

## Deadline 10 Submission TASC IP no. 20026424

TASC comments on document 9.13 REP8-096 submitted at deadline 8 and related issues connected with SZC's coastal defences

As a result of insufficient time and resources, TASC have not been able to prepare a detailed response to the critical issue of the ability of the proposed SZC sea defences to adequately protect the site over its full lifetime. We have therefore prepared a brief summary that outlines some of TASC's concerns.

<u>Modelling FRAs to 2140</u>- totally inadequate as reasonable expectations are that spent nuclear fuel will be stored on the SZC site until the late 2100s and the site not fully decommissioned until 2190-2200

- -see TASC comments at ISH11 -agenda item 3(b) REP8-285a
- see the ONR and EA's joint advice note <u>'Principles for Flood and Coastal Erosion Risk</u> Management' defines, in Appendix A on page 10: "Full life-time of the station operational life, plus the time taken for the decommissioning and interim storage of spent fuel and waste, prior to disposal. Again, this should be specified and justified by the operator, <u>but is generally understood to be 160 years</u> [emphasis added]."

Modelling for storm surges- recent disasters throughout the world are clearly demonstrating various extreme weather events, many of which have been assessed to be as a result of climate change. The recent IPCC AR6 report and the 'Climate Change Risk Assessment Report 2021' issued by Chatham House in September 2021, both point to worsening weather conditions, which will be in excess of those included in CPUK18. Given the length of time that SZC will need to be protected, given that virtually every climate change report published makes forecasts more extreme than the previous ones, TASC consider it is not acceptable to rely on government forecasts published 3 or 4 years ago. The extremes that have been experienced elsewhere are being reported as being way beyond the worst case predictions. This is why TASC believe that storm forecasts used in the Applicant's modelling are not extreme enough nor do they assess the likely impact from multiple storms that could hit Sizewell in a sequence that does not allow for replenishment of the SCDF. This would appear to be of great importance given the integrity of the HCDF appears to totally rely on the presence of the SCDF.

TASC note that the Applicant has refused to sanction an independent expert review of flood risk assessments and coastal geomorphology, despite the importance of these issues. This calls into question the veracity of the Applicant's own calculations. Indeed, TASC wonder what experience the modellers used by the Applicant have in the area of coastal engineering-we are aware CEFAS claim to be expert in the matter of assessing commercial fish stocks, but we are not aware of their coastal engineering prowess. TASC remain sceptical of CEFAS's conclusions that wave heights at Sizewell would be smaller without the Dunwich-Sizewell Bank as this appears to be in contradiction with a common-sense view, we question whether CEFAS have investigated why the modelling shows such an illogical result? Modelling is only as good as the data input and the quality of the software.

Modelling for shut down of SZB- TASC share the concern advanced by Paul Collins [REP8-280] regarding the apparent lack of modelling for the cessation of operations at SZB and what the impact will be from the loss of the salient that has been built up through SZA's and SZB's operations.

<u>Sea Defence Designs-</u> TASC are concerned that the sea defence designs have been delivered so late in this process that proper scrutiny by IPs is not possible. TASC have concerns that the toe of the HCDF would likely need to be adapted within the lifetime of the project, so are dubious as to why the Applicant is not proposing a more robust design at this stage.