2011 Government Response to the Consultation on the revised draft NPS for Energy Infrastructure" – Executive Summary

PURPOSE

This paper was undertaken to review the proposals being brought forward by the Applicant, in the context of the 2011 response of the UK Government to the Consultation on the revised draft NPS for Energy Infrastructure.

SUMMARY

The Sizewell site is the second smallest included in locations bought forward by the UK Government (See figure at Page 1. It is just 2 Hectares larger than Heysham (the smallest) and nearly half the size of Hinkley Point C, the Applicants chosen location for a similar size and design power station to that considered in this dDCO.

As a consequence, it is vital the ExA view this Application in the context of the circumstances prevailing in the 2010 as well as in the 2021.

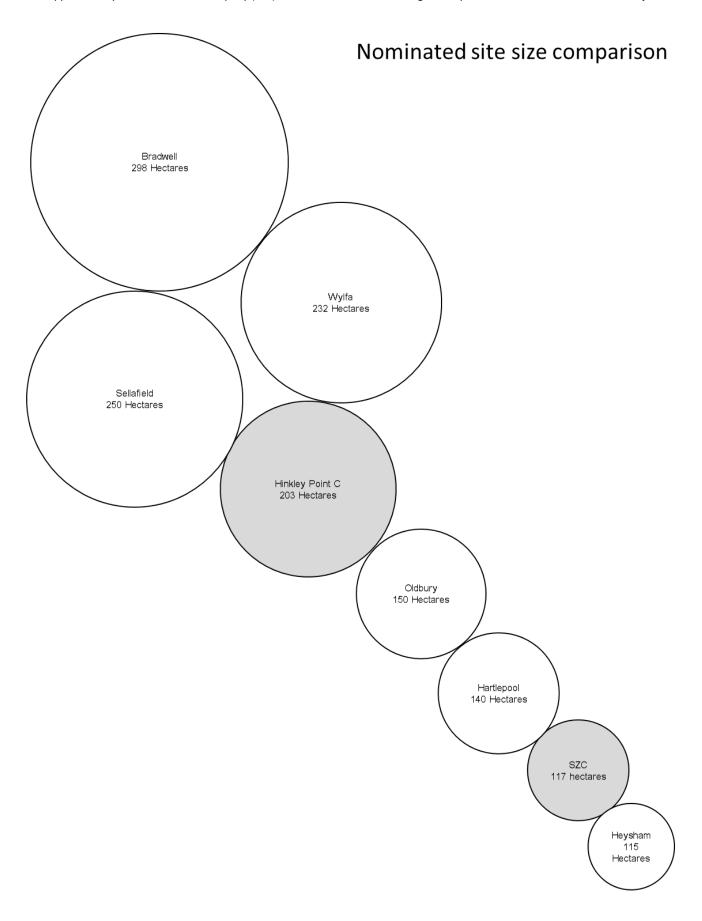
The National Policy Statement for Nuclear Power Generation (EN6) is 'very well thumbed' and referred to by all parties bringing forward, or opposing, proposals for Nuclear Power development in the UK.

Less thumbed, the 2011 response of the UK Government to the Consultation on the revised draft NPS for Energy Infrastructure provides further insights into the thinking and rationale underpinning the policy formulation of a decade ago.

This Representation draws on the response and invites the ExA to consider points raised and addressed by the UK Government in 2011.

IKH Galloway





NPS for Nuclear Power Generation (EN-6)

2011 Government Response to the Consultation on the revised draft NPS for Energy Infrastructure

1. INTRODUCTION

- **1.1** In the context of the Application before the ExA, the questions asked in the Consultation whilst wide-ranging do cover issues germane to the Applicants dDCO, specifically:
 - Q2 Do you have any comments on the revised "need case" in the Overarching National Policy Statement (EN-1)?
 - Q3 Do you have any other comments on the revised National Policy Statements and accompanying documents? These are:
 - a) Revised draft Overarching National Policy Statement for Energy (EN-1)
 - f) Revised draft National Policy Statement for Nuclear Generation (EN-6) including the list of potentially suitable sites for the deployment of new nuclear power stations by 2025
 - I) Revised Appraisals of Sustainability for EN-6
 - m) Appraisal of Sustainability Monitoring Strategy
 - o) Revised Habitats Regulations Assessments for EN-6
 - p) Revised Impact Assessment for the energy NPSs
- **1.2** This Representation is not intended to be an analysis of all areas covered in the Governments' response, instead dealing only with those material to the consideration of the dDCO.

2. Sizewell Site

- **2.1** In making its response to the Consultation on the revised draft NPS for Energy Infrastructure, the Government identified that:
 - "...there are a number of areas which would require further consideration by the applicant, the IPC and/or the regulators should an application for development consent come forward, including amongst other things coastal erosion and mitigation of effects on the Suffolk Coast and Heaths AONB." [Para 3.607]

In making this response, the Government clearly identifies the explicit obligation on Applicants to bring forward (amongst others) considered and substantive proposals to:

- i) combat coastal erosion, both existing and resulting from development of the Sizewell site.
- ii) mitigate the impacts on the Suffolk Coast and Heaths AONB arising from the; construction, operation and decommissioning of the proposed Application
- **2.2** It is my contention that currently, the Applicants dDCO falls far short of dealing with either of these obligations adequately.

Whilst not a subject expert on coastal erosion, I am cognisant of concerns being aired by parties with expertise, who seem to be indicating that coastal erosion beyond the Sizewell Site may be exacerbated by development there, dependent on decisions relating to flood defences, outflows, etc.

Equally, I am concerned that Applicant seems to be taking very limited action to mitigate direct and indirect impacts on the Suffolk Coast and Heaths AONB. It is my contention that the AONB is a living, breathing, ecosystem and landscape that draws in resources from an area far greater than the area designated and may be compromised from the main development and 'associated works' distant from the designated area. For example were the SLR to be constructed, not only would airborne pollutants have potential impacts, but also waterborne and wildlife transported pollutants.

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project **2.3** It is notable in the context of local concerns that, identified amongst the key themes of the Consultation in respect to the Sizewell Site was, Emergency Planning. The Government response remained silent on the issue at the time and eleven years on the issue of ensuring adequate provision for safe evacuation of the East Suffolk area during the construction phase of a SZC power station remains largely absent from the dDCO.

3. Climate Change Mitigation

- **3.1** In response to concerns regarding a report from the Institution of Mechanical Engineers titled "Climate Change Adapting to the Inevitable?" 2009 the Government concluded that "should sites achieve development consent, their capacity to withstand potential climate change will remain under consideration throughout the life of the nuclear power station. Once licensed, as part of the site licensing conditions, the licensee must review their safety case at regular intervals (typically on a ten year basis). This review will take the most recent climate change projections into account and allow the necessary modifications to flood defences and/or operating arrangements to be undertaken." [Para3.612]
- **3.2** At the same time the EA advised "...that they agree with the report's suggestion that the site might need additional flood protection in the future, as considered in their original advice for the site." [Para 3.6.11]
- **3.3** Since the Government made this response to a report made over 12 years ago, had a development simultaneously received consent, a review of the developers' safety case would have already been scheduled and completed, with another due within the next eight years.
- **3.4** Consequently, given the acceleration of Climate Change, its widening range of impacts, improved knowledge and reporting, the question has to be asked as to whether a ten year review is still viable?
- **3.5** Alternatively, should the ExA be seeking (within the requirements of the DCO) an ongoing Climate Change Impact modelling programme for the Sizewell Site, accompanied by a 'rolling' review of Climate Change Impact Mitigation and a programme of uplift?

To do so, could eliminate the potential for up to ten year delays in acting on identified Climate Change threats.

3.6 Then again, (as the site is projected to have a life through to circa 2130) it could be considered prudent to require the applicant to pro-actively design-in a long term climate impact horizon and the commensurate flood protection measures from inception, rather than rely on the operator undertaking cycles of review and 'incremental' reactive measures.

Such a requirement might require an integrated flood defence design for the entire lifecycle of the power station (i.e. 150 year horizon) that whilst being 'over-engineered' from the viewpoint of today, could avoid further invasive interventions on (or near) the shoreline.

4. Coastal Processes

4.1 Respondents to the Governments Consultation expressed widespread concerns regarding coastal inundation and erosion in areas adjacent to the Sizewell site. The Government in reply to these concerns relied extensively on the EA quoting that;

"The EA does not consider that the shoreline has come under greater stress in recent years." [Para 3.616]

"The EA considers that there is no accelerated rate of erosion and that its original advice is still sound" [Para 3.616]

Nevertheless the EA is also quoted as having "...advised that detailed modelling supported by data will be required to support the development application for a new power station." [Para 3.616]

It is the latter point that remains a concern following completion of the Preliminary Meeting, insofar as the Applicant has effectively failed to provide the necessary modelling data and analysis in a timely fashion.

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- **4.2** As a member of the public, I am increasingly concerned as it appears the Applicant is deliberately delaying, withholding or obfuscating over critical items of evidence, such that the EA and other interested parties have limited time to conduct their analysis diligently and advise the ExA responsibly.
- **4.3** As required by the Government by virtue of EN-1, among the questions that require answering during the Examination are not only whether the necessary detailed modelling has been undertaken by the applicant in support of the dDCO, but also whether the applicant can demonstrate how they intend to (amongst other things) minimise adverse impacts on other parts of the coast, including the effects of the proposed project on maintaining coastal recreation sites and features.
- **4.4** Additionally, is it clear to the ExA as to the extent of the works proposed by the Applicant constitute 'coastal defences' and if they are so determined whether they have been accordingly: assessed, mitigated and agreed acceptable?

5. Proximity to sites of National Ecological Importance

- **5.1** The adverse impact on the Sizewell Marshes SSSI has long been a concern of organisations (national & local) as well as members of the public. Consequently, the Draft NPS Consultation attracted significant disapprobation with many respondents questioning how mitigation of impacts was possible.
- **5.2** In its response the Government all but conceded the Sizewell Marshes SSSI would be irreparably impacted, saying "...development in the area is likely to lead to some direct loss and fragmentation of habitats..." [Para 3.620]
- **5.3** It continued "...there is some scope for mitigation or compensation for negative effects on biodiversity." [Para 3.620] highlighting "mitigations could include careful site layout, design, routing, location of the development, associated infrastructure, and sympathetic construction management and timings." [Para 3.621]
- **5.4** Consequently, it would seem incumbent on the ExA to thoroughly examine the processes of the Applicant by which they optimised the; site layout, design, routing, location and infrastructure to ensure impacts on the Sizewell SSSI are avoided and if unavoidable, minimised through an identifiable programme of mitigation.
- **5.5** Additionally, the ExA are asked to obtain from the client an independently audited construction plan catalogue that identifies all the species specific "sympathetic construction management and timing" actions planned throughout the construction, operation and decommissioning phases of the proposed SZC.
- 5.6 Not to do so leaves to chance critical issues that are, neither embedded in the construction management plan nor culturally rooted in day to day working.
- **5.7** In concluding its response the Government noted that "Artificial habitat creation can also be used to compensate for habitat loss..." adding "...full compensation may not be possible." [Para 3.621]
- 5.8 Whilst the Applicant may assert their habitat creation programme has discharged their obligations (in respect to safeguarding the SSSI) through mitigation, it is my contention that safeguarding the SSSI is not a binary choice and that habitat creation is only complementary to the more fundamental issues of embedded SSSI safeguarding in working methods and an ecologically sensitive timetabling of works execution.
- 5.9 I would respectfully like to draw the ExA's attention to Para 3.623 where the Government reinforce the need to safeguard against unnecessary or avoidable damage stating "...the IPC should use conditions and/or planning obligations to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest." concluding "It would not be appropriate to set such conditions at this stage before more detailed proposals are known, as the wrong effects or conditions may be specified." [3.623]

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- 6. Proximity to areas of amenity, cultural heritage and landscape value
- **6.1** Unsurprisingly there were similar and equally widespread concerns expressed in respect to the potential impacts on the Suffolk Coast and Heaths AONB, as there were to the impacts on the SSSI.
- **6.2** Moreover, much of the feedback highlighted that visual impacts were perceived as irrevocable, beyond mitigation and fundamental in undermining a core tenet of the 'Suffolk Coast and Heaths' AONB designation.
- **6.3** In making its response the Government countered "The nominator has noted that there is established plantation woodland to the north-west of the site and it would be the intention to retain some of this woodland to help screen the development." [Para 3.625]
- **6.4** Against this backcloth it would appear the ExA have a profound and fundamental role in deciding not just whether the AONB should be safeguarded, but also the degree of impairment it should bear in the event the ExA recommends the SoS should grant the dDCO.
- **6.5** In coming to a decision on this critical issue, the ExA should be mindful of the increasing popularity of East Suffolk as both a tourist, holiday, recreational and leisure destination, renowned amongst other things for its; AONB, Minsmere, heritage assets, 'dark skies', varied ecology, heathland, historic landscapes, accessible coastline, seaside resorts and communities, quiet secluded villages, country lanes, historic buildings and its extensive and its relatively unspoilt rural setting.
- 6.6 The Government continue, "The nominator has also proposed that mitigation is also likely to be achieved by minimising ancillary land use in those areas away from the main power station site, although this would depend on consultation with local planning authorities." [Para 3.625]
- **6.7** Whilst this is not expanded on in the response, could it be that in reality the Applicant is unable to utilise a significant portion of the site as it lacks sufficient "defence-in-depth"? [Annexes to the NPS EN-6 Volume II of II, Para C.8.7]
- 6.8 Alternatively, is it because to use the most westerly portion could mean breeching the "semi urban criterion?
- **6.9** The Office for Nuclear Regulation advise that whilst "...the site does not exceed the semi-urban criterion", [Annexes to the NPS EN-6 Volume II of II, Para C.8.7] it notes the proximity the boundary has to an area exceeding the semi-urban criterion.
- **6.10** This has given the ONR cause to advise the Government that "the Applicant should demonstrate that it has taken the advice of the Office for Nuclear Regulation on demographic risk, and that subject to that advice, the Office for Nuclear Regulation is satisfied that the proposals do not result in a direct radiological hazard being sited in an area which exceeds the semi-urban criterion." [Annexes to the NPS EN-6 Volume II of II, Para C.8.11]
- **6.11** Following procedural discussions at the Preliminary Meeting when it was unclear what order consents might need to be given, the added complexity of the "...Applicant should demonstrate that it has taken the advice of the Office for Nuclear Regulation..." seems to imply that the ONR have to give more than 'tacit' agreement prior to the ExA being able to advise the SoS.
- **6.12** For the benefit of members of the public and other Interested Parties that may be unfamiliar with 'Nuclear Approvals', could the ExA clearly and authoritatively lay out the logical permissions chain (with dependencies and interdependencies), preferably with a illustrative timeline.
- **6.13** In so doing, I believe this simple action will make the Examination more clear and transparent, with the added benefit of reducing conjecture betwixt the respective parties QC's.
- **6.14** At Para 3.627 the Government continues "The AoS assessment for Sizewell notes that the current power station is already a significant feature in the landscape and that any new build would be seen in this context. However, given the potential scale of the proposed new nuclear power station, it is likely that there will be adverse direct and indirect effects on landscape character and visual impacts on the AONB, with limited potential for mitigation."

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- **6.15** It is my contention, as demonstrated by the figure above that the first of the Government's assertions is both misguided and fatuous in the extreme. However, sadly their second assertion is correct, although woefully understated. The proposed power station is incongruous with its wider surroundings, of absolutely no architectural merit and of a size that makes no concession to its neighbourhood (i.e. rural, AONB, verdant, hospitable, organic, etc.) Instead it is brutalist and more 'metropolis film set' than 'Suffolk rural' in form. Moreover, in combination with SZA and SZB it describes the inexorable ascendency of corporate excess.
- **6.16** In concluding the Government are clear that the IPC have a fundamental role at "the project stage" in bringing about a further "...detailed assessment of visual effects and potential mitigation..." and as suggested by the AOS "an integrated landscape, heritage and architectural plan..." [Para 3.629]
- **6.17** It is my belief that the commissioning, development, agreement and scheduling of such an integrated plan should be widely consulted on and subject to approval by representatives of Parishes, local business, East Suffolk Council, SCC and other interested parties (AONB, RSPB, Natural England, National Trust, etc.) and led by an independent panel of experts acting 'in trust' for East Suffolk.
- **6.18** Funding the realisation of the plan should rest solely with the Applicant, alongside a suitable endowment to sustain the outcome(s) for the duration of the occupation of the site, until all inhibiting issues are cleared thereby permitting unfettered use of the space by the public (i.e. nuclear waste).

7. Size of Site to Accommodate Operation

7.1 In responding to concerns that;

- "...the size of the nominated site and the potential impact this could have on the AONB..." [Para 3.630].
- "...the site was 'too cramped' for the number of reactors proposed...there would be insufficient space within the nominated boundary...to avoid flooding." [Para 3.631]
- "...there is insufficient 'defence-in-depth' around Sizewell A and B." [Para 3.632]

The Government stated "To reduce the likelihood of further land being needed, and increase the usability of their site, nominators were encouraged to ensure that the area nominated included within it all likely actual site plans and all reasonable variations to those plans." [Para 3.633]

- Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project **7.2** This is particularly germane to the consideration of this dDCO, insofar as some proposals coming forward seem to rely heavily on accommodations being agreed with Sizewell A, others with Sizewell B, plus more foreshore impacts should marine delivery be used and potentially further incursions into the AONB to gain a suitable agreement on pylons and interconnect.
- **7.3** I have also been made aware that the larger Sizewell site (SZB and SZC) is being considered (outside of this dDCO) for Hydrogen and Direct Air Capture projects, which presumably may have some influences on site use and design within this project.
- 7.4 I understand that under normal circumstances a Planning Authority can only determine based on the Application in front of them. In this instance are the ExA able to explore with the Applicant whether strategic planning for either of the above mentioned projects (or others) has had an impact on the dDCO under consideration?
- 7.5 In this connection, potential accommodations with both SZA and SZB should also be considered
- **7.6** The Government response also reference "The ONR have expressed the view that there is sufficient space within the nominated site at Sizewell to provide defence-in-depth for at least one single unit nuclear power station, and for it to be safely configured." [Para 3.634]
- 7.7 This dDCO is for a power station comprising a twin nuclear reactor configuration. For the avoidance of doubt, given concerns with regard to; 'defence-in-depth' and other utilisation issues, can the ExA confirm with the ONR that remain confident that the site can be safely configured, noting the other potential activities (Hydrogen & DAC) already made known by the Applicant and in the public domain?
- 7.8 The ExA are asked to note that the wording of the Base Case assessment for the Sizewell Site was changed at the behest of the Applicant, thereby compromising direct comparison with other potential sites in the UK. This may be a key reason for the Applicant maintaining interest in the Sizewell site, when to outsiders others might appear more attractive development options?

8. Access to suitable sources of cooling

- **8.1** Water, its acquisition, use and disposal are always issues close to the surface in one of, if not the driest county in the UK, closely followed by another issue close to many residents and visitors alike, the fish that live in it!
- **8.2** So, when responding to these areas of concern, the Government starts "There are many forms of mitigation available to protect marine ecology from the effects of cooling technology." followed by "The HRA has suggested a suite of avoidance and mitigation measures which the IPC could consider when assessing an application at Sizewell." [Para 3.636] it is no surprise these issues will feature extensively during the Examination, particularly as there are many diverse views and significant differences of opinion on which techniques offer the least damaging outcomes.

The brouhaha at HPC regarding audible fish deterrent technologies are a concern and safeguards in respect to the proposed SZC must be more robust than the ones that are being backtracked on in Somerset.

9. Status of the NPS within the Planning System

- 9.1 Answering concerns that the NPSs (to some people) appeared contradictory, the Government reinforced that:
- "...the IPC must consider all of the criteria set out in EN-1 as well as the additional criteria set out in the technology specific NPS to which the application relates." [Para 3.757]

"NPSs are aimed primarily at providing a framework for the IPC to take decisions on major infrastructure projects. Decisions by the IPC (and in future, the Secretary of State) have to be taken in accordance with NPSs [Para 3.758]

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9.2 This position has been further reinforced in the Governments response to the 2017-18 - CONSULTATION ON THE SITING
CRITERIA AND PROCESS FOR A NEW NATIONAL POLICY STATEMENT FOR NUCLEAR POWER WITH SINGLE REACTOR CAPACITY
OVER 1 GIGAWATT BEYOND 2025 where the government clearly stated "National Policy Statements ("NPS") establish the case
for Nationally Significant Infrastructure Projects, as defined in the Planning Act 2008 ("the Act"), and set out the framework
within which the Examining Authority of the Planning Inspectorate ("PINS") will make a recommendation to the Secretary of
State, in turn, to make related planning decisions." [Para 1.3] continuing "The listing of a site as potentially suitable in EN-6 does
not guarantee that applications for development consent on that site will be granted but provides a clear framework within
which PINS should make its recommendation before the Secretary of State takes the eventual DCO decision." [Para 1.6]

- **9.3** It must be hoped that the ExA are able to navigate a safe path through the complex labyrinthine documentation being bought forward by the Applicant in support of the dDCO.
- 9.4 In preparing this Written Representation I have learnt a great deal. Moreover I hope I have provided the ExA with commentary that is broadly constructive and useful in enabling it to form an even more rounded view of the issues surrounding this dDCO, from an East Suffolk perspective.