

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

The Sizewell C Project

Natural England's Comments on the Site Water Supply Strategy

Planning Inspectorate Reference: EN010012

24th September 2021

Natural England's Comments on the Revision 2.0 Site Water Supply Strategy [REP7-036]

- 1.1 Natural England has reviewed the Deadline 7 submission by the Applicant titled 'Deadline 7 Submission 8.4 Planning Statement Appendix 8.4K Site Water Supply Strategy Revision 2.0' [REP7-036] and has the following comments.
- 1.2 At its peak during construction, it is proposed that Sizewell C will require over 4 megalitres of water per day. Considering Suffolk, and the wider East Anglia area, is under serious water stress, it is essential that the Applicant can demonstrate that this level of abstraction can be sourced sustainably, and without adverse impacts on designated sites already scoped into the application, or potentially those further afield. This should include consideration of potential impacts from associated works such as pipelines and other infrastructure as well as the abstraction itself. Further information can be found under issue 3 of our Statement of Common Ground.
- 1.3 We note that the SZC Water Supply Strategy has identified additional capacity within the Northern/Central Suffolk Water Resource Zone (WRZ) to supply the water required by this project. However, we hold concerns over the lack of information and detail within the strategy of how and where this water will be sourced from by the water company.
- 1.4 We would expect further information to be provided by the Applicant and/or water company with definitive identification of sources of supply and the environmental implications of these (and any associated infrastructure)in order to assess, understand and potentially mitigate the impacts upon internationally and nationally protected sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites and Sites of Special Scientific Interest (SSSIs) and the water environment within the Northern/Central WRZ. Impacts to protected species and protected landscapes (i.e. the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) should also be fully assessed. We would expect a similar level of scrutiny on the impacts of utilising other sources of water supply as mentioned in the Water Strategy document.
- 1.5 The proposed desalination plant and any associated discharge presents a risk of highly saline water being discharged into coastal and marine habitats which may negatively impact species, habitats and environmental conditions. We would expect assessment of this risk and appropriate mitigation for this proposal.
- 1.6 Additionally, we would welcome commitments to offset the carbon cost of the water supply within the project. We would expect the mitigation to make a positive contribution to the wider environmental objectives and provide benefits to support the delivery of targets within the Government's 25 Year Environment Plan, the upcoming Environment Bill, and Nature Recovery. For example, the right tree in the right place.
- 1.7 We advise that the transfer of treated foul water via a pressurised pipeline should have sufficient measures in place for the containment of any potential leaks to prevent chlorinated water from entering the environment and to ensure that the highest possible standards of water efficiency and water savings are utilised.

- 1.8 We welcome the proposed storage of water during periods of low demand in the winter for the intended purpose of supply during high demand in the summer to alleviate pressure upon the water environment during this time.
- 1.9 We welcome the inclusion of water reduction and recycling measures for both potable and non-potable water. We would welcome greater ambition and commitments to reduce water consumption by the workforce, both on site and within accommodation, to well below national averages through the installation of water-efficient and water saving appliances, fixtures and fittings within offices and accommodation.
- 1.10 The Northern/Central WRZ is subject to Water Industry Natural Environment Programme investigations with the conclusions then informing the Water Resource Management Plan process. The outcome of these investigations may be a determining factor on where the water will be sourced from. Thus, the availability of piped water from Essex & Suffolk Water is uncertain, with regards to timing, location, and quantity.
- 1.11 In regard to the recent change consultation, it is disappointing for such a major change with potentially far-reaching implications in terms of our remit to be introduced at this late stage within the Examination.
- 1.12 This change has the potential to alter the existing environmental impact assessments and/or add to the potential impact pathways for a number of other outstanding issues that are we are currently advising on and which are covered in this SoCG. While the consultation document outlines a number of potential impacts arising from the change proposal and finds no significant effects requiring mitigation, we advise that further assessment and supporting documentation is required to confirm this, as set out in our response to the Applicant's Sizewell C Consultation on Proposed Changes (August 2021) (our ref: 363033, dated 25th August 2021) including on:
 - Additional air quality impacts on relevant internationally and nationally designated sites caused by increased Heavy Good Vehicle (HGV) movements;
 - Additional air quality impacts on relevant internationally and nationally designated sites caused by additional diesel generators;
 - Impacts of installation of pipes on the England Coast Path;
 - Impacts of installation/drilling of pipes, intakes and outfalls on relevant internationally and nationally designated sites;
 - Impacts from chlorine and other bio-fouling treatments on relevant internationally and nationally designated sites;
 - Impacts of hypersaline water on relevant internationally and nationally designated sites;

- Effects of dredging on relevant internationally and nationally designated sites;
- Impacts of discharge into the marine environment on relevant internationally and nationally designated sites;
- Additional landscape impacts to the Suffolk Coast and Heaths Area of
 Outstanding Natural Beauty (AONB) associated with the construction and siting of
 a containerised desalination module;
- Impacts from additional marine noise created by vessel traffic, dredging and drilling on relevant internationally and nationally designated sites;
- Effect of intake and outfall headworks on coastal processes and any additional impacts to relevant internationally and nationally designated sites.
- Impacts on designated sites from water abstraction for tankered water supply (which again may affect wider European sites that those listed in column B; we understand that the source of this supply is currently unknown)
- 1.13 We would also like to draw your attention to previous work submitted by SZC Co in January 2021 which discounted desalination as an option for the following reasons:
 - "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)." (Table 1.2 in 6.14 Environmental Addendum Appendices, Chapter 2 Main Development Site, Appendix 2.2D. Water Supply Strategy, January 2021).
- 1.14 Clearly there is potential for a number of impacts from the proposed change and it is therefore essential that these impacts are fully assessed (or revisited in the context of your previous concerns as highlighted in Table 1.2),and made available within the Examination as soon as possible so they can be examined fully.
- 1.15 We understand that the currently anticipated worst case is that the desalination plant would be in use for the entire construction phase, and advise that further extension into the operational phase would require further detailed assessment given the potential for the additional cumulative/in combination impacts this would present with regards to the operational infrastructure, in particular to the relevant internationally and nationally designated sites.