From:
To: SizewellC

Subject:deadline 10 submisstionDate:12 October 2021 23:03:55

Attachments: SZC DCO deadline 10 submission.docx

We wish to send you the minutes of our meeting which was held on 11th October and a full summary of correspondence from members of the public, which will take a week or so. Thank you.

On behalf of Aldeburgh Town Council

### Deadline 10 submission from Aldeburgh Town Council

#### The overall process of the DCO

Aldeburgh Town Council has attempted to fully engage in the DCO process, attending or observing all Issue Specific Hearings, Open Floor Hearings and reading as much of the materials as possible. However, it has been a daunting process and extremely stressful for both the Council and our residents, those who work in or visit here, and our businesses and organisations.

Before outlining our final submission for Deadline 10 we wish to reiterate our concern that the energy DCOs have been badly timed. To begin the Sizewell C DCO prior to the end of the SPR EA1N and EA2 DCO and to begin the NGV Nautilus informal consultation while the SZC DCO was still in progress has limited our ability to engage and participate, and our resources are exhausted by this and the clashes in timetable caused. Two or three months would not have adversely impacted either project significantly and would have given communities a well needed break between them.

We have found the PINS Inspectors to be courteous and patient, but the use predominantly of online for Hearings (except for most recently) has also disenfranchised many residents and visitors especially as broadband is not stable in this area, and it has been an actual or perceived barrier to participation.

Covid-19 has also added to the complexity of our lives, both personally and as Elected Councillors as we needed to provide additional support to our community which includes many older residents and young families experiencing financial hardship and deprivation. The pandemic also reduced the amount of networking we could do to support each other between Hearings or deadlines.

## Outstanding concerns

As late as Monday 11<sup>th</sup> October we received a briefing from EDF staff, and the following are a summary of our outstanding concerns by theme.

# A. EPR Design

- 1. We have always understood that the EPR design would have to be replicated at SZC both due to the generic approval and to reduce costs, enable smooth transition of trained/experience workforce etc. We now believe there are elements which will be different if this is the case we believe further consultation about other elements should have been undertaken either by the applicant direct or via East Suffolk council. The cooling water pumphouses cannot be replicated as the tidal range here is much lower than that at HPC- so its altimetry is different but it serves the same purpose. The dry fuel store is replicated though in a different relative location on the site may we be told why and what impact this has on the overall decommissioning considering that the DFS would be one of the last buildings to be removed and one of the most furthest west closest to communities.
- 2. What lessons have been learned from the shutdown of the EPR reactor at Taishan? What caused the fuel failure? What implications are there for other reactors using the same technology e.g. Hinkley and proposed Sizewell C? Will any adjustments be necessary and if so, what are they? If there are no answers to all the above, why not and when are there likely to be recommendations?

- 3. Presumably a similar amount of concrete to that used at Hinkley will be needed here. Is there a carbon calculation for that use?
- 4. Why is the European Pressurized Reactor design being used when there is no conclusive evidence that it is the best design?
- 5. What happens when fusion takes over?
- 6. Does EDF have any intention of planning for the disposal of spent fuel? New build fuel will be the longest to remain in situation.
- B. Financial model
- 1. Given the experience of Wylfa, how is the whole operation to be funded? Pension funds (e.g. Prudential, Aviva, Legal and General) have said that they will not invest. What are the alternatives? Is the expectation that the Government will fund it all? Who will own the power station and on what terms?
- C. Sea defence and use of beach:
- 1) No one walks on the beach at HPC, in fact there is no beach as such the land beyond the jetty is an estuary. We have asked how EDF will compensate for loss of the beach to build the temporary and permanent BLFs. Thye have said: "We only expect irregular and very short closures of the beach in the interests of public safety. During the construction of the BLFs we have proposed temporary diversions and will provide the public will lots of notice prior to closure. The closures will be kept to a minimum and the No one walks on the beach at HPC, in fact there is no beach as such the land beyond the jetty is an estuary. How will you compensate for loss of the beach to build the temporary and permanent BLFs? We only expect irregular and very short closures of the beach in the interests of public safety. During the construction of the BLFs we have proposed temporary diversions and will provide the public will lots of notice prior to closure. The closures will be kept to a minimum and the
- 2) How will beach access, including access to the grassy area presently used by walkers, runners, cyclists etc. be affected by the rock armour needed for the sea defences proposed? Is this actually going to be the full area as demonstrated by the recent beach protest? How do EDF justify this?
- 3) For how long do you think the proposed sea defences will last, before needed to be extended to cope with increased sea levels? Official climate change forecasts for the UK are published by the Met Office Hadley Centre Climate Change programme as UK Climate Projections (UKCP). They are regularly updated and peer reviewed. While the latest projections provide UK-wide estimates of the effects of climate change they also show there will be regional variations. The projections for conditions at Sizewell show that even under the worst-case climate scenario, maximum wave heights are likely to decrease. Sizewell C will be built on a platform standing approximately 7 metres above today's mean sea level and will be protected by a sea defence structure which will be more than 14 metres above mean sea level. These and many other measures

incorporated into the design of the power station will protect it from the sea. To make sure our plans are future proof, our sea defence will be adaptable and could be raised in future if sea level rise turns out be greater than current predictions. Based on current forecasts, any adaptation would not be needed until 2140 and then only under the most severe climate change scenario. We have performed thousands of hours of flood risk modelling using the highest plausible estimates for sea level rise in the Sizewell area. Our assessments show that the power station and access road will be built to withstand a 1-in-10,000-year storm and 1-in-100,000-year surge events. Although extreme storm events could result in some sea water coming over the sea defence and pooling around the site, it would drain away in a matter of hours. This is predicted, planned for, and reflected in the design of the entire Sizewell C site. To monitor the situation, drones are flown over the Sizewell beach each month and photograph every 3cm square of the coastline, producing 3D maps of any changes. Radar and tide gauges also allow us to monitor sea conditions and levels at Sizewell throughout the lifetime of the power station. If there are any unexpected developments, we will take action to address them. Our sea defence plans are strictly regulated by East Suffolk Council, the Environment Agency, and the Office for Nuclear Regulation. We believe the sea defences will be needed well into 2130 when a new deep deological facility will be started.

Hinkley Point C and Sizewell C both take advantage of lessons learned from Taishan, which is home to the first two EPR units in the world to enter commercial operation. SZC would be the 7th and 8th EPR units in the world, so would benefit from a large body of experience from construction and operation of the rest of the EPR fleet. More specifically, learning from Taishan is shared through the EPR Owners Group (EPROG) with the other plants under construction. We are aware that Taishan recently experienced failures in a small number of fuel rods, well below the levels permitted by the plant technical specifications. This is a known and not uncommon occurrence in the operation of nuclear power plants. The plant was shut down in order to inspect and replace the damaged elements. Unit 1 was shut down in July to carry out maintenance following the defects to the very small number of fuel rods. In June, the NNSA (Chinese regulator) estimated that as few as 5 out of more than 60,000 were affected. Fuel unloading has now been completed and inspection of fuel assemblies is continuing. This will take several more weeks. 4 The phenomenon involving a loss of tightness in some fuel rods is well understood and the plan is now to replace the affected fuel rods. [Radiation from noble gases in the primary circuit was well below permissible levels]. EDF's view about the need for a shutdown was to enable the maintenance work to be carried out as early as possible rather than to wait for a statutory outage. Taishan 2 continues to operate normally. It should be noted that the fuel assemblies for HPC and SZC will not come from the same manufacturer as for Taishan. Fuel for HPC and SZC will be manufactured by Framatome, who have a long experience of working with EDF including the supply the fuel for Sizewell B. 9) How has it been possible for EDF to leave the issue of water supply until such a late stage in the process when water is such an integral part of the technology? What guarantees will EDF be able to give that there will never be any interruption to water supplies for consumers/farmers/other local businesses if planning is granted, given that the water supply is essential to the safety of operation and they will likely take precedence? We have a clear, deliverable strategy for supplying water to the Sizewell C project during both construction and operation. There will be no impact on the supply of water to local communities from any stage of the Sizewell C project. The construction of the power station would include many activities that require a regular supply of water, both potable and non-potable. Like all elements of construction, it was an important consideration for the engineers, planners and expert third parties working on the Sizewell C proposals over the last decade. Therefore, prior to

submission of the application for development consent, SZC Co. developed a sustainable water supply strategy by engaging with relevant stakeholders such as the utility companies and the Environment Agency. Our planning application includes proposals to eventually access water from a permanent water main. Until the building of that connection is complete, it was our expectation from work with these stakeholders that the supply of potable water in the early years, using existing water network connections, would be feasible. However, very recently the water companies indicated here could be a risk that the full requirement of potable water in the early years of construction might not be met. This is because water abstraction in the region is becoming more restricted- irrespective of whether Sizewell C goes ahead - and the plan under discussion with water companies for some years to use existing water supplies while a pipeline to bring additional water into the area is put in place was called into question because of this change in the availability of water. As a responsible applicant focussed on ensuring the impacts of construction are avoided, mitigated or compensated for, we therefore proposed the change to include a temporary desalination plant on the main construction site, away from both Sizewell Marshes SSSI and 5 Sizewell beach. This will provide a reliable, continuous source of water while the permanent water transfer main is completed. For the initial 9-12 months of construction, while the temporary desalination plant is being built, water will be supplied by tanker from commercially available fill points outside of Essex & Suffolk Water's (ESW) Suffolk supply network. The demand over this period will increase gradually to a maximum 40 tanker deliveries per day using the A14/A12 strategic road network. There will be no increase in planned HGV numbers over this period because other non-critical deliveries have been re-scheduled. Sizewell C's construction demand for potable water will then be met in full by the temporary desalination plant, which has been rigorously assessed and demonstrated to be sustainable. This construction demand takes account of a raft of measures that will be used to reduce the demand for potable water. These measures include maximising water recycling, use of water efficient fixtures and fittings and use of sustainable non-potable water sources for activities that don't require potable water, such as dust suppression. SZC Co. continues to engage closely with Northumbrian Water Limited (NWL), of which Essex & Suffolk Water is a part. Subject to regulatory approval of ESW's part of the Environment Agency's Water Industry National Environment Programme (WINEP) investigations – and if new supply schemes are required – approval of its next Water Resources Management Plan 2024 (WRMP24), has publicly committed to supply Sizewell C's long-term mains water supply for commissioning and operation. Whether or not this supply can sustainably be sourced from their Northern/Central Water Resource Zone (WRZ) using the proposed transfer main depends on the outcome of their WINEP studies which are expected to conclude in mid-October 2021. If these studies demonstrate that sufficient spare capacity is available in the Northern Central WRZ to meet the demand of NWL's existing and future customers (including Sizewell C's long-term water supply), NWL will use reasonable endeavours to ensure it is likely that the new transfer main will be available before construction ends. If not, NWL will seek to identify new resources to meet the forecast demand through the Water Resources Management Planning 2024 (WRMP24) regulatory process, which is expected to conclude by 2024. If consented, Sizewell C's temporary desalination plant will operate up to the start of commissioning in approximately 2032, so there is ample time available for Sizewell C's longterm water supply to be established, either way. 10) Who is going to pay for Sizewell C's construction? Please see the answer to question 15. 11) How will beach access, including access to the grassy area presently used by walkers, runners, cyclists etc. be affected by the rock armour needed for the sea defences proposed? Is this actually going to be the full area as demonstrated by the recent beach protest? How do EDF justify this? 6 This is a difficult question to answer because we have no idea what area was occupied by the recent protest to comment whether it is correct or not. It is important to note that while the sea defences will be more seaward than the Sizewell B defences, if the protestors

marked the full area to where where the toe of the hard defence will terminate that would be an exaggeration of the loss of amenity. The ground overlaying the toe (between 5 and 9 metres) of the hard sea defence will be landscaped and available for walkers, runners, cyclists etc. The extent of the hard sea defence, the placement landscaping and the footpath are clearly shown on the DCO plans. 12) Does EDF have any intention of planning for the disposal of spent fuel? Or is this

- D. Mitigation and governance:
- We do not believe that the 11 pledges to the community will have reference to Aldeburgh residents, workers and visitors – however we remaing concerned as follows. Hinkley Point C and Sizewell C both take advantage of lessons learned from Taishan, which is home to the first two EPR units in the world to enter commercial operation. SZC would be the 7th and 8th EPR units in the world, so would benefit from a large body of experience from construction and operation of the rest of the EPR fleet. More specifically, learning from Taishan is shared through the EPR Owners Group (EPROG) with the other plants under construction. We are aware that Taishan recently experienced failures in a small number of fuel rods, well below the levels permitted by the plant technical specifications. This is a known and not uncommon occurrence in the operation of nuclear power plants. The plant was shut down in order to inspect and replace the damaged elements. Unit 1 was shut down in July to carry out maintenance following the defects to the very small number of fuel rods. In June, the NNSA (Chinese regulator) estimated that as few as 5 out of more than 60,000 were affected. Fuel unloading has now been completed and inspection of fuel assemblies is continuing. This will take several more weeks. 4 The phenomenon involving a loss of tightness in some fuel rods is well understood and the plan is now to replace the affected fuel rods. [Radiation from noble gases in the primary circuit was well below permissible levels]. EDF's view about the need for a shutdown was to enable the maintenance work to be carried out as early as possible rather than to wait for a statutory outage. Taishan 2 continues to operate normally. It should be noted that the fuel assemblies for HPC and SZC will not come from the same manufacturer as for Taishan. Fuel for HPC and SZC will be manufactured by Framatome, who have a long experience of working with EDF including the supply the fuel for Sizewell B. 9) How has it been possible for EDF to leave the issue of water supply until such a late stage in the process when water is such an integral part of the technology? What guarantees will EDF be able to give that there will never be any interruption to water supplies for consumers/farmers/other local businesses if planning is granted, given that the water supply is essential to the safety of operation and they will likely take precedence? We have a clear, deliverable strategy for supplying water to the Sizewell C project during both construction and operation. There will be no impact on the supply of water to local communities from any stage of the Sizewell C project. The construction of the power station would include many activities that require a regular supply of water, both potable and non-potable. Like all elements of construction, it was an important consideration for the engineers, planners and expert third parties working on the Sizewell C proposals over the last decade. Therefore, prior to submission of the application for development consent, SZC Co. developed a sustainable water supply strategy by engaging with relevant stakeholders such as the utility companies and the Environment Agency. Our planning application includes proposals to eventually access water from a permanent water main. Until the building of that connection is complete, it was our expectation from work with these stakeholders

that the supply of potable water in the early years, using existing water network connections, would be feasible. However, very recently the water companies indicated here could be a risk that the full requirement of potable water in the early years of construction might not be met. This is because water abstraction in the region is becoming more restricted- irrespective of whether Sizewell C goes ahead - and the plan under discussion with water companies for some years to use existing water supplies while a pipeline to bring additional water into the area is put in place was called into question because of this change in the availability of water. As a responsible applicant focussed on ensuring the impacts of construction are avoided, mitigated or compensated for, we therefore proposed the change to include a temporary desalination plant on the main construction site, away from both Sizewell Marshes SSSI and 5 Sizewell beach. This will provide a reliable, continuous source of water while the permanent water transfer main is completed. For the initial 9-12 months of construction, while the temporary desalination plant is being built, water will be supplied by tanker from commercially available fill points outside of Essex & Suffolk Water's (ESW) Suffolk supply network. The demand over this period will increase gradually to a maximum 40 tanker deliveries per day using the A14/A12 strategic road network. There will be no increase in planned HGV numbers over this period because other non-critical deliveries have been re-scheduled. Sizewell C's construction demand for potable water will then be met in full by the temporary desalination plant, which has been rigorously assessed and demonstrated to be sustainable. This construction demand takes account of a raft of measures that will be used to reduce the demand for potable water. These measures include maximising water recycling, use of water efficient fixtures and fittings and use of sustainable non-potable water sources for activities that don't require potable water, such as dust suppression. SZC Co. continues to engage closely with Northumbrian Water Limited (NWL), of which Essex & Suffolk Water is a part. Subject to regulatory approval of ESW's part of the Environment Agency's Water Industry National Environment Programme (WINEP) investigations – and if new supply schemes are required – approval of its next Water Resources Management Plan 2024 (WRMP24), has publicly committed to supply Sizewell C's long-term mains water supply for commissioning and operation. Whether or not this supply can sustainably be sourced from their Northern/Central Water Resource Zone (WRZ) using the proposed transfer main depends on the outcome of their WINEP studies which are expected to conclude in mid-October 2021. If these studies demonstrate that sufficient spare capacity is available in the Northern Central WRZ to meet the demand of NWL's existing and future customers (including Sizewell C's long-term water supply), NWL will use reasonable endeavours to ensure it is likely that the new transfer main will be available before construction ends. If not, NWL will seek to identify new resources to meet the forecast demand through the Water Resources Management Planning 2024 (WRMP24) regulatory process, which is expected to conclude by 2024. If consented, Sizewell C's temporary desalination plant will operate up to the start of commissioning in approximately 2032, so there is ample time available for Sizewell C's longterm water supply to be established, either way. 10) Who is going to pay for Sizewell C's construction? Please see the answer to question 15. 11) How will beach access, including access to the grassy area presently used by walkers, runners, cyclists etc. be affected by the rock armour needed for the sea defences proposed? Is this actually going to be the full area as demonstrated by the recent beach protest? How do EDF justify this? 6 This is a difficult question to answer because we have no idea what area was occupied by the

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- What measures, if any, will EDF take to make sure that mitigation funding benefits communities directly and adversely affected by the project, rather than just going into a pot that benefits the larger, more densely populated areas? Note: This question prompted by feedback from the residents of the small communities in the immediate vicinity of HPC who said that the majority of the mitigation funding went to benefit large urban areas such as Minehead, who were far less significantly/adversely affected by the build. This was felt to be disproportionate and unfair.
- 3. We understand that Aldeburgh representatives will be invited to sit on the general forum but that this will only meet once every quarter. What will the mechanism be to deal with issues between meetings. (Feedback from HPC residents was that the email and telephone number liaison service was not effective). EDF have pledged that an elected Aldeburgh Town Councillor will sit on the Main Development Site Forum. It will meet initially in advance of construction then quarterly until a year after the end of construction. There will also be an over-arching Sizewell C Forum which will meet annually to inform all East Suffolk parishes of progress through construction.
- 4. One of the big concerns for local residents around HPC is about the impact on roads for the safety of cyclists, with several deaths having occurred. With this in mind, what safety measures will EDF be prepared to add in Suffolk e.g. cycle lanes to ensure the safety of cyclists?
- 5. Having visited the construction and accommodation sites, what steps will be taken to return the large area of woodland, marsh, footpaths and farming land to its current state?
- 6. Why had the applicant pressed ahead and agreed the Tourism fund with East Suffolk when local town and parish councils and the DMO do not believe this will be sufficient? How is this listening?

We do not believe EDF can achieve 60% via rail and sea, and we know that the temporary and permanent beach facility with bring adverse impacts to Aldeburgh both from loss of amenity, impact on tourism and risk of flood, impact on coastal processes. Between meetings there will be a Community Relations Team working throughout construction and into operation which will work with local parish councils, attend monthly meetings if invited, and respond to inquiries from both representatives and residents. There will be regular emails to parishes and newsletters to local residents which will promote the freephone number for raising any inquiries.

### E. Desalination plant

The applicant is continuing to claim that the desalination plant will only be temporary. EDF say "the temporary desalination plant will supply the construction demand for potable water up to the start of commissioning in around 2032. SZC's long term supply of 2.2Ml/d as a daily average for commissioning and operation (including outages) will be provided by NWL. This was confirmed by them in the examination." This is not our understanding of what NWL can provide.

Outages increase the volume required significantly and will occur every 6months lasting for three months (with three reactors on an 18month refuelling and maintenance cycle).

Regarding location EDF say "For the first 2-3 years the temporary desalination plant will be sited within the Main Construction Area away from the beach. After that it will be moved to the temporary construction area." We do not believe this is a sustainable or green option.

There is no mention of prior to the building of the temporary desalination plant and the need for water to be brought in tankers which will increase pressure on the roadways.

We also remain concerned that given that the water supply is essential to the safety of operation and they will likely take precedence over communities, farmers and our hospital etc?

### F. Cumulative impact

As witnessed today clashes of timetable have meant it was impossible to attend all events. We would be grateful if PINS would specifically include all information known or unknown regarding their peers.

We remain unconvinced that the promises by EDF have no teeth, and it becomes part of a wider, inclusive strategy.

Disadvantages continue to outweigh advantages, yet the application has not revisited the Community pleadges offered. The SPR DCO and current NGV DCO should be considered in full along side this document.

We also wish to submit minutes of our meeting on 11<sup>th</sup> October, and transcript of the responses received from the public. Thank you.