

## Westleton Parish Council

### Comment on EDF's proposal to build a desalination plant on the Sizewell C site

Westleton Parish Council (WPC) is surprised and concerned that EDF have again amended its application for an order granting development consent for Sizewell C.

- We are surprised because it seems odd that EDF have realised at this late stage in the process that supply of water, clearly crucial to the construction, was not fully considered and resolved much earlier in the preparation of the plans – regular dialogue with the water company surely would have avoided this situation;
- we are concerned because this failure to resolve this crucial consideration in a timely manner undermines the credibility and reliability of the whole application which, if approved, will anyway present significant environmental, social and economic impacts to the East Suffolk area (see previous WPC submissions).

WPC does not have the knowledge to understand fully the environmental impacts of the construction and operation of a desalination plant at the site but a simple Google search found numerous articles detailing the environmental implications of desalination plants elsewhere – none of which make comfortable reading – an inexhaustive list is provided in the footnote<sup>1</sup>.

Further to these criticisms and concerns, statements made in EDF's consultation document<sup>2</sup> (of August 2021) simply raise further questions:

*2.3.4 The desalination plant will be required before the Sizewell transfer main is fully available. This is potentially for approximately the first four years of construction, i.e. to 2026 as set out in Paragraph 2.2.4 above. However, it should be assumed for the purposes of consultation that the desalination plant may need to be retained for longer – potentially throughout the majority of the construction period – in the unlikely event of a delay to delivery of the transfer main by Essex and Suffolk Water that is beyond their control. The desalination plant would be decommissioned once the transfer main is fully available.*

WPC comment: the impacts of the proposed change to the application are presumably not accurate given that as stated in this paragraph, the plant may well have to be used for much longer – even for the majority of the construction period – than is foreseen and presented in this consultation by EDF.

*2.3.5 Construction of the desalination plant would take approximately 4-6 months and can only commence once the Main Platform is suitably prepared. It is assumed that for the first 9-12 months of construction, potable water will need to be imported by road via water tanker truck. The number of tanker deliveries is likely to rise gradually during this period to approximately 40 deliveries per day. The capped HGV limits already established for the*

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<sup>1</sup> [Environmental Issues of Desalination \(siu.edu\)](https://www.siu.edu)

[2.3 From Desalination to Destruction – Environmental ScienceBites \(pressbooks.pub\)](#)

[The Disadvantages of Desalination \(sciencing.com\)](#)

[Too much salt: water desalination plants harm environment: U.N. | Reuters](#)

[Case studies on environmental impact of seawater desalination - ScienceDirect](#)

[Desalination plants produce more waste brine than thought \(nationalgeographic.com\)](#)

<sup>2</sup> [sizewell c project consultation document updated v2-compressed.pdf \(edfenergy.com\)](#)

*Project would remain unchanged.*

WPC comment: if the capped HGV limits remain unchanged, what happens to the 40 trucks per day which they will be replaced? Can we assume that their replacement by trucks transporting water to the site means that other work will be further delayed due to the slower delivery of materials?

**2.3.6** *The modular desalination plant would initially be capable of producing up to approximately 2,500m<sup>3</sup> of potable water per day. In the event that the water transfer main is not complete by the 4th year of construction, an additional module would be added to the plant to create the ability to produce up to approximately 4,000m<sup>3</sup> of potable water per day.*  
WPC comment: i.e. the plant will have to be enlarged – the construction would presumably require more HGV movements and also further delay the construction of the site.

**2.3.9** *Plant would be delivered by road and is unlikely to comprise any Abnormal Indivisible Loads (AIL). The additional HGV movements would be within the already proposed HGV daily limit established for the Project during the early years.*

WPC comment: as above, this suggests that trucks for the construction will be replaced by trucks for the construction of the desalination plant – with the possibility that some traffic will be AIL. This would aggravate congestion and also cause further delays to the construction of the power station itself.

**2.3.22** *The intake screen and pipework will be maintained by periodic cleaning using a compressed air cleaning system. Periodic shock chlorination within the headworks would be applied to prevent biofouling. Chlorine dosing would be flow controlled and angled inwards to minimise chlorine emissions to the environment. Abstracted water would be dechlorinated prior to the Sea Water Reverse Osmosis membranes.*

WPC comment: we note this says that chlorine emissions will be “minimised rather than “prevented”. Why?

**2.4.13** *...Potential impacts associated with the physical presence of the infrastructure and associated scour protections include loss or change in habitat type and the potential for the spread of non-indigenous invasive species. Each of these potential impacts will be fully assessed.*

WPC comment: surely “potential impacts” should have been “fully assessed” for the purpose of this amendment to the application?

**2.4.16** *Approximately 60% of the abstracted seawater would be discharged back into the sea. The discharge would consist of concentrated saline water, increased concentrations of naturally occurring metals as well as added phosphorus and a preliminary H1 screening assessment of the proposed discharges indicates that the small volume discharge may exceed screening thresholds for zinc and chromium as noted above. A full assessment will consider the magnitude of saline, trace metal and nutrient discharges in relation to the sensitivity of marine ecology receptors...*

WPC comment: as above, surely a “full assessment” should have been completed for the purpose of this amendment to the application?

**2.4.20** *Further assessment will be undertaken to confirm the impacts and any further mitigation which may be required to minimise the risk to marine users.*

WPC comment: as above, surely the “assessment” should have been completed for the purpose of this amendment to the application?

**2.4.24** *Further assessment may be required following a review of any updated or additional coastal and geomorphology assessment.*

WPC comment: as above, surely the “assessment and review” should have been completed for the purpose of this amendment to the application?

All of these points only heighten WPC concerns about the credibility of the application overall and the impacts of the construction and operation of the site.

**September 2021**