



THE SIZEWELL C PROJECT

EN010012

NNB Generation Co (SZC) Ltd

Sizewell C Co's claims for Biodiversity Net Gain

WRITTEN REPRESENTATION/RESPONSE TO WRITTEN QUESTION (Bio.1.33)

Interested Party ID: 20025904

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Note to the Examining Authority

Please read this Written Representation in conjunction with the report by Dominic Woodfield of Bioscan, submitted in answer to ExQ1, Bio.1.33.

Suffolk Coastal Friends of the Earth wholly endorse Mr Woodfield's response, which considers the problems with Sizewell C Co's use of the Defra Metric 2.0 in more detail.

CONTENTS

1. Background
2. The mitigation hierarchy
3. A question of trust
4. How successful are habitat creations?
5. The Aldhurst Farm habitat creation scheme
6. Kenton Hills reptile translocation area
7. St James' Covert, Studio Fields and Great Mount Walk reptile translocation areas
8. Problems with the new roads
9. Overall loss of woodland
10. Conclusion

APPENDICES

REFERENCES

1. Background

The construction of Sizewell C nuclear power station will cause very significant losses and long-lasting damage to local habitats and resident and visiting wildlife. The decision was made by EDF Energy to use the Biodiversity 2.0 Metric produced by Defra/Natural England to assist in calculating such biodiversity losses. The tool was also used to calculate the gains that would result, should their proposals for habitat creation and enhancement be put in place, as a way of mitigating for this damage. This is in line with the Environment Bill, currently being considered by Parliament, and also the Government's 25 Year Environment Plan, both of which set out a vision for the restoration of the natural world. In addition, energy policy document EN-1 calls for applicants to 'show how the project has taken advantage of opportunities to conserve and enhance biodiversity' (section 5.3.4) and to 'minimise harm to the landscape'.

As local people we do, of course, know the Sizewell area very well, not least because the permissive paths around the Estate attract those of us who are walkers and nature-lovers, and also because the beach is very popular for recreation, especially in summer. Over the nine years of consultation for the Sizewell C project, we have noticed how the company's publicity leaflets have gradually claimed ever more gains in biodiversity, starting at a relatively modest 10% and now boasting 19%. At the same time, the amount of land to suffer the consequences of construction has also increased. We failed to see how the loss of yet more land, with its habitats and wildlife, could be reconciled with increasing claims for net gain in biodiversity.

We therefore invited Bioscan to examine the Applicant's documents relating to the claims, who immediately noticed what appeared to be anomalies and errors. In order to verify the results, the spreadsheets of the metric were requested, on which the data had been inserted. Since then, the Applicant has consistently refused to allow us to see these, despite Bioscan's appeal to the need for transparency.

Following Bioscan's complaints, EDF Energy decided to re-run their calculations and submitted these new reports at Deadline 1, 12 May 2021, leaving scant time for us to examine them and submit our conclusions by the next deadline of 2 June. Nevertheless, Bioscan has kindly agreed to scrutinise these new documents, despite the extreme time pressure. Spreadsheets are still not forthcoming. This is extremely worrying, as we are left wondering why the Applicant should be so determined to conceal them.

2. The mitigation hierarchy

The User Guide to the metric emphasises that the 'mitigation hierarchy should always be considered as the metric is applied'. Its aim is to 'limit damage to nature in the first place and help it thrive'. (Crosher *et al*, 2019.) This is a crucial point. The question, therefore, is whether EDFE has been true to this advice.

It is a deep concern of ours that the company has pushed ahead with its development plans without regard to the first step in this hierarchy, i.e. Avoidance. For example, there is no evidence that any attempts have been made to avoid driving an access road right across the Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) and over the Sizewell Marshes Site of Special Scientific Interest (SSSI), nor for building part of the station platform directly into the SSSI. While the metric is

not designed to consider impacts on designated habitats, the road would cause severe habitat loss and fragmentation of the landscape as a whole. Rather than avoiding such damage, EDFE has jumped straight to Compensation, mainly in the form of the Aldhurst Farm habitat creation scheme. Yet this is the final stage of the hierarchy and should only be used as an absolute last resort, the intervening steps being 'Minimise' and 'Remediate'. This is clearly a misuse of both the hierarchy and the metric. Principle 2 of the 'Biodiversity Net Gain Good Practice Principles' makes clear that impacts on irreplaceable biodiversity must be avoided as such impacts cannot be offset (CIRIA *et al*, 2016).

The same can be said for building and carrying out construction works on major parts of two of Suffolk's best-loved County Wildlife Sites, namely Goose Hill within Sizewell Levels & Associated Areas and Suffolk Shingle Beaches CWS. Here again, there has been no attempt at avoidance.

EDFE's aim has not been to 'limit damage in the first place', but rather to use this tool as a means of getting away with doing what they want to do as developers.

3. A question of trust

The effectiveness of EDFE's proposals to create new habitats, or improve existing ones, and thereby claim uplift for biodiversity net gain, depends entirely on how good the plans are, how well they are carried out, subsequent long-term monitoring and careful management. Some of these proposed habitats are not yet implemented and will not be until post-construction (after 2035), while others are only partly in place. At present, therefore, such habitats are merely hypothetical. Most of the biodiversity gain claimed for by the Applicant depends on the company's willingness to carry through the proposals as promised and to find the funds and staff for ongoing monitoring and management. This means that we, the local people, who will personally suffer from the consequences of this gigantic building project, have to trust that the proposed new habitats will indeed be created and cared for as declared.

We have to ask, therefore, how honest this company is. Parent company, Electricité de France, does not have a good track record. In 2014 they were fined in excess of 5m euros for using false information to raise the share price artificially, thereby misleading investors about the real cost of Hinkley Point C nuclear power station in Somerset. (Ambrose, 2020.) This is very unfortunate, as it leaves us doubting the company's trustworthiness.

It also raises the question of funding. The Applicant has committed to the setting up of an Environment Trust Fund to guarantee that sufficient money will be available for future creation and management of the promised habitats. Clearly, much would depend on how the fund is set up, the amount available and who would be in control of it. It is easy enough to make promises, but we are left wondering where such funds would come from, bearing in mind that EDF is in dire financial straits, with debts running into billions. The company openly admits that it cannot afford to pay for the building of Sizewell C and that the project would only be viable with very considerable, if not total, government support.

4. How successful are habitat creations?

Statistically, success rates for habitat creations are very poor. Those that are development-led fair particularly badly in comparison with the ones that are put in place for conservation enhancement. Part of the reason is that developers make these habitats in order to translocate species that happen to be in the way of their plans. Surveys beforehand may be inadequate and the overall ecological context may not be taken fully into account. Conservation professionals, however, have different aims, such as rescuing a species from extinction, or improving a habitat so that there is a better chance that the species will flourish and multiply. Yet even these scientifically responsible habitat creations, outside the mitigation context, show alarmingly low success rates of between 26-46% only (Germano & Bishop, 2009).

Worryingly, this indicates that the Applicant's habitat creation and restoration schemes to compensate for the losses at Sizewell are more likely to fail than succeed. These might be ameliorated if it could be demonstrated that the company's recent attempts at habitat creations and enhancements were exemplary. Unfortunately we cannot say that this is the case.

5. The Aldhurst Farm habitat creation scheme

EDFE are claiming biodiversity units for 49 ha of new heathland and acid grassland on this former farmland. While it is generally true to say that these habitats should be of more value for wildlife than arable land or improved grassland, much depends on the quality of the habitats that result and how well they are managed.

It is a particular concern of ours that the planning application for change of use was put in to the local authority, even though the project was clearly part of the Sizewell C proposals. The agreement for managing the land was for 10 years only, from 2015. This will therefore expire in four years. Who will care for it then? It is crucial, therefore, that monitoring and management 'in perpetuity' is secured through the DCO.

Complaints from local residents that the area had become overrun with weeds, prompted a visit from ourselves in early September 2020. Rather than the much-advertised acid grassland for reptiles, butterflies and ground-nesting birds, the southern area of the site had become dominated by thistles and docks, as the photograph shows (Appendix A). The only true acid grassland visible was a small area close to a copse of trees, where rabbits had kept the sward short by grazing.

As we had predicted, the nearby Leiston residents had already adopted this supposed wildlife habitat as a country park. Having broken down the fence, a new, unofficial path has been made right across the southern habitat area, where ramblers and dog walkers roam at leisure. (Photo: Appendix A.) There would be no hope here for ground-nesting birds and other wildlife. EDFE has done nothing to repair the fence and guide walkers along the designated footpath. People have no wish to walk there, as it is adjacent to the sewage works and, frankly, smells. Although EDFE have provided an alternative footpath, it runs alongside Valley Road and lacks appeal, so is never used.

As for the new wetland area, there is a striking difference between the two photographs in Appendix B. The first, taken in 2015, shows the new ponds shortly after instigation, while the second, taken from the same location in 2020 demonstrates how they have become badly overgrown. The

bindweed and rosebay willowherb have taken over, while the imported reeds are now so dense that no water is visible. Yet open water was an important component of the original plans, to compensate for that lost on the Sizewell Marshes. Proper management of this compensation site has been woefully lacking.

6. Kenton Hills reptile translocation area

We can find nothing in the Applicant's plans that demonstrate any attempt to avoid building on reptile habitat. All of the four protected species that inhabit the Sizewell Estate would suffer losses of much of their natural range. EDFE has therefore been obliged to mitigate in the form of reptile translocation areas, of which the Kenton Hills woodland is one.

In 2007, as part of their commercial forestry activities, EDFE began to thin out some of the trees. Later, when new plans for Sizewell C were being formulated, they realised that if part of this woodland was clear-felled, then it could be turned into heathland for future use as a reptile translocation site. They put up reptile fencing and captured and removed the existing animals. After the felling of large swathes of trees, brashings were evidently applied and gorse planted.

It is well known that heathland needs ongoing management. In former times this would have been achieved by local people cutting bracken for animal bedding and timber for fires and other uses. Here, the site, having been left, no longer shows any evidence of heathland, for which EDFE is claiming biodiversity net gain. By the summer of 2020 it had become badly overgrown with bracken and young silver birch trees. (See Appendix C, photo 1.) One of our members was very alarmed to witness a large tractor with cutting machinery entering the area during March 2021, just at the time when the reptiles would be emerging from hibernation. It is a serious concern that the reptile fencing was badly set up, with many gaps through which reptiles could pass. (Appendix C, photo 2.) Having found their way inside, they could become trapped and easily preyed. There is no water there and insufficient food.

It is unclear how many reptiles the company would relocate to this site. Are they simply returning those that were taken out? If more are to be added, would the habitat be able to support them? It seems unlikely. Would the fencing be left *in situ* to protect the animals from the adjacent construction site and heavy vehicles and railway line? We can find no relevant details in the Applicant's documents.

Natural England has made it very clear to us in a private communication that BNG 'can only be delivered alongside and in addition to any mitigation needs' (N.E., 2020). Yet EDFE have claimed net gain for four reptile translocation sites and one marsh harrier mitigation site. The purpose of these sites was to mitigate for reptile habitat losses and, in one case, marsh harrier foraging loss. Indeed, the site at Great Mount Walk doubles up for both reptiles and marsh harriers. Claims for biodiversity net gain seem to have been an after-thought, when it was realised that, without them, none could be proven. Yet a large part of the claimed uplift is from these sites. Principle 7 also states: 'Be additional: achieve nature conservation outcomes that demonstrably exceed existing obligations.' (CIRIA *et al*, 2016.) The Applicant has clearly failed to follow this principle. If these compensation sites are subtracted from the total then the claimed net gain would quickly fall into loss.

Even where BNG is allowable, as at the grassed areas of Aldhurst Farm (excluding the wetlands), we can see that EDFE cannot be relied upon to deliver the quality of habitat that has been promised. This means that the chances of long-term success are significantly reduced.

7. St James' Covert, Studio Fields and Great Mount Walk reptile translocation areas

The process at St James' Covert has been similar to that of the works at Kenton Hills, with areas of trees felled so that the animals, when introduced, would have space for basking and foraging. Net gain units here are being made for 'acid grassland'. However, it seems that the existing rides have simply been expanded to incorporate the felled areas. The rides already consisted of acid grassland, so should not be counted as additional. As for the felled areas, it is rough grassland being invaded by bramble. (Photo: Appendix D.) The reason for this, according to local ecologist, Tom Langton, is that no nutrient stripping has been carried out, leaving the soil too enriched. The land will therefore be subject to constant invasion by nettles and brambles. (Langton, 2020.) Management of this poses serious problems for the reptiles' safety. True acid grassland needs soil that is low in nutrients.

The same problem is evident at both Studio Fields and Great Mount Walk. These fields were formerly intensively farmed for arable use with regular application of fertiliser. In addition, the soil has become compacted due to the use of heavy machinery. Long-term management to achieve and maintain the target condition is therefore likely to be challenging.

8. Problems with the new roads

Friends of the Earth are totally opposed to the creation of new roads, especially those that are not strictly necessary, as with the Link Road and Two Villages Bypass. While EDF Energy has responded to certain local requests for these bypasses, our members do not support them. It is our view that much less damaging solutions could have been found, based on the existing highway network.

In assessing the net gains and losses of these new roads, no account whatever has been taken of the chronic impacts on the local environment and the resident and visiting wildlife that these new roads would cause. Such impacts are discussed in detail in our associated Written Representation concerning the proposed new Access Road, to which the examiners are referred (Fulcher, 2021). In addition to the inevitable roadkill, is the well-researched fact that there would be a drop in bird and animal populations, especially within 1km either side, of up to an average of 30%. It is a serious shortcoming of the metric that it focuses exclusively on habitats and that species are not taken into account, except in a very minor way through the 'distinctiveness' category.

Bypasses are particularly damaging, as the arc that is created between the new and old roads is simply too small to support thriving wildlife populations. Serious fragmentation is caused, so that colonies are unable to disperse to find mates. The result is inbreeding. The colony becomes weakened and the species will eventually die out.

A significant proportion of the land for these roads has no access, or access has been refused, so that 'professional judgement' has to be used to assess condition of the various features. This is most unsatisfactory and leaves one doubting that conclusions are robust.

9. Overall loss of woodland

Our members are particularly saddened by the loss of so much woodland, Goose Hill with Dunwich Forest alone amounting to 46ha. The whole of Coronation Wood has already been felled to make more space for Sizewell C buildings. When the loss of many hectares of woodland at Kenton Hills and St James' Covert, together with the BAP wet woodland from the SSSI are added in, then the amount lost easily exceeds the 50ha of new planting offered. The Applicant has not taken note of the government's aspiration to increase and enhance woodland, as set out in the 25 Year Environment Plan.

With climate change, planting of new hedges and woodland will become increasingly difficult due to drought, most particularly in this very dry region of East Anglia. Many saplings will not survive. Yet claims are made for 'good' condition of this new planting. We consider this to be overly optimistic.

Ancient woodland is excluded from the metric, as this clearly cannot be replaced. However, it is a great concern of ours that veteran trees are not even mentioned. This applies most particularly to the Two Villages Bypass. The new road would go straight through a historic walkway near Farnham Hall, which has hedges on either side containing veteran trees, some of which are oaks. Such trees are extraordinarily valuable for wildlife, each one supporting many hundreds of species, while also offering roosts for bats and nest sites for birds. No account whatever is taken of such losses.

10. Conclusion

Despite the Applicant's unwillingness to be transparent over the workings-out of the metric, both Bioscan and our Friends of the Earth group have clearly demonstrated that there are significant problems with this method of working out biodiversity losses and gains. Moreover, the Applicant has failed to follow good practice in respect of some of the principles, as set out in CIRIA *et al's* guidance.

We have pointed out that the Mitigation Hierarchy has not been followed in that there has been no attempt to avoid taking land from high-value conservation areas. We have also highlighted the question of trust and that the gains claimed depend largely on the company achieving and maintaining the target conditions. So far, the company has not performed well in these respects, as demonstrated in this paper. Added to this, developer-led habitat creations statistically have a very poor record for successful outcomes. This leaves us doubting the veracity of Sizewell C Co's assertions.

We challenge the use of the reptile mitigation land in order to show gains, as this would have to be created in any case. It flies in the face of both Natural England's position on the matter and also of Principle 7 of BNG good practice, whereby any net gains should be 'additional'.

The loss of so much woodland is also extremely regrettable as is the exclusion of valuable veteran trees.

It is ironical that net gain should be claimed for new roads, when by their nature they cause so much damage, in terms of roadkill, fragmentation, barrier effect, noise and pollution. None of this is factored in.

We are left with the distinct impression that the Defra Metric 2.0, which has been used to assess losses and gains, is a poor tool indeed. Essential factors are left out and it is all too easy to manipulate it. We are unable to trust, therefore, that an overall gain of 19%, as claimed, would be at all achievable. It is our view that overall losses are more likely.

APPENDICES

APPENDIX A



1. Aldhurst Farm: Dog walkers have created this path across the 'habitat creation'. No 'acid grassland' here with low sward as claimed. (R. Fulcher, 2020.)

APPENDIX B



1. Aldhurst Farm: newly constructed ponds.
(R. Fulcher, 2015.)



2. The same view (but slightly closer), with no
water visible. (R. Fulcher, 2020.)

APPENDIX C



1. Kenton Hills 'heathland', overgrown with bracken and successional silver birch.
(R. Fulcher, 2020.)



2. Gaps in the reptile fencing, Kenton Hills.
(R. Fulcher, 2014.)

APPENDIX D



St James's Covert: We welcome the log piles, but brambles are pushing through everywhere. (R. Fulcher, 2020.)

REFERENCES

- Ambrose, J. 'Hinkley Point C: French watchdog fines EDF 5m euros for false claims on cost.' *The Guardian*: 31/7.
- CIRIA, CIEEM, IEMA (2016). *Biodiversity Net Gain: Good Practice Principles for Development*.
- Crosher, I. *et al* (2019). *Biodiversity Metric 2.0 User Guide*. Natural England Joint Publication JP029: 29/07/19.
- Fulcher, R (2021). 'Harmful effects of the proposed new Access Road on designated sites and protected wildlife.' The Sizewell C Project: Written Representation.
- Germano, J.M. & Bishop, P.J. (2009). 'Suitability of amphibians and reptiles for translocation.' *Conservation Biology*, 23: 7-15.
- Langton, T. (2020). 'Biodiversity protection issues.' Response to EDFE's 5th consultation for Sizewell C.
- Natural England (2020). 'Sizewell C: net gain calculations.' Email communication. 29/05/20.