Together Against Sizewell C

Deadline 10 Submission TASC IP no. 20026424

TASC comments on Applicant's actions following ISH11 (Water Issues) document 9.104 REP8-125 submitted at deadline 8

Para 1.11 Timeline on spent fuel storage

1.11.1 ***"****As set out in Appendix 2B of the Fourth ES Addendum (electronic page 113) [REP7-032], initially for the purposes of the EIA it is assumed that the end of operation of the Sizewell C power station will be in 2090s. By 2140s, the Interim Spent Fuel Store (ISFS) will have been decommissioned and 2190 has been assumed as the theoretical maximum site lifetime."*

1.11.2 *"Before decommissioning of a new nuclear power station can take place, there is a requirement for the operator to undertake an Environmental Impact Assessment (EIA) and prepare an Environmental Statement under the relevant EIA Regulations, such as Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (Ref. 5.1) and the Marine Works (Environmental Impact Assessment) Regulations 2007. For the Sizewell C UK EPRTM units the preparation and submission of the EIA will take place in the years leading up to End of Generation. The EIA performed at that time would take full account of the environmental impacts of decommissioning."*

1.11.3 *"Further to the above information, SZC Co. can confirm that the Main Development Site FRA explicitly sets the timeline for assessment at epage 31 [AS-018] and for the subsequent MDS FRA Addendum [AS-157] assessment. This therefore matches the timeframe for the storage of spent fuel, with 2140 defining the end of nuclear decommissioning activities."*

The Applicant made the comments above following TASC's oral representation at ISH11 where TASC advised the hearing that, based on information supplied directly by the ONR to TASC, the Flood Risk Assessments to 2140 were inadequate as it is expected that spent fuel will still be on site beyond 2140 and the site will not realistically be fully decommissioned until 2190-2200 i.e. a period of approximately 160 years after SZC starts operation, and that would only be if a GDF was available to dispose of the spent fuel. TASC's comments can be seen under Agenda Item 3b) in our ISH11 submission at deadline 8 [REP8-285a] which includes a copy of the ONR's statement confirming the timeline.

The comments in para 1.11 above, were similarly made by the Applicant at the ISH recorded in **document 9.100 [REP8-121]** at:

1.3.5 *Mr Wilson on behalf of TASC raised concern surrounding the timeline for spent fuel storage and alignment of timeframes within the FRA, citing direct correspondence in August 2020 on fuel storage from the ONR to TASC. He explained that given his own calculations together with the information*

detailed in the ONR's written response, the storage of sufficiently cooled spent fuel would be far beyond the timeline set out in the Applicant's submission in REP5-120 at electronic page 1218, within Appendix J.

***1.3.6** Mr Hanson responded by confirming that the timeline for the FRA was entirely consistent with the timelines set out in the overall application, but suggested that a note be produced to explain these timelines in the context of spent fuel storage. [A note is appended to the Applicant's Written Submissions Responding to Actions Arising from ISH11 (Doc Ref 9.104)]*

TASC consider that the comments at the ISH and in the actions following, do nothing but confirm the Applicant has decided on a post-commissioning date of 2140 and that they have applied this date to their Flood Risk Assessments, but they provide no evidence to justify that the 2140 date is appropriate. TASC consider that it is essential to use the timeline independently supplied by our nuclear regulator that indicates that the site will not be fully decommissioned until the end of the twenty-second century, particularly when one is looking at something as critically important as the ability to keep the site safe from flooding.

TASC draw attention to the joint ONR/Environment Agency advice note 'Principles for Flood and Coastal Erosion Risk Management' which states, in Appendix A on page 10, *"Full life-time of the station* [should be represented by] – *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, but is generally understood to be 160 years* [emphasis added]*."* The same document on page 12 states *"… PINS should be satisfied that the applicant is able to demonstrate suitable flood risk mitigation measures. These mitigation measures should take account of the potential effects of climate change in the most recent marine and coastal flood projections. Applicants should demonstrate that future adaptation/flood mitigation would be achievable at the site, after any power station is built, to allow for any future credible predictions that might arise during the life of the station and the interim spent fuel stores."*

How can PINS be 'satisfied' when the Applicant's FRA is only up to 2140, a period five or six decades shorter than required? In addition, the UK have formally adopted the IPCC's AR6 report setting out dire warnings about the impacts from climate change, so the Applicant needs '*to allow for any future credible predictions that might arise during the life of the station and the interim spent fuel stores.'* TASC do not consider that the Applicant's assessments have done this.

TASC would also add that these issues highlight serious short-comings in the Applicant's DCO application insofar as it does not include a programme for the decommissioning of SZC, nor does it include the specification for the Dry Fuel Store in order to demonstrate that the spent fuel can be stored safely for its lifetime.