SIZEWELL C PROJECT The National Planning Inspectorate Examination

Written Submission for Deadline 7 providing commentary on EXQ2 CG.2.6 in particular on Coastal Geomorphology

Response from the Alde and Ore Association (Registered Charity number 1154583)

#### IP REF:20026276

The Alde and Ore Association exists to protect for the public benefit the Alde, Ore and Butley rivers and their banks from Shingle Street to their tidal limits together with features of public interest. It has some 2000 members.

## **Summary**

The revisions to the CPMMP have addressed only matters within the 3km vicinity of SZC. There is nothing to deal with the impact of the project on the longshore drift or other coastal changes which may impact on the adjacent Suffolk coastline despite the proven geomorphological history and ongoing sedimentation processes. Having a baseline relating to all potentially affected areas, notably in relation to longshore drift, and climate change factors impacting in the coast for the very minimum of the physical life of the construction, is necessary. The legal and funding framework is not clearly set out or obvious.

Detailed comments on CG.2.6 Impacts on coastal processes. Text in italics is ExQ's questions

EXQ asks for indications whether there are any further concerns in relation to the revised CPMMP, REP5-059,

i. As regards the wording of that draft plan including in relation to the geographical extent of the proposed monitoring, the means of monitoring and future mitigation to maintain the shingle transport corridor and mitigation triggers?

**Geographical extent:** The Association remains concerned about the geographical extent of the proposed monitoring: it objects to the minimalist SCZ centred, isolationist approach. Table 1 states the maximum extent of monitoring will be 3km centred on SZC, that is Thorpe Ness headland to Minsmere Outfall- this is inadequate as the limitation does not recognise the Suffolk coastal sediment flow system and the interconnected nature of the evolution of the Suffolk coastline, on which much evidence has been submitted (including REP2-204, REP2-510 and several more). No response has been seen from the Applicant in relation to the knock-on effects along the coast.

# Means of monitoring and future mitigation to maintain the shingle transport corridor

- a) Terms used in the CPMMP are not defined and need to be to ensure that the matters to be surveyed and on which data is to be collected are clearly understood and adequate baselines established. For example, in Table 1 Section 7 there needs to be a clear definition of 'beach survey', (does it just mean beach profile or include aspects such as pebble size and longshore drift), equally in Para 1.1.2 the broad term 'geomorphology receptors' / 'geomorphic receptors' is used but there is nothing to indicate what is to be covered. At the least the CPMMP needs to state that the items to be monitored will be agreed jointly by the Applicant and the Marine Technical Forum.
- para 1.1.2 on monitoring states that statutory authorities should only provide feedback "relevant to the project". The CPMMP has set a firm limit of a 3km area and so appears to exclude considering any other area however much it might be impacted by the project. On the basis of the current draft the Applicant would be able to argue that such data is not within the compass of the CPMMP and so is not relevant, so

that mitigatory action would not be considered. There need to be provisions for the Applicant to make and to consider at regular intervals observations related to the wider stretch of the related coastline.

- c) The statutory authorities should have an equal role in deciding when data collection on any aspect can be run down or ceased, or needs to be increased, given their extensive expertise and awareness of the characteristics of the coast which they manage in various ways.
- **d)** Para 1.1.4 states that "... monitoring the separate elements of the geomorphology receptor for impacts will capture both the potentially significant and the anticipated insignificant impacts". How can this be correct for the Suffolk coast that might be affected by the project if the monitoring and mitigation only extend to a 3km stretch?

Further, Chapter 9 states that 'mitigation for coastal geomorphology is only proposed with respect to two potential interruptions to continuous longshore transport' for the HCDF and BLF. This indicates there is no intention to take account of wider coastal impacts of the proposed construction.

- e) The plan should be based on scenarios/modelling, including sea level rise and climate change features including more violent storms and surges, going beyond 2110 (see Table 3 in para 7.1 sets that limit). Such calculations are needed until at least 2190 when the plant may be taken away and that is only provided that means of removing the nuclear waste off the site have been found.
- The plan for mitigation is by using shingle using recycling, bypassing or recharging. This recognises that shingle moves, albeit much more slowly than sand, but recycling and bypassing would keep the shingle within the Bay and prevent it from continuing its normal role of the long term drift southwards and so would impact on the adjoining coastline. Thus, the monitoring and mitigation to maintain the shingle corridor is too narrowly construed being applied only to a 3km length despite the fact that the shingle corridor runs all along the Suffolk coast.

# **Mitigation triggers**

- a) The second aim stated in the CPMMP Executive Summary is to' maintain the longshore shingle transport corridor, thereby minimising or avoiding impacts of an exposed hard coastal defence feature (HCDF). Para 7.5 also states that "The aim of the proposed mitigation is to maintain the longshore shingle transport corridor." Since the monitoring is proposed to centre on SZC and is for a 3 km zone only, the CPMMP, as designed, cannot achieve that aim of maintaining the longshore transport corridor of the coastline within which SZC would sit.
- b) As currently proposed, the CPMMP contains no monitoring to trigger mitigation along affected adjacent coasts. This is not acceptable.
  - ii. In relation to the funding of the monitoring and mitigation process by the Applicant and the duration for that to process and funding to be in place?

There is very little said about funding in this document but by implication in wording on costs it appears that the Applicant would carry the cost of monitoring.

There is little here on the provision of a full legal and funding framework which means that the document is still work in progress and not complete.

## iii. The means of securing and enforcing the CPMMP provisions?

REP5- 059 states that the Sizewell Marine Technical Forum is to facilitate open and transparent dialogue with the statutory environment authorities (these are not actually listed but should be). It is only about dialogue to inform SZC action. Whilst the role of discharging authorities is recognised, this appears to be a passive one and it would appear to give no authority to the statutory authorities should they consider action is required (para 1.1.1)

iv. Whether this now satisfactorily addresses the details sought of the proposed secondary mitigation in the event that the SCDF-supported sediment pathway across the site frontage is interrupted?

Para 7.1 clearly shows that it is known that the HCDF will disrupt longshore shingle transport as it could become exposed after 2053) quote." Avoiding an exposed HCDF prevents dividing the otherwise continuous shingle beach in two and partially or fully blocking the longshore shingle transport corridor. Were such a condition to persist, shingle starvation and erosion on either side of the exposed HCDF would be expected" but the mitigation proposed relate only to the frontage formed by the SCDF. There is nothing in the CPMMP which addresses impacts of changes in the sediment pathway caused by the SCDF or HCDF other than within the 3km Greater Sizewell Bay area.

Further, in Chapter 10 it is made clear that any mitigation will only address the Greater Sizewell Bay, its geomorphic elements, coastal processes and transport rates and pathways. This does nothing for other parts of the coast which are likely to be affected by disruptions in the natural sediment pathway along the entire Suffolk coast whether Thorpeness village to the unique Orfordness further south. The changes do not begin to address the need to consider mitigation for coastal areas which could be affected by the massive intrusion in sediment pathways by the protruding HCDF. This should be preferably as far south as Shingle Street to safeguard the unique shingle shoreline and composition of Orford Ness.

- v. no question printed
- vi. Whether any further changes/provisions are required to safeguard the Coralline Crag from avoidable unnatural deterioration?

Any drilling into the Coralline Crag is likely to increase its vulnerability to erosion. The latest plans for the desalination plant simply add to the amount that needs to be done already.

Alison Andrews, Chairman Alde and Ore Association 3 September 2021