


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

Paul Collins – IP:20026395



1. Background and Summary of Concerns and Objections

I am a resident of Eastbridge who has lived here permanently for the last 11 years. Eastbridge lies on the border of RSPB Minsmere and the Minsmere valley, its paths, single track lanes, reed beds, grazing marsh and way of life are all under serious threat for the 12-15 years, or longer, that Sizewell C is likely to take to construct.

I'm a Councillor for Theberton and Eastbridge Parish Council, Chair of Stop Sizewell C and Co-secretary of Minsmere Levels Stakeholders Group (which is affiliated to Suffolk Coast Action for Resilience).

I have submitted a number of documents during the examination regarding Biodiversity Net Gain (BNG) and was also requested by the Examining Authority to take part in a Statement of Common Ground meeting with the Applicant because of the differences in interpretation of the Applicant's BNG assessment under Natural England's BNG Metric 2 assessment tool. I was supported by both Dominic Woodfield of Bioscan and Tom Langton, both of whom are Interested Parties to this Development Consent Order application and have expertise in habitat assessment and associated environmental matters.

I also took part in all but one (desalination – due to pre-arranged holiday) of the Issue Specific Hearings and have co-written many of the submissions and enhanced oral contribution transcripts on behalf of the various organisations referred to above and myself.

I remain concerned that the Applicant's approach to the whole consultation and examination period has been characterised by provision of options that are assessed with a level of predetermination that pays little heed to the needs of the resident community and is clearly focussed on the needs of the Applicant and their contractors but to the detriment of the residents.

Two examples would be the eventual choice of the Sizewell Link Road route, with its unmitigated construction project plan and the siting of the workers campus at the top of Eastbridge Road, which the Applicant stated was the preferred site, because the contractors wanted such a facility to be as close to the site as possible. The latter despite efforts by Suffolk County Council to investigate and suggest potential alternative sites in the area, which would have avoided creating a facility that will accommodate a population that will be between 40-50% the population of Leiston,

the nearest significant town. A situation that is so different to that at Hinkley Point C and its twin campus setup at the construction site and at Bridgewater, a town of approximately 45,000 people, that it really puts the Applicant's claim for replication of the Hinkley Point C construction into sharp focus.

Whilst the technical construction of the reactors may be replicated, the environment within which these reactors will sit within the erosion prone coast and East Suffolk societal aspects of the Sizewell construction site alongside poor transport infrastructure are completely different to that at Hinkley. Even the business environment, levels of unemployment, and labour availability in East Suffolk or Suffolk and Norfolk compared to Hinkley Point C with Bridgewater, Bristol and the industrial cities of South Wales simply cannot be considered as anything like comparable.

I support the combined submission of Theberton & Eastbridge / Middleton cum Fordley Parish Councils / Stop Sizewell C / Minsmere Levels Stakeholder Group and B1122 Action Group as well as the submissions of Nick Scarr, Bill Parker, RSPB/SWT, Dominic Woodfield (Bioscan), Tom Langton and Suffolk Coastal Friends of the Earth.

This submission will cover the following areas.

- Desalination and water supply
- Habitat compensation/mitigation
- Sizewell Link Road
- Coastal protection and mitigation
- Spent Fuel and safety
- Value for money
- Environmental Trust

2. Desalination and Water Supply

In November 2016, prior to the Applicant's Stage 2 Consultation, I had an exchange of e-mails with Northumbrian Water Limited via Essex and Suffolk Water regarding their ability to supply sufficient potable water to both the construction and operational phase of the Sizewell C project. On 17th November NWL responded as follows.

"I can confirm that we have had some early, confidential discussions with EDF to understand the timings, locations and magnitudes of the anticipated additional water demands arising from Sizewell C.

We are happy that we are able to meet this additional requirement by utilising the existing resource capacity (i.e. within existing abstraction licensed quantities) across the wider supply zone, but also by reinforcing the localised distribution network in a number of specific locations."

It has become all too clear that in 2021 the confidence in NWL's potable water supply provision statements were not sustainable or appropriate given the areas well known characteristic of being one of the driest parts of the country and that its aquifers were already considerably stressed. Indeed, the catchment around Leiston and Sizewell were already under significant pressure due to Sizewell B's operational consumption and the local increase in housing both built in the past 10 years and planned in response to government housing targets.

The Applicant has stated throughout the consultation phases that they do not consider desalination as an appropriate mechanism to supply their potable water needs for construction or operation.

So it is with considerable dismay that we are now in a position where the plan for construction will include both additional tanker traffic in the early years to bring in potable water until such time as a desalination plant can be accommodated and operational on the site of the SZC platform. There will also now be an increase in air pollution due to the requirement for a diesel generator farm to supply sufficient power to run the plant 24/7 for approximately 3 years before it can be connected to power from the local grid.

There is also the issue of the return of concentrated brine into the local offshore environment for at least 10-12 years. Sizewell Bay, immediately in front of the Sizewell C site, has sand bars close to shore and the proposed outfall for the desalination plant is in an area where it is not clear how well the continuous output of brine will disperse, despite the Applicant's proposed use of a "spreader" discharge head. The still concentrated brine will sink to the local seabed where it will impact local fish and flora and if insufficient mixing over time is achieved, significant harm could be inflicted upon this environment. It is also regrettable that no preliminary license had been discussed or applied for with the Environment Agency at the time the examination finished.

As far as a permanent desalination plant is concerned for the operational phase of the SZC power station, whilst such an arrangement has been considered during the Office of Nuclear Regulation's Generic Design Assessment for the European Pressurised Reactor, it is something that was never envisaged by the Applicant, and they still seem to be relying upon NWL to provide potable water from the commissioning stage and into the long term operation of SZC.

However, should such a supply fail to materialise, the current suggestions from the Applicant for siting a permanent desalination facility are both unacceptable from an environmental impact perspective.

- The suggestion to site the desalination plant on Goose Hill to the north of the site, but to place it underground, will further degrade the landscape.
 - It will further impact the loss of biodiversity on the “restored” construction site, already predicted to be a permanent 25% loss in the Applicant’s Metric 2 assessment, post development.
 - This area will move from mix of plantation and mixed woodland and arable to acid grassland and replacement planting.
 - However, it will also host the regular and outage workers car parks and the main two-lane access road from the B1122 to the Sizewell Marsh SSSI crossing, which will be subject to shift pattern use for the 900 permanent staff for the lifetime of SZC plus all the commercial delivery traffic.
 - There is no mitigation available for such use and the road will form a permanent inhibition barrier to wildlife that does not exist today and will be a major contributor to the 25% loss of biodiversity and permanently sever the current countryside connectivity between Minsmere and Sizewell Marshes.
 - The addition of an underground facility with its maintenance areas and piping infrastructure to the SZC platform will further impact the 25% biodiversity loss.
- The alternative site suggested by the Applicant is to utilise space from the Sizewell A site that has been made available to the Sizewell B Relocation Project to avoid the use of Pillbox Field as an outage car park.
 - In the current plan for the Sizewell B Relocation Project, Pillbox Field is being used as compensation/mitigation planting for the loss of Coronation Wood, which has been felled for siting the relocated buildings and staff/outage car park and laydown area.
 - Should the Applicant be allowed this retrograde step, Pillbox Field would revert to being an outage car park and the compensation planting would be permanently lost from that project, once again reducing the overall biodiversity losses at Sizewell.
 - There is currently no proposal to compensate for this permanent biodiversity loss.
- The only potential positive in the Applicant’s suggestions is that the concentrated brine output could be routed through the main SZC cooling water outflow. This would resolve the potential issue of concentrated brine accumulation and damage close to shore, as the brine would be significantly diluted in the large outflow volumes from the reactor cooling system.

Overall, this project should not be approved without a clear and unequivocal potable water supply source from NWL and to have reached this point in the application and

examination/approval stages of the project speaks volumes as to the competence of the Applicant.

Although it is not raised in your questions, there are also questions regarding the access to non-potable water for operations such as spoil heap spraying and wheel washing etc on site.

During the stage 4 consultation, the Applicant added a small reservoir at the northern edge of the site close to Eastbridge which was originally expected to be filled by winter rains sufficiently to see the requirement through the summer months. However, several suggestions were also posited by the Applicant to maintain the reservoir by negotiating the release of abstraction licenses from local farmers or direct abstraction from close to the Minsmere Sluice or piping water from the Benacre sluice (~20km north of Minsmere close to Lowestoft).

It is unlikely that local farmers, already under pressure to have their abstraction licenses reduced by the Environment Agency, would be able to release any abstraction licenses whilst maintaining their farms productivity. A number of farms have already created reservoirs on their land to help manage the summer requirement by abstracting during the winter months.

The Benacre Sluice suggestion is unlikely to be practicable due to the distances involved and the existing roll-back plans that will see the significantly at-risk Benacre Sluice decommissioned as the coast is rolled back into the valley to a new bund with water conservation areas inland of the new bund.

Additional abstraction from the Minsmere New Cut, close to the sluice is unlikely to be licensed as the New Cut has a number of abstraction licenses from it, including for the EDF Estate, which the Applicant was completely unaware of.

3. Habitat Compensation/Mitigation

The principle of habitat compensation and mitigation is clearly for the Applicant to have established these areas prior to any work taking place. So, I am pleased to see that the SoS has asked about the earlier provision of Marsh Harrier compensation in the Minsmere valley close to the Minsmere South Levels.

It is also good to hear that the Applicant intends to start the establishment of the reed bed and wet woodland prior to any work on site and continue some of the work already done in creating acid grassland on previously arable areas on the southern border of the Minsmere valley.

However, other areas of compensation, such as that for the loss of fen meadow at Sizewell Marsh, at Pakenham in West Suffolk over 30 miles distant, will not be started until after development and damage is done. Also being so distant and not in the saline influenced environment at Sizewell, the proposal to “transfer” material and species to this inland environment has been questioned as to its likelihood of failure.

This is not a “like for like” compensation and thus should be regarded as being inappropriate on both a distance and environmental setting measure, never mind the fact that it will not have been established before work starts.

However, having started these various works, also including Aldhurst Farm and Studio Fields complex, the Applicant has to properly maintain these areas and whilst the very visible Aldhurst Farm reed bed and acid grassland have been visibly worked upon, other areas are in danger of not meeting their expected development and thus falling short of the biodiversity net gain assessments that are being relied upon by the Applicant to provide the bald 19% improvement after all the construction site is taken away and restored.

When Studio Fields complex was visited last year and in prior years, the site was in danger of being significantly invaded with poorly diverse areas, with bramble and nettle incursion. In a more recent example, some woodland planting was made south of the Minsmere Sluice path, not far from Lower Abbey Farm. A stretch of approximately 100 mixed trees around 5 years old, were planted a couple of years ago with some shrubby plants on the southern side of this planting. These have clearly not been managed at all and during a count made on 22nd May 2022, 70 had already died and some 45 or so whilst being in leaf/needle were looking significantly stressed with leaf/needle cover well below what would be expected or evidenced in trees close to or in established woodland both to the east and west of the planting. Of the 70 dead trees, about 10 had clearly been storm damaged and had only trunk coming just above the supporting stakes. To establish such juvenile trees in the sandy and fast draining environment we have here, there should have been regularly watered for at least the first few years to allow them to establish healthy and sufficiently deep/extensive root systems to enable them to thrive in this environment.

Whilst the main site and it's off-site impacts have been examined along with Sizewell B Relocation, Sizewell Link Road, Two Villages Bypass and Yoxford Roundabout have also been assess for BNG, neither of the two Park and Ride sites nor the Freight Management facility have been assessed and as they all remove arable land and field margins and hedgerows for the best part of the 12 year construction phase, these elements further contribute to biodiversity losses not accounted for by the Applicant. In fact in their Metric 2 assessment of those areas that have been considered, Metric 2 cannot assess the impact of the loss of the construction site area for the 12 years it has no biodiversity at all. That is however possible is using the Metric 3 assessment.

All of this simply does not excuse the Applicant from claiming Biodiversity Net Gain when they are building on Sizewell Marsh Site of Special Scientific Interest which cannot be assessed in either Metric 2 or Metric 3 assessments (the latter required by the Environment Act 2021) and for which Natural England advise, quite clearly, that under such circumstances applicants should not claim any Biodiversity Net Gain.

4. Sizewell Link Road

I support the position and submission by the combined group of Theberton & Eastbridge / Middleton cum Fordley Parish Councils / Stop Sizewell C / Minsmere Levels Stakeholder Group and B1122 Action Group.

The Applicant's total lack of a dispassionate assessment of both Route W compared to the Sizewell Link Road and their late conversion to requiring this relief road has simply been to look for solutions to their own problems of backfill with little regard to the short- or long-term impacts that this route entails.

The Applicant has also failed to look at the cumulative impacts and potential advantages to the other 6 potential energy projects being considered for this area, two of which, are already approved.

Whilst I understand that in considering this Development Consent Order Application the SoS is constrained by what is proposed, you also need to consider whether options have been appropriately assessed during the planning and submission process.

In this case I would argue that in the case of the Sizewell Link Road, the alternatives were not adequately assessed with some significant biases applied to Route W which appeared to show more significant residential disturbance than for the SLR.

You also have raised the issues that there has been no attempt to assess how the SLR might be delivered in advance of the main site preparation relieving the villages of Middleton Moor and Theberton from the very high early years HGV traffic associated with the existing project schedule. Whilst this approach would have been undoubtedly more difficult, it is not impossible without losing that backfill material that the Applicant requires.

5. Coastal Protection and Mitigation

The issue of the Hard and Soft Coastal Defence design and positioning relative to the existing coastline has been a subject that the Applicant has been extremely reluctant to engage in both during the consultation phase and into the early stages of the examination. All they were willing to discuss was the Coastal Processes Monitoring and Mitigation Plan (CPMMP) that was being discussed with the Marine Technical Forum and Coastal Protect East (a body responsible to East Suffolk Council).

It took the Examining Authority's insistence that the design of the Hard and Soft Coastal Defence be presented to the Examination, following arguments from Interested Parties, that the CPMMP could not be adequately assessed when no plans were available to measure its potential effectiveness against. During the examination we have been treated to four versions of those plans and, questions remain unanswered.

I was particularly pleased that you asked the question about the potential impact of the cessation of operation of Sizewell B, because it is a subject that only attracted a

couple of apparently insignificant comments in the various submissions by the applicant on their modelling the Soft Coastal Defence.

The Applicant insists that any natural coastal retreat due to the loss of the Sizewell B outfall maintenance of the Sizewell B salient will be managed through the CPMMP monitoring and potential beach recharge process.

However, we remain concerned that the precise position of the southern extremity of the Hard Coastal Defence, which according to the charts provided by the Applicant, is actually resident on the main Sizewell B shingle salient and is only one metre below Ordnance Datum. This is very high and should tides reach this hard point position, will cause damage both north and south of the hard point and because it is so high, the defence itself is at risk of being undermined.

The Applicant has since admitted in its submission to the SoS that the Soft Coastal Defence at this position will be 10m less deep than across the rest of the frontage but we still have not seen an accurate plan of where the whole of the Hard Coastal Defence and Soft Coastal defence is relative to the existing sacrificial dune system, natural profile of the beach without the Sizewell B salient, despite requesting such information over many consultations and during the examination.

There are going to be several forces at play here once Sizewell B ceases operation. The applicant states that once this happens the beach profile will take only a few years to return to its natural profile. These are.

- There is no equivalent SZC sustaining force to keep the salient in position as its outfalls at around 3km offshore and beyond the Sizewell/Dunwich Bank complex.
- Normal longshore drift will slowly erode the salient back towards the natural profile.
- The prevailing East and Northeastern winter winds will accelerate this erosion
- Any winter storms could rapidly exacerbate the salient erosion and to the extent that the Hard Coastal Defence at the southern end becomes exposed

Whilst the CPMMP might should be able to deal with some of the slower erosion processes it is unlikely to be able to cope with a combination of the quicker removal of the salient alongside any significant or persistent erosion due to the prevailing winds, such as have created a significant amount of erosion of the shingle beach and sacrificial dune this year. If a significant storm were to add to this pressure, the Hard Coastal Defence could easily be exposed and damage in a single event and the CPMMP would struggle to regain the upper hand.

Should this occur, there appears to be no Plan B, where repairs to the Hard Coastal Defence are considered. The whole premise of the CPMMP is for beach recharge operations. One only has to look at experiences at both Thorpeness and Benacre in recent years to know that once the Hard Coastal Defence is damaged, that the ongoing efforts tend to be constant and require hard coastal defence measures. These measures end up being temporary until the next set of strong prevailing winds and

tides or the next storm event and that even Plans B and C will not stem the damages.

For a nuclear power plant that will be operational for at least sixty years and with spent fuel resident on the site for up to 190 years (the Applicant's claim of all spent fuel being removed by 2140 is not credible), this Hard and Soft Coastal Defence proposal remains inadequate and the CPMMP incapable of maintaining it in difficult circumstances. Indeed should EDF not receive permission to extend the life of Sizewell B beyond 2035, the Soft and Hard Coastal defences could be under threat in the first decade of its operation.

6. Spent Fuel and safety

I fully support the submissions of Nick Scarr and Bill Parker on this subject and refer back to the comments made in the previous section regarding the maintenance of the Hard and Soft Coastal Defence through the CPMMP.

The fact that the Applicant is claiming removal of spent fuel from the site by 2140 is clearly predicated on the fact that their flood risk assessments beyond 2140 are not compliant with those expected in EN-6 legislation and directly contradict statements and expectation from ONR and Nuclear Decommissioning Authority and Radioactive Waste Management.

As Sizewell A, B and C are expected to become islands over the period prior to their full decommissioning, there is a legitimate question about whether additional defences will be needed not only to the rear of the site but also to the SSSI Crossing into the Sizewell C site which has not been addressed by the Applicant.

7. Value for money and cost estimates

I am concerned that the last estimate of costs for Sizewell C dates back to 2020 and has not been updated despite significant changes to the project, increases in estimates for materials including cement and steel, all of which have significantly increased in price since 2020.

EDF have recently revealed increased costs for Hinkley Point C rising to ~£26bn (2015 money) for a number of reasons, not just Covid-19 related. This has to put the estimate for SZC into considerable jeopardy, even if you accept EDF's commitment to a ~30% reduction for follow-on developments that learn from prior construction lessons.

Indeed, if you look at learnings from Olkiluoto, Flamanville and Taishan, lessons learned seem to be minimal or non-existent. Whilst it is easy to say, that Hinkley Point and Sizewell will be different as they are based on UK specifications, control and inspection, the fact of the matter is that the environments that the two sites represent are "chalk and cheese" and represent totally different challenges not only at the proposed site of the platform but also in terms of the infrastructure surrounding the site that is needed to support such a complex and large development.

Once the Applicant updates the cost estimate for construction and completion of this project, it should be remembered that NO EPR project has been completed on time or to budget and that, like Hinkley Point C, Sizewell C will be no different.

The difference will be that, unlike Hinkley Point C, Sizewell C will be financed by the Regulated Asset Base financing method and some level of risk for overruns and cost increases will be transferred to the tax payer through their energy bills or indirectly through the Treasury.

Such a situation is unacceptable, as it is clear that the Applicant cannot guarantee any level of confidence in their, as yet undeclared, estimated project costs given all of the current cost pressures on construction and inflation, which simply has not been accounted for in either the Applicant's current cost estimates or the somewhat arbitrary estimates of levies on energy bills through the RAB mechanism.

How a value for money assessment can be made, given all these moving and imprecise cost estimates, beggars belief and behoves BEIS to insist that the Applicant provides more detailed explanations of the issues besetting Hinkley Point C, as well as updating the Sizewell C cost estimates with a clear explanation of where any extra costs are being incurred.

Without such a detailed explanation it will be impossible to understand the basis of the updated explanation and its impact on any value for money assessments that may be made.

8. Environmental Trust

I need to raise an issue that has only recently become an issue. Theberton and Eastbridge Parish Council recently had a meeting with the Applicant on the Deed of Obligation. It has been widely claimed by the Applicant that the DoO contained ~£250m of commitments to the local community.

When the DoD is examined, the total commitments are somewhat less at around £175m, a point that has not been lost on our Suffolk County Councillor and their officers.

I questioned the Applicant about this and in particular about the £12m allocated to Environmental fund and its relationship to the Environmental Trust that the Applicant has set up. It turns out that there is a separate deed for the Environmental Trust but I could not find it on the PINS website, so have not been able to validate or examine it.

I have asked the Applicant to point me at this document on the PINS website but so far have received no reply.

To not be able to examine a document that accounts for £78m, or approximately 25% of the local support contribution is unacceptable.

The reality is that when you examine the pledges from the Applicant within the DCO, the vast majority of the pledges and contributions are simply mitigation for adverse effects on the local community and offer no recompense for the damage and

inconvenience that will impact the local communities for over 12 years of construction disruption.

9. Conclusion

The current proposal and responses to the SoS's requests for further information provide no additional confidence in the ability of the Applicant to organise, deliver and complete the Sizewell C project in a manner that meets the expectations that are expected, for what is oft described as an essential and timely development that meets the UK government's net zero aspirations and intentions in EN-1 and EN-6 legislation.

Indeed, in terms of meeting other aspirations for a net zero electricity distribution system by 2035, National Grid are clear that Sizewell C (and Hinkley Point C) will pay little part in those aspirations.

The Sizewell C project is both ill-conceived and unlikely to meet the goals set by the Applicant. It is clearly damaging environmentally by the Applicant's own BNG assessments and any delays that may occur merely compound these problems.

The Applicant continues to claim BNG that go against Natural England guidance, are in conflict with their own Metric 2 assessments and transposed Metric 3 assessments.

It is time to call a halt to this ill-conceived project and admit that the Suffolk coast with its uniquely biodiverse and interconnected habitats in this part of Suffolk simply should not be assaulted by such an inappropriate development that serves no-one well.

Please refuse this planning application and set the UK on a track that protects the environment from folly developments such as the one requested by the Applicant.

Yours sincerely,

Paul Collins

