Response to Secretary of State's Request for Information, 25th April 2022

Theberton & Eastbridge Parish Council Middleton cum Fordley Parish Council Stop Sizewell C Minsmere Levels Stakeholders Group and B1122 Action Group

1. Summary of Concerns and Objections

As a group of organisations and individuals, we are not, in principle, opposed to nuclear power. However, we have been brought to oppose Sizewell C as a result of years of insufficient information, unsatisfactory community engagement, obfuscation and hidden agendas (such as with the route of the SLR, and the reasons for destroying Coronation Wood) from the Applicant, and the multiple cumulative impacts on our community and environment.

We are pleased that the Secretary of State (SoS) has given Interested Parties an opportunity to consider the two sets of questions to the Applicant and others regarding the Sizewell C (SZC) Development Consent Order Application (DCO) along with some of its shortcomings and less well-defined proposals, as well as the responses received from the Applicant and those other consultees.

This response from the two Parishes and three organisations represents the views and perspectives of some of the geographically closest communities to the northwest of the proposed construction site, which will also be significantly impacted by the Sizewell Link Road and proposed Early Years use of the B1122, which runs through both Parishes. We trust that you will bear this in mind when considering the responses below.

Minsmere Levels Stakeholders Group is a member of Suffolk Coast Acting for Resilience (SCAR) and has long been involved in monitoring and contributing towards raising issues regarding the Suffolk coastline between Coastguard Cottages at Dunwich and the southern extremity of the Southern Minsmere Levels close to the northern end of the Sizewell C development. We have worked with the RSPB, Environment Agency and Internal Drainage Board over the years on both the refurbishment of the Minsmere Sluice and upgrades to the North Wall at RSPB Minsmere.

2. Water Supply and Desalination

Whilst we understand and accept that the Applicant and Northumbrian Water (NWL) are working towards the provision of potable water supply starting with the commissioning of unit 1 the further commissioning of unit 2 and the continuing operational phase of both reactors SZC, it remains a concern that this provision is subject to its own separate regulatory and approval regime.

However, we are in agreement with the Applicant's statements during the Examination that desalination is not an appropriate solution for the supply of potable water for either the construction or operational phases of the project.

It is highly regrettable that the Applicant has failed to secure an adequate potable water supply for the project and that this only became apparent close to the end of the examination.

NWL, back in 2016, stated that water supply was not an issue and that this was well in hand (correspondence available), a statement that was supported by the Applicant during the various consultation stages, yet desalination has since become the only solution for the construction phase.

We remain concerned that a dedicated desalination plant might end up as the only viable solution for the operational phase and would seek to ensure that without a clearly available mains water supply that the project is not approved.

Whilst approval of any scheme for increasing the water supply in WRMP24 for this region is being assumed by the Applicant, there is still the issue of putting all the infrastructure and delivery pipeline in place in a timely fashion. Whilst 10 years might seem an adequate timeframe, there is good reason to be cautious.

So, we understand the concern of the Secretary of State BEIS (SoS) that should this fail to materialise, that some thought should be given to a dedicated desalination at the SZC site.

We also are aware that during the GDA assessment for the EPR reactor, the potential for permanent on-site desalination has been allowed for (2.2.4).

The suggestions for siting and dealing with the brine output, whilst being subject to appropriate licensing from the Environment Agency (EA), we are still concerned regarding the impacts of suggestions from the Applicant.

We are also concerned that in 2.2.5, the Applicant seems to have added an additional requirement to the DCO by stating "The permanent design would be likely to include standby desalination capability within the plant to maintain security of supply during maintenance periods." As far as we are aware this was not part of the DCO requirement and does not appear on any site plan. It would also be subject to EA licensing.

2.1 Desalination Plant Siting

We recognise and agree that the temporary, container-based desalination plant cannot remain for the SZC commissioning and operational period.

The suggestion (2.2.9) that a desalination plant remain north of the SSSI Crossing close to the proposed temporary desalination plant but placed underground is unacceptable.

The infrastructure already proposed for this area, road, car parks and security entrance results in a permanent 25% loss of biodiversity over the long term, according to the Applicant's own Biodiversity Net Gain (BNG) Metric 2 assessment. The same assessment transferred to the current Metric 3 assessment required by the Environment Act 2021 legislation, shows the permanent loss to be greater than 25% (REP6-075).

Additional infrastructure, underground or not, immediately adjacent to the Minsmere to Walberswick Heaths and Marsh SSSI and Ramsar site, with its other associated designations, should not be allowed.

Whilst the effects, subject to detailed assessment (2.2.10), may not be materially significant compared to that already assessed for this construction site area, additional reductions in biodiversity due to service access areas and ducting for power, sea water feeds, potable water and brine outputs will add to the existing degradation of biodiversity and is unacceptable.

The second suggestion (2.2.9) is that an area of the Sizewell A site which is currently proposed to be used for the Sizewell B Relocation project be re-assigned for use by this desalination plant.

- Unfortunately, the Applicant proposes that Pillbox Field once again be utilised as an outage car park for the Sizewell B Relocation project.
- Pillbox Field is currently being used to provide tree, shrub and hedgerow planting compensation for the felling of Coronation Wood and other natural capital damage, where the relocated Sizewell B facilities and outage laydown area is located.
- The original Sizewell B Relocation application had Pillbox Field as an outage car park, but after objections to EDF and East Suffolk Council, EDF submitted an updated plan to use redundant Sizewell A space and use Pillbox Field for compensation planting.
- To revert to the original plan and lose Pillbox Field to outage car park would be an environmentally retrograde step.

- During both the Sizewell B Relocation planning application and during the DCO examination, the issue of outage car park sizes and their siting were discussed at some length.
 - In both cases statutory authorities and the examination authority questioned whether a combination of outage car park sharing and/or off-site temporary park and ride facilities would be a better and more environmentally considerate solution.
 - Given that the Land East of Eastlands Industrial Estate will have a small park and ride for the SZC construction period, perhaps this should be retained.
 - Alternatively redundant land and hard standing that is part of the Magnox estate at the Leiston branch line rail head, where the nuclear flask trains used to stop to load and off-load the transport flask could be re-utilised in this manner.
 - It was suggested by the Applicant at one point, during consultations, that this rail head and land could be used for the unloading of aggregate from freight trains for the SZC construction phase.

What should be avoided, if a permanent desalination plant is required, is for further damage to the biodiversity in the Sizewell Marsh SSSI, adjacent Minsmere SSSI and the important connecting habitat in between the two, the latter of which will be devastated during construction, with zero biodiversity contribution for at least a decade and permanently reduced biodiversity following post construction restoration.

Considering the need for the provision of sea water access and brine effluent dispersal for either of these desalination facilities (standby or permanent), the avoidance of any additional infrastructure being placed offshore should be the first consideration subject to EA licensing.

- As far as brine effluent dispersal is concerned, of the two remaining suggestions, dispersal via the cooling water outfall, given the significant dilution effects, would seem to be the most appropriate solution.
- For the sea water intake, utilising one (or both as backup) of the cooling water forebays would appear to be the solution provided there were no impacts to the safety of the cooling water feed to the reactors.

It remains of significant concern that the issue of potable water supply for this project was not and is still not resolved and only became an issue close to the end of the examination despite NWL stating back in 2016 that water supply was not an issue and that this was well in hand (correspondence available), a statement that was supported by the Applicant during the various consultation stages.

3. Traffic and Transport - Sizewell Link Road and Two Villages Bypass

In reviewing the Applicant's <u>main report responses</u> to traffic and transport questions 4.1 and 4.3 from the first set of questions from the SoS:

The initial argument that the delay would be two years or possibly three years if the current back-stop date is used (3.1.14) is spurious.

- If the Sizewell Link Road (SLR) and Two Villages Bypass (TVB) were to start notionally 2 years before the current Phase 1, the Phase 3 back-stop has no validity or meaning. A new back-stop would need to be agreed and we would suggest this should be simply that "Phase 1 cannot commence until both of these mitigations are in public use."
- Pre-commencement enabling works that precede Phase 1 could be started 12 18 months after the SLR is started and potentially be completed before TVB and SLR completion, whilst also taking regard for bird nesting season (3.1.14).

The statement at 3.1.7 that the project is not deliverable with the above is preposterous. The project for the SLR and TVB development would have to look different but under different constraints they could still be delivered.

Not providing mitigation in advance, as per planning requirements, behooves the
Applicant to have considered and assessed the alternative method and present both
during consultation and at the examination. No attempt has been made to achieve
and disseminate such an assessment (3.1.8 and 3.1.9) as indicated by the
Applicant.

The statement at 3.1.14 that the current project plan allows site clearance to avoid the bird nesting season, is simply nonsense. An altered time frame for this clearance within a new overall plan would allow such clearance to be scheduled at the appropriate time to avoid bird nesting season. To suggest otherwise is simply not credible.

The statements in 3.1.15 and 3.1.16 that the urgency for new nuclear is overriding is spurious, considering that any EPR development at Sizewell will take well over a decade and only contribute to additional CO2 impacts and no new low carbon generation until 2035, at the earliest.

These statements also run counter to a conversation with the SoS, at a business lunch in Ipswich on 26th November 2021, that indicated that should the two EPR developments be moved to the Wylfa site in Anglesey, the several years' delay would not be significant.

The statement in 3.1.18 that any delay to the SZC project would lock the government into a longer period than the government's ambition to decarbonise the electricity supply, is erroneous as the ESO has already stated that they expect the electricity generation system to be zero carbon by 2035, which is the earliest date by which any SZC project can be delivered. This assumes no delays and that the project plan succeeds in delivering on-time. Given all the experience with EPR deliveries around the world, including at Hinkley Point C, such a delivery would be a world first and, when reviewing other nuclear reactor developments worldwide, would suggest that it is an extremely unlikely event. Indeed the Applicant was at pains to

emphasise during the Examination that the government would support the SZC project whether it could deliver by 2035 or not.

The statement in 3.1.22 that such a development is needed for "energy security" completely ignores the fact that no uranium ore or yellow cake can be sourced within the UK. 52% of world supply is within the realms of Russian influence and many other source countries have significant agreements and mine ownership or output agreements with China. Considering it would appear to be government policy to reduce and remove China General Nuclear's involvement from the SZC project and the current policy towards Russia, there are significant issues with nuclear providing the UK with the "energy security" that is being striven for. There are also concerns over EDF's continuing relationship with Rosatom and Rosenergoatom through agreements signed as recently as 2021.

The references in 3.1.26 and 3.1.27 to the approval of the two Scottish Power windfarms and onshore infrastructure, despite potential adverse impacts on the integrity of three European Sites, fails to address or recognise the fact that these projects do not actually build any infrastructure on a Site of Special Scientific Interest and the main substation development is outside the Suffolk Coast & Heaths Area of Outstanding Natural Beauty. This was one of the two main reasons given by Scottish Power for choosing the Friston development site rather than sites closer to Sizewell, next to the two existing wind farm substations, that are within the AONB. It is also the case that these developments have a much lower CO2 developmental impact and are truly zero carbon at the point of generation, rather than low carbon for nuclear due to the ongoing mined and enriched uranium requirement.

In statement 3.1.32 the claim that any site won material from the TVB and SLR would have to be exported, is of course nonsense. Any site won material destined for the main site could be stored locally until such time as the main site is ready to accept the material. After all, the push to open the main site development in parallel to the TVB and SLR developments would only see the material being transported to a storage area identified as material/spoil heaps on the main site, close to Upper Abbey Farm.

In statement 3.1.33, the claim that only by progressing the project in this parallel way is it possible to save 20-30,000 HDV trips is also spurious as the material would simply be in storage at the SLR or TVB until such time as the two developments are finished. Then, the required 20-30,000 HDV trips to transport the TVB and SLR site won material can use the TVB, A12 and SLR to the SZC site and avoid the heavy and significantly difficult use of the B1122 for these and other abnormal indivisible load journeys, which average over 1 per day in the Applicant's proposal.

The statement in 3.1.36 that the delay in providing the SLR (or TVB) in advance would be to the detriment of amenity to other communities, is nonsense. As we argue below, the SLR has no (or minimal)I long-term amenity value. Those affected by the SLR development would have the same impact of the SLR development without the additional impact of traffic along the B1122. The other communities affected by construction at the main development site would simply have their amenity impact delayed until such time as the SLR and TVB were completed, and Phase 1 of the main development site started.

- Had Applicant's Route W been proposed (previously known as the D2 route for Sizewell B), the impact of its construction on communities is significantly less than for the SLR.
- In fact, the SLR route has only been proposed because it meets a "mass balance" requirement for the main development site that clearly has arisen during project planning (3.1.29 3.1.34).
- The Applicant had strenuously denied that a relief road was required to alleviate HDV traffic on the B1122 for the much of the pre-examination consultation period.
- Indeed, it was only in the final consultations that the SLR was proposed and the other alternatives, including Route W, were rejected.
- It is now clear that the SLR has been proposed because it satisfies the "mass balance" requirement at the main development site through its site won material, something that the Route W would not provide because of the much flatter terrain, but would have the advantage of being easier to construct prior to Phase 1 development being started.
- Route W was the preferred route of Suffolk County Council and many local communities.
 This route would also better serve the longer term needs of the Scottish Power wind
 farm developments, along with the other 6 potential wind farm and interconnector
 developments being proposed and outlined for the Leiston and Friston area as well as
 an improved access route to Leiston from the south.
- This just goes to show how little the Applicant has listened to the local communities about the need for a relief road and the Applicant's route selection of the SLR has only been because it fits with the Developer's "mass balance" requirement.
- Suffolk County Council (SCC) and Therese Coffey MP have pressed the Applicant to remove the SLR following any development as it offers no legacy and only potential additional costs in the long term, unlike the Route W route. Given the mass balance transfer to the construction site, this was always going to be rejected as impractical.
- It also means that by proceeding with the SLR, the cumulative impacts of SZC and all the approved and prospective wind farm and interconnector projects is maximised rather than minimised to the amenity detriment of the entire community in this part of East Suffolk.

In statement 3.1.37, the fact that insufficient planning and assessment has been done prior to the DCO submission to assess this alternative method, whilst also avoiding the requirement to deliver mitigation prior to project commencement, is no reason for acceptance of the Applicant's plan.

- The claim that, as a "twin and follow-on project to Hinkley Point C" would be put at risk because of any additional delay is also nonsense. It was said by the Applicant on several occasions during early consultations that the optimal follow-on time was between 2 and 4 years behind Hinkley Point C.
- Sizewell C is now much beyond even the 4-year follow-on having started earnestly in October 2016, but with some enabling works having been completed in 2008.
- Any additional delay, to get the project done right, will have minimal impact as many of those skilled workers will have to have found other jobs to bridge the inevitable employment gap that exists already.

The Applicant goes on to complain that their forward thinking, on what is potentially an
inappropriate mitigation project plan, would be perverse. On the contrary, to approve the
Applicant's current project plan, that does not meet planning mitigation expectations,
would be perverse.

In statement 3.1.38, the knock-on effects of the delays that could be caused by such a change in project plan, can only be laid at EDF's door, for a lack of foresight and determination to assess the alternatives. Such statements are a crude attempt by the Applicant to get their way without having invested sufficiently in preparation of the DCO submission.

- The total time that the SZC project has taken so far is 11 years compared to the 4-5 years that Hinkley Point C required to get to an approved planning application.
- Most of these delays are as a result of EDF's lack of determination to push the project forward, with work being stopped on several occasions, and now we find that essential assessments have not been done in order to look at this alternative project plan.
- Any delays are simply down to the developer's poor planning and poor execution, which
 also shows up in significant areas of this development, such as the coastal defences and
 potable water supply.

In statement 3.1.43 and 3.1.44 the fact that the impacts have been reduced, as far as practical, does not negate the fact that the HDV and other traffic predicted to use the B1122, in the existing project plan, makes the "Early Years" traffic impact along the B1122 close to the busiest time of the entire project, including with the TVB and SLR in place and operational. We are also concerned that experience at Hinkley Point C required an early increase in HDV traffic limits between Bridgewater and the HPC site despite EDF's "best laid" plans.

3.1 B1122 Mitigation

Whilst there are several noise and traffic mitigation proposals for the B1122 and affected residences, the plain fact is that provision of the real mitigation, especially considering the overall early years traffic volumes on the B1122, is for a relief road (the currently proposed SLR) to be provided in advance of any site development, as expected in planning law.

The requirements for many of the B1122 mitigation schemes would then be made redundant and the work could get started on the B1122 Corridor Repurposing Scheme to become a "country lane" more suitable for pedestrian and cycle traffic.

However, assuming the Applicant's plan is accepted for the SLR being constructed, in parallel to Phase 1 Site Establishment works, the mitigations proposed for the B1122 through Theberton have raised several issues with residents in Theberton and Eastbridge villages.

The proposal (3.4.1) for a zebra crossing to be created just south of the junction between Church Road and the B1122, would require street lights to be installed.

• The village has no street lights currently and it is the wish of residents not to introduce such lighting to the village, even temporarily, prior to the SLR being completed.

- The suggestion from Theberton and Eastbridge Parish Council is that the crossing be a "raised pedestrian crossing" with a narrowing but still suitable for the HDV traffic to pass in both directions.
 - The "raised pedestrian crossing" would be black and white but with no Belisha beacon or crossing lights and would work in conjunction with the proposed 20mph speed limit through the village between the proposed village gates, at the B1122 entrances north and south of Theberton.

The mitigations proposed for the B1122 through Middleton Moor, prior to the SLR coming into use, are also unresolved with proposals for footways, limited by the position of highway boundaries, and the rejection of a 20mph speed limit on this section of the road.

3.2 Changes to traffic flow in rural lanes to the east of B1122

The following issues, whilst not raised by the SoS, are issues that are still unresolved, despite discussions with the Applicant and with the Highways Authority.

- As a result of the connection of the SLR to the existing B1122 between Onners Lane/Moat Road and Potters Street, it is proposed that traffic be barred from exiting Potters Street onto the B1122.
- To achieve this, whilst Potters Street could still be accessed for entry off the B1122, exit back on to the B1122 would be shown as prohibited by signage at the junction and road users would be guided by a rearranged junction priority at the crossroads between Potters Street, Bakers Hill and Onners Lane. The current priority lies with Potters Street running north/south across the junction but would change to having Bakers Hill and Onners Lane having priority east/west and the expectation is that all egress to the B1122, and the eventual downgraded B1122 south of Theberton, would be via Onners Lane.
- Onners Lane is a narrow single-track lane with high verges and close hedging, no formal
 passing places, only field entrances that are mainly unsuitable for vehicles other than
 farm vehicles. It is already common for cars to have to reverse 50 to 100 yards to reach
 a position where oncoming traffic can pass.
- All but one of the lanes between Theberton and Eastbridge are single track lanes without passing places. The only one that has any passing places is the one that goes to Eastbridge from what will be the SZC site entrance roundabout and most of these are not maintained by the Highways Authority and are little more than sand/earth passing places on a slightly wider lane than Potters Street, Onners Lane, Bakers Hill or Church Road.
 - If this is to go ahead, some maintained passing places should be provided along Onners Lane and others on the main access route from the entrance roundabout to Eastbridge should be similarly improved and maintained.

4. Coastal Considerations

Regarding question 5.1 and the Applicant's response, we support Mr. Nick Scarr's submission on this subject "Sizewell C – Coastal considerations and TR553" and his previous submissions during the application and examination process.

Regarding question 5.2 and the Applicant's response, whilst we understand the nature of the Coastal Processes Monitoring and Mitigation Plan and its role in maintaining what will be a "volumetrically enlarged shingle beach" and that the Applicant will have plenty of warning of the cessation of Sizewell B operations in 2035, 2055 or any intermediate license extension date, the same issues remain concerning the Soft Coastal Defence Feature (SCDF) and its underlying Hard Coastal Defence (HCDF).

- When the position of the southern end of the HCDF is located, based on grid references on the Applicant's maps/plans, the eastern extent of the southernmost tip of the HCDF sits out on what is currently the Sizewell B salient.
- On several occasions we, and others, have requested more accurate mapping of the HCDF and SCDF position with respect to both the current beach (including Sizewell B salient) and sacrificial dune system, as well as the expected beach following Sizewell B cessation of operation (without SZC) to understand the positioning of the proposed HCDF and SCDF across what would be the natural sweep of Sizewell Bay. This request remains outstanding (REP8-280).
- Section 4.2.2 of the Applicant's response states that "Sizewell B's salient is expected to largely disappear over the course of a year or so once operations cease" and the SCDF "is expected to narrow by around 10m, restoring the shoreline to roughly straight."
- As "a volumetrically enlarged shingle beach" (4.2.3), the SCDF will be an unnatural feature on the Sizewell shoreline, which is already unnatural due to the Sizewell B salient which reaches and tapers to the north, right across the proposed SZC frontage (REP8-280).
- Whilst the CPMMP is designed to replenish the SCDF as trigger points are reached, we believe that insufficient weight is being given to the cessation of Sizewell B operation as it will lead to,
 - the removal of the salient "restoring the shoreline to roughly straight" in about 12 months
 - the narrowing of the SCDF "by around 10m"
- As the HCDF at the southern end is resident on the Sizewell B salient, there is a contradiction here between restoration of the shoreline to "roughly straight" and only narrowing the SCDF "by around 10m". If the former is true, it is likely that the HCDF is at serious risk of exposure.
- Given that the Applicant believes this restoration of the shoreline will only take about 12 months, then it is questionable whether the CPMMP controls and actions will be able to keep pace with a change in the shoreline which will be both dramatic and strive to remain straight for the lifetime of the SZC sea defences following Sizewell B cessation of operations.

- In this scenario, the CPMMP will be ineffective and the integrity of the SZC HCDF/SCDF and shoreline both north and south of SZC will be at risk with little hope that lasting mitigation can be applied through the CPMMP or any other means.
- We are also mindful of the views of RSPB and Suffolk Wildlife Trust, at paragraph 1.16 of their response to you, that "It is our view currently the only known method for maintaining dynamic shingle features of high conservation value is non-intervention and the ability for the features to move as required in relation to coastal processes."
 - Clearly should the positioning of the HCDF and SCDF, in combination with the loss of the Sizewell B salient, contribute to significant additional interventions through the CPMMP, then there will be considerable impact on these high value shingle features.
 - This scenario is borne out by the BNG Metric 2 assessment undertaken by the Applicant that already shows a 95% permanent loss on the shingle and dune habitats in front of the SZC site.
 - Should additional and more frequent interventions be required, those losses will undoubtedly worsen and additional impacts north and south to shingle and dune habitats will likely increase also.

5. Spent Fuel and Radioactive Waste

With respect to question 8.1(a) and the Applicant's response 5.2, we concur with Mr. Nick Scarr's analysis, in Appendix 4 of "Sizewell C – Coastal considerations and TR553", of the discrepancies between the Applicant's use of 2140 as a date for when all spent fuel will be removed and dates around 2190 used by the ONR and others for spent fuel removal.

6. Conclusion

Considering the Applicant's

- Inadequate plans for providing mitigation in advance of starting work on the main site, leading to very heavy use of the B1122 from Yoxford through Middleton Moor and Theberton and the begrudgingly late and inappropriate selection of the Sizewell Link Road route over Route W (D2), favoured by Suffolk County Council and others
- Over-reliance on the Coastal Processes Monitoring and Mitigation Plan to resolve what could be significant and long term erosion following the cessation of operations at Sizewell B, including exposure of the Hard Coastal Defence at its southern extremity
- Unrealistic 2140 end date for removal of all spent fuel and decommissioning completion when statutory authorities and EN-6 legislation point to dates closer to or beyond 2190
- Significant site flood risk beyond 2140 according to the Applicant's own assessments
- No agreed potable water supply plan for the operational phase of the Sizewell C reactors
- Unsupported biodiversity net gain claims and significant biodiversity damage post construction both at the construction site and shingle/dune foreshore
- Development of Sizewell Marsh Site of Special Scientific Interest with late and inadequate compensation plans that do not meet Environment Act 2021 requirements

The application for development consent should be rejected, as the Applicant has repeatedly refused to engage on all of these issues over the 11 year consultation and Examination period.