed that EDF have submitted this nineteenth change to the DCO so late in the examination process.
- 1.2 It is even more concerning that the subject of provision of potable water supplies to the project has been an area of concern ever since the first pre-application consultation over 10 years ago and regularly resurrected as a concern at all subsequent consultations and again during the examination.
- 1.3 We understand the situation that Northumbrian Water find themselves in, with increasing quantity demands from the applicant, alongside potential reductions in abstraction levels at their WMZ north of the Blyth WMZ where there initially seemed to be a potential for provision to the applicant.
- 1.4 In the Statement of Common Ground with Minsmere Levels [REP2-091](#) EDF expressed confidence that a new supply from Barsham would be available to “*to enhance capacity and security of supply to NWL’s existing customers within the local distribution network near Sizewell*”. It appears that such optimism has fallen well short of reality and reflects the inappropriate optimism that has been in evidence throughout the entire consultation and examination process where assurances have been given that water supply was not an issue.
- 1.5 Suggestions by Northumbrian Water that perhaps the applicant should become “self-sufficient” in terms of their water supply, given the fact that the EA consider the East of England as being “seriously water stressed”. Perhaps, a permanent desalination would seem to be the only solution to this suggestion but we are once again mindful of the severely restricted nature of the proposed SZC platform which has already required significant eastward extension of the site footprint into the coastal dunes that has been required to accommodate the site.
- 1.6 We recognize that Change 19 is for a temporary desalination plant that will be present for only the construction phase of the project but are also concerned that should a solution to potable water supply not be found that the surrounding AONB may be further compromised to provide space for such a permanent facility.
- 1.7 It is not as if the thorny issue of developing such a project, in what is widely recognized as one of the driest, if not the driest part of the country, wasn’t well recognized by the applicant when this project had its beginnings over 10 years ago.
- 1.8 It is also well known in the area that Sizewell B puts significant strain on the local water resource and cumulatively with all the other increasing domestic calls on water in this area should be no surprise that the Blyth WMZ was never going to be a resource that SZC could expect to rely upon, and given the East of England is considered to be “seriously water stressed”, even transfer mains from adjacent or other nearby stressed areas was always going to be a risky strategy.
- 1.9 So, it is surprising that we are here so late in the process, finding out that the applicant has demonstrated insufficient planning to ensure security of potable water supply well before any DCO application was submitted. After all, without a guaranteed potable water supply, the two reactors simply cannot operate. Having no guaranteed potable water supply is like having a nuclear power station without any fuel.

1.10 In [AS-202](#) Water Supply Strategy Update, regarding desalination the applicant states;

This option has been discounted in favour of alternative options, due to concerns with power consumption, sustainability, cost, and wastewater discharge. The desalination process is typically energy intensive, and the discharge of brine water as a result of desalination may not be suitable for discharge through the combined drainage outfall (CDO).

1.11 We note that the current proposal does not propose to use the CDO for discharging the brine back to the sea.

1.12 However, it would appear that concerns expressed in [AS-202](#) regarding various sustainability and environmental factors have suddenly become “not significant”, are within already provided assessments in the Environmental Statement.

1.13 It now seems likely that the temporary desalination plant will be doubled in size after two years and run for the entire duration of the construction period. It is not clear if that would result in any long term impacts due to the cumulative brine discharge between the inshore banks and the Sizewell Dunwich Bank complex (SDB).

a. Even using the duck-billed diffuser to mix the brine sufficiently to avoid a concentrated brine layer depositing on the seabed. The salinity in the discharge plume is still expected to increase. Will this higher saline concentrated plume still accumulate on the seabed and over the 8-10 years of potential operation remain within the confines of the SDB due to its higher density and potentially become trapped in this inshore area?

b. There is no information on a larger scale that examines whether the brine in this inshore space will slowly mix sufficiently and migrate beyond the space inshore of the SDB into the North Sea.

1.14 Diesel generators will continuously run the plant for 2-3 years prior to mains electricity connection and will contribute to significant CO₂, Nitrogen Oxides, and PM 10s and 2.5s. Atmospheric Ozone will also increase as a result of the combination of NO_x and volatile organics (always present in building environments due to diesel machinery etc.). Effects can be particularly bad from late spring through early autumn when temperatures rise and sunlight is strongest. Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli. This leads to wheezing and shortness of breath. Depending on the level of exposure, ozone can cause coughing and sore or scratchy throat. Such effects will be particularly bad for those who already have respiratory issues such as Asthma or COPD.

1.15 A detailed breakdown for the early years of construction of the expected HDV and other traffic on the B1122 is still awaited within the DCO Examination.

1.16 We are not convinced that the assurances of “no need for change” in maximum limits for HDV numbers in the early years given the statement that up to 40 deliveries per day will be required to deliver the potable water requirement, during this time in the project.

1.17 As indicated in 1.8 to 1.10 above, to be raising this nineteenth change requirement now within what is supposed to be a front-loaded application process goes to show that insufficient efforts by EDF have been applied to the overall pre-planning process resulting in a project that lurches from one crisis to another with little coherence.

1.18 Given the number of late changes, incomplete submissions and questions still unanswered by the applicant, the submission of change 19 and the applicant’s failure to appropriately plan for such a major piece of infrastructure like SZC requiring considerable volumes of water for operation, beggars belief. We ask the ExA to put the applicant, local residents, local fauna, flora and this unique environment out of our misery and reject the application.