



## SPR EA1N and EA2 PROJECTS

### DEADLINE 10 – COMMENTS ON APPLICANTS TOPIC POSITION STATEMENTS

**Interested Party:** SASES      **PINS Refs:** 20024106 & 20024110

**Date:** 6 May 2021      **Issue:** 1

#### INTRODUCTION

1. The Applicants submitted a document entitled Topic Position Statements at Deadline 9 (REP9-009).
2. This document is incomplete for the following reasons.
  - a) It reflects the position with technical stakeholders only and ignores interested parties.
  - b) It is the Applicants' subjective view of other parties positions it is not objective.
  - c) It is a high level summary only.
  - d) It omits the following key topics:
    - site selection
    - design - whilst this is briefly referred to in relation to Land Use and Landscape and Visual it should be identified as a separate subject given its importance.
3. In respect of the draft DCOs whilst elements of these are covered within Table 2.1 a separate summary would be helpful.
4. SASES has the following comments. The absence of a comment does should not be taken as an indication that SASES agrees with the position of the Applicants.

#### SITE SELECTION/ALTERNATIVES

5. SASES's position remains that the site selection process which has resulted in the identification of Friston as the site for the connection to the National Grid is wholly flawed. As a consequence, less harmful alternatives have been improperly excluded. The errors in the site selection process are not limited to the Applicants' own process, but also the means by which the grid connection offer from National Grid, which offered a connection in the Leiston area and Friston as the site for the National Grid NSIP were not the subject of proper assessment either under EN1 or the Electricity Act 1989.
6. These matters were discussed at ISH2 and are the subject of a post hearing submission made by SASES (REP3-128). The Applicants have not addressed these issues. The non-compliance with the Electricity Act 1989 has been the subject of ongoing submissions between the Applicants and SASES, SASES' latest submission being made at D8 (REP8-222).
7. In terms of the cable route the Applicants only offered and consulted on a single landfall and potential cable corridor route from landfall to Friston. For example there is no evidence

that account was taken of proximity to residences or ecological impact on important Hundred River habitats of the proposed road and watercourse crossing place in Aldringham which has been presented as the only option. The Applicants have failed to respond to SASES requests for the 'Cable Route Optioneering and Engineering Feasibility Report' referred to in Environmental Statement - Appendix 4.2 - Red Amber Green (RAG) Assessment for Onshore Substations Site Selection in the Sizewell Area 6.3.4.2 [APP-443]. This contrasts with the approach being taken by National Grid Ventures which has been evaluating several cable routes to Friston for its interconnector projects.

8. Broader alternatives arise from the Government's intention to seek better coordination of grid connections for renewable energy projects which is the subject of an ongoing review which remains relevant to these proposals. Given the five year duration of the DCOs and the length of the construction period, it is possible that either both or one of the projects will not be operational for 10 years. The Applicants' unwillingness to engage with this issue and think creatively is at odds with the Government's emerging policy in this area and the longer term 2050 objectives for offshore wind. Consistent with the short/medium term objectives of the Offshore Transmission Network Review being conducted by BEIS, SASES has made submissions in respect of a Pathfinder proposal the latest of which was made at Deadline 9 (REP9-076).

## **DESIGN**

9. SASES considers that the projects do not meet the policy requirements concerning design and have made a number of submissions in relation to this matter and the drafts of the Substations Design Principles Statement including REP1-357, REP3-132, REP5-097, REP9-078 and at Deadline 10.
10. Whilst the introduction of the Substations Design Principles Statement is an improvement, not least as it applies to all elements of the infrastructure at Friston, that statement has a number of major flaws as set out in SASES submissions not least as it fails to address that design is not merely a matter of aesthetics but good engineering which could result in both a reduction of size and height. Further much of the additional language is not about good design or design principles but simply a narrative setting out the limited design evolution which has been achieved with the EA1N and EA2 substations. There has been no meaningful design evolution with the National Grid infrastructure.
11. The parameters in Requirement 12 in respect of the Applicants' infrastructure, but not National Grid's, have been marginally improved and key items in relation to the National Grid infrastructure included. However given the more detailed information provided by the Applicants in REP 8-082, Requirement 12 would benefit from greater granularity in respect of individual components of the substation - see below. Please note SASES does not accept that the revised heights are the best that can be achieved at this stage.

**Table 6.1 Revised Onshore Substation Building and External Equipment Heights**

Onshore Substation Building / External Equipment	Building or External Equipment Height Presented within the Application	Revised Maximum Building or External Equipment Height Committed to at Deadline 3	Notes
Harmonic filters	18m	<b>14m</b>	4m reduction in maximum height achieved
Statcom building	15m	<b>12m</b>	3m reduction in maximum height achieved
GIS building	15m	<b>14m</b>	1m reduction in maximum height achieved
Lightning protection masts	25m	<b>20m</b>	5m reduction in maximum height achieved

12. It is regrettable that the heights of the relevant infrastructure are not sufficiently secured due to the lack of definition of finished ground levels and the Applicants not including AOD heights within Requirement 12.
13. It should be noted that the NGET 400kV 22 bay GIS substation at Bramford has a height metric of 12m.

## 2.1 CUMULATIVE IMPACT ASSESSMENT

14. The Applicants have made a statement of their position on cumulative impact. The Applicants have still failed to adequately assess the cumulative impact of other projects together with the proposed development. Importantly, this is a case where the authorised development would directly enable those other projects by the creation of a National Grid connection hub at Friston. It is a striking feature of these applications that they seek consent for nationally significant grid connection infrastructure with a planned capacity beyond the needs of the offshore windfarms proposed.
15. This has been ongoing issue throughout the examination touching as it does on every aspect of the projects. The issue was discussed at ISH 2 and was the subject of SASES post hearing submission (REP3-126) and an additional submission (REP4-113).
16. At Deadline 8 the Applicants have conducted an exercise to appraise the impacts of the expansion of the National Grid substation to accommodate the NGV projects. That appraisal conducted is inadequate – see SASES Deadline 9 submission Comments on National Grid Substation Extension Appraisal (REP9-075)
17. In relation to the windfarm extension projects now known as Five Estuaries and North Falls, the Applicants have produced a piece of correspondence from the Five Estuaries developer that this project is no longer to connect Friston. This letter is notable because it proves that the Five Estuaries project was to connect Friston something which the Applicants did not acknowledge.
18. It is telling that no information on this subject appears to have been provided by NGESO despite Action Point 1 from ISH10. Also the fact this connection offer has moved elsewhere (if indeed it has) does not mean it will not subsequently move back to Friston if the National Grid NSIP is consented, which will no doubt require the CION assessment to be reopened and the connection point re-evaluated. EA1N and EA2 are themselves examples of a change of connection location. If the relevant CION assessments were to be provided by NGESO this is a matter which may become clearer. However despite a request by SASES

under the Environmental Information Regulations National Grid has refused to provide the CION assessments for the Five Estuaries and North Falls projects despite providing redacted versions in relation to other projects following EIR requests by SASES in the past. SASES has now made a complaint about this refusal but this has to be addressed through National Grid's internal complaints procedure which takes 40 working days. This is transparently a delaying tactic by National Grid which hinders the examination process.

**TABLE 2.1**

### **Land Use**

19. The Applicants' during the examinations have conceded that the operational impact of the authorised projects on land use is major. The impact is contrary to the requirements of EN-1 which at paragraph 5.10.8 states that "Applicants should seek to minimise impact on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).
20. SASES continues to rely on its written representation made a Deadline 1 REP1-359.
21. Scottish Power has also failed to address the cumulative impact of the further developments that will take place at the substation complex site and in the neighbouring area. The National Grid Substation Extension Appraisal takes no account of additional land take that will be required near the Friston site.
22. The Applicants have included design issues within this topic given the limited measures the Applicants have taken to reduce the footprint and height of the Applicants' substations. The reduction in the footprint and height of the substations' infrastructure has not reduced the amount of land required for mitigation respect of adverse effects to the landscape, cultural heritage and flood risk.
23. National Grid has taken no steps to reduce the footprint of its infrastructure (substation and three cable sealing ends) which it has stated are "standard" and in terms of height a marginal reduction of 0.7 m has been proposed in relation to finished ground levels although no investigation has been carried out to assess whether this is feasible. Furthermore the size of the National Grid substation will not be reduced if only one project is developed.

### **Onshore Ecology**

24. SASES refers to its Deadline 1 submissions (REP1-350) and ISH7 post hearing submission (REP6-128/129).
25. SASES remains concerned that the Applicants have not submitted any data on high-frequency noise at the substation site, which would impact on wildlife, particularly bats. The Applicants say they do not intend to comment further on this matter, which is unacceptable.
26. SASES notes that Natural England have not issued Letters of No Impediment regarding badger setts in the onshore development area, including the substations site. Natural England expressed **major concern** at Deadline 8 (REP8-162, Appendix C9) that the wording of the OLEMS had been amended to state that, rather than avoiding known badger setts through micrositing, the setts would be destroyed. SASES supports NE's position.

27. SASES maintains that the proposed mitigation measures in respect of badgers and bats are insufficient. Many of the onshore wildlife surveys, including otter, water vole, bats and reptiles, are incomplete or contain errors.
28. SASES agrees with the Councils that growth rates of replacement hedgerows expressed by the Applicants are over-optimistic and this impacts specifically on the foraging routes of bats and nesting birds. Further there are no plans to replace a significant number of hedgerows to be removed on the substation site. Neither have the Applicants defined "Important Hedgerows" in line with government guidance.

### **Onshore Ecology – The Aldringham Hundred River**

29. SASES refers to the following submissions:
  - a) REP1-350
  - b) REP1-371 Section 4.10
  - c) REP6-128 and REP6-129 (ISH7 post-hearing submissions)
  - d) REP7-089 Appendix 5
  - e) REP8-231 (ISH14 Post- hearing submission)
30. SASES has previously highlighted serious deficiencies and errors in the 2018 Extended Phase 1 Habitat Survey results for the Aldringham and River Hundred area. The Applicants' Site Selection decision of June 2018 relied upon the feasibility and suitability of the Aldeburgh Road pinch point cable crossing. That decision would have been made without reference to an adequate ecological survey of Works no 19 and the wider Aldringham River Hundred Valley former Special Landscape Area.
31. SASES supports Natural England's concerns expressed in its REP7-073 Appendix C8 and REP8-162 Appendix C9 regarding the Applicants' choice of February at a time of unsuitable ground conditions to carry out its onshore habitats survey in the River Hundred area. SASES believe that if further surveys of the area are to be carried out, the results must be verified by Surveyors who can be seen to be independent of the Applicants. All parties should then defer to the opinion of Natural England, the UK Government's independent adviser for the natural environment in England, as to whether or not the woodland on the west bank of Hundred River is wet woodland and a priority habitat under the UK Biodiversity Action Plan.
32. SASES welcomes the Applicants' oral commitments at Issue Specific Hearings to take great care to minimise impact on the natural environment in Aldringham, through for example eco-sensitive micro-siting of the cable routes in order to avoid notable trees in this area and in reducing the footprint of Accesses 5 and 6 on Aldeburgh Road, Aldringham.
33. The Applicants have clarified in REP9-013 Section 2.6 that the functional requirements for the length of the working area along the riverbank have been driven by the need to accommodate safe working at the Hundred River and to allow safe means of access for construction vehicles and personnel, rather than separation distance between the onshore cables under the river.
34. The Applicants' commitment to lay ducting for the second project at the same time as cables are laid for the first project would imply concurrent installation of ducting for both projects at the river crossing, given the proposed open cut watercourse crossing methodology

35. SASES believe there exists an opportunity to further protect riverside woodland biota and habitats by making a significant further reduction in the proposed 68m X 40 m river crossing working area alongside the west bank of the river. For example, a 'banjo' style haul road design to facilitate lorry turning should be achievable within a 20 metres width.

### **Onshore Ornithology**

36. SASES refers to REP1-350 and REP6-128/129 which also contain its submissions on ornithology.
37. SASES agrees with Natural England that the omission of farmland bird protection from the OLEMS needs to be addressed. This is currently an issue where site investigations works are taking place during the breeding season and particularly affecting ground-nesting skylarks.
38. SASES maintains that the above issues regarding onshore ecology and ornithology are not compliant with EN1-5.3.

### **Water Resources and Flood Risk**

39. Friston is already vulnerable to and suffers from regular pluvial stormwater run-off flood water and sediment inundation. The proposals result in significant new hard surfacing, infrastructure and ground works which will have an adverse impact on flood risk. A fundamental error was made by the Applicants in the site selection process by not properly implementing the Sequential Test.
40. Flood risk and drainage both during construction and operation has been the subject of a number of submissions during examination process and specifically was addressed at ISH 11. SASES made a detailed submission following ISH 11 as to its position at Deadline 8 (REP8-226 & 227) and a further submission at Deadline 9 (REP9-080)
41. The Applicants have failed to assess the required drainage for the wider construction area and the increased turbidity of the run-off. Thus, they have not proven that the construction drainage is viable. There is an added complexity to flood risk during construction given that the substations will either be built concurrently or sequentially.
42. There is a lack of clarity as to the Applicants position in relation to the size of the SuDS ponds for the different SuDS schemes proposed. The Applicants should clearly set out the size of basins required for an infiltration only scheme and separately a combined attenuation and infiltration drainage scheme together with the landscape implications, including whether the basins will be below ground level in all directions given the topography of the site.
43. The Applicants have repeatedly referred to the position of the Environment Agency although it is not responsible for surface water flood risk management which is the key issue in these applications.
44. As the Examining Authorities are aware SASES has retained the services of Clive Carpenter of GWP consultants in relation to flood risk matters. Given this expertise it would be helpful for Clive Carpenter to be involved in the discussions between the councils and the Applicants in relation to flood risk matters to avoid the issues which have arisen in relation to operational noise where SASES' expert was not involved contrary to the wishes of the Examining Authorities.

45. Given Suffolk County Council will be responsible for dealing with matters concerning flood risk and drainage should the projects be consented and given the severity of the consequences if flood risk management is not effective, then Suffolk County Council should be the discharging authority.
46. As set out in SASES' Comments on National Grid Substation Extension Appraisal (REP9-075) the flood risk is significantly worsened by the extension of the National Grid substation for the NGV projects by increasing the amount of hard surfacing and reducing the land available for SuDS basins which will need to be larger to address the increased flood risk created by the extensions.
47. In terms of the DCO SASES remains concerned as to the maintenance of the drainage system (REP8-228 and REP9-079). Further it may aid in addressing the dimensional issues in respect of the SuDS basins if parameters for these are included in Requirement 12.

### **Archaeology and Cultural Heritage – Setting of Designated and Non-Designated Heritage Assets**

48. The substation site is ringed by seven listed buildings including the church of Saint Mary the Virgin, Friston a Grade II\* listed building. These heritage assets do not exist in isolation and are all part of a significant area of historic landscape which lies immediately to the north of the village of Friston and which is directly and significantly affected by the proposals.
49. As set out in SASES written representations submitted at Deadline 1 (REP1-366) which were discussed at ISH2, the Applicant's assessments underestimate the heritage impact of the proposed schemes and undervalue the contribution made by setting to each of these heritage assets resulting in a much lower assessment of the adverse heritage impact. On a proper assessment, the harm to designated heritage assets is far greater than that suggested by the Applicants. The outline landscape mitigation plan does nothing to reduce the heritage impacts of the schemes in any meaningful way.
50. A particular concern is the Grade II\* Saint Mary the Virgin Church and SASES endorses the views of Historic England with regard to this listed building and generally.
51. Whilst the Applicants have made attempts to reduce the heritage impact of its proposals through reducing the footprint and height of the Scottish Power substations, together with an immaterial 70 cm reduction in the finished ground level of the National Grid substation, this does not reduce the heritage impacts (REP4-108). The ability to reduce finished ground levels is unproven and doubtful given the surface water flood risk at the site.
52. Only the impacts of the operational phase of the schemes are assessed in detail. The failure to include the construction and decommissioning phases is a significant omission and a failure on the part of the Applicant to meet its obligations under paragraph 5.8.10 of EN-1.
53. As set out in SASES' Comments on National Grid Substation Extension Appraisal (REP9-075) Appendix 3, the extension of the National Grid substation can only serve to increase the harm to the heritage assets.
54. In relation to archaeological matters SASES agrees with and defers to the views of SCC.

### **Noise And Vibration – Construction**

55. The engagement by the Applicants on construction noise was constructive and significant improvements have been made principally through following the control mechanisms provided for under S 61 of COPA as recommended by SASES. This is reflected in the Outline Code of Construction Practice submitted at Deadline 8.

### **Noise and Vibration – Operation**

56. In terms of Operational Noise SASES refers to its post ISH 12 submission (REP8-220) and has commented on the Applicants' Noise Position Paper at Deadline 9 (REP9-082).

57. In essence the Applicants' assessment of background noise is flawed and has chosen to ignore without valid reason the noise measurement at the quietest location SSR 9. East Suffolk Council has similar concerns as to the understatement of background noise. However without technical justification it chosen to accept the background noise figures presented by the Applicants. In the absence of such a technical justification the background noise figures presented by the Applicants still have to be regarded as unreliable and not a basis upon which to assess adverse effects or accept the noise requirement in the draft DCOs.

58. The Applicants have not satisfactorily addressed the issues surrounding tonality but should the Projects be consented, a requirement that 100 Hz sound will not exceed 32 dBLLeq (15 minutes) should be included in the DCO noise requirement as has been agreed for other substation projects. A draft of this requirement is set out in SASES post ISH12 submission.

59. The Applicants have not addressed the impulsive noise from the switchgear in the National Grid infrastructure and this remains an area of major policy non-compliance. The Applicants have chosen not to enquire as to the plant and equipment which National Grid will install in the substation extensions and therefore it cannot be ruled out that further switchgear will be installed increasing the overall frequency of switchgear operation.

60. It is regrettable that the Applicants' contrary to Action Point 10 in the ISH15 Hearings Action Points have chosen not to reach agreement with SASES in respect of noise requirements.

61. In relation to the noise requirement agreed by the Applicants and ESC this cannot be regarded as a requirement that will avoid a significant adverse effects given it is derived from flawed background data as stated above. Furthermore the requirement does not assess noise impact at Saint Mary the Virgin Church and it is unduly restrictive in terms of the locations and times when measurement should be taken, which may result in an inadequate assessment of noise levels, particularly in the longer term. SASES draft requirement is to be preferred assuming the policy non-compliance of the operation of the National Grid switchgear can be addressed.

62. The agreement to address tonality issues and other effects post consent through a redrafted Requirement 12 and a provision in the Substations Design Principles Statement is contrary to law and policy as it is deferring the feasibility of whether the noise requirement can be achieved until after consent. Furthermore the drafting of requirement 12 is not sufficiently specific to ensure that tonality and other noise affects are properly addressed.

### **Traffic and Transport**

63. SASES refers to its submission at Deadline 5 (REP-100) and Deadline 8 (REP8-223). Serious concerns remain including in respect of impacts arising from the use of

A12/A1094 Friday Street junction and issues arising from the movement of AILs during construction and thereafter in the event of equipment failure.

### **Human Health**

64. SASES refers to its submissions at Deadline 8 following ISH 10 - Health and Wellbeing.
65. In terms of the Applicants' track record in community liaison SASES can only comment in relation to EA1N and EA2 but the community's experience of a Scottish Power has been universally poor as referred to in SASES' Deadline 9 submission Comments on Quality Of Stakeholder Engagement (REP9-081). The Applicants have already caused further unnecessary disruption and stress through wholly inadequate engagement and information in relation to its current survey works. This has necessitated contact with Suffolk County Council, the RSPB, Natural England and the rural police due to inadequate engagement and information in relation to highways and ecological impacts.
66. Comments in relation to PRoWs are set out below.

### **Landscape and Visual**

67. Friston has a strong sense of place and local distinctiveness and its selection is the result of a flawed site selection process (REP1-364, REP1-365 and REP3-128).
68. During the course of the examination the Applicants have proposed a small reduction in the area of the EA1N and EA2 substations but there has been none in relation to the National Grid substation or cable sealing ends which have been described in correspondence from National Grid as "standard" (REP3-127). There have also been reductions in the height of the EA1N and EA2 substations but none in respect of the National Grid infrastructure aside from a possible 0.7 m reduction in the finished ground level of its substation. Furthermore National Grid has confirmed that there will be no reduction in size of the National Grid substation or the cable sealing ends if only one of EA1N or EA2 is constructed. SASES has commented on all these matters during the course of the examinations and on new visualisations which have been submitted by the Applicants.
69. Despite these changes the position remains that the Applicants have:
- a. materially understated the adverse impact on the landscape and visual receptors;
  - b. relied upon visualisations, which despite some improvements during the course of the examinations, still underrepresent the impact of the projects;
  - c. failed properly to acknowledge that the landscape impact might be prolonged and uncertain given the site will be a construction site for a substantial period of years depending on how the three NSIPs are sequenced.
70. In terms of mitigation through tree planting much of this will not be implemented until after a prolonged and uncertain construction period. Further it is entirely reliant on tree growth rates which are unrealistic notwithstanding the proposal to introduce an ill-defined "adaptive maintenance regime". It is unsatisfactory in a situation where mitigation is wholly dependent on a planting regime that the growth rates are not secured in the DCO in that the Applicants that do not have a direct obligation to ensure that those growth rates are achieved (REP9-083 comments on the Outline Landscape And Ecological Management Strategy)

71. As set out in SASES' Comments on National Grid Substation Extension Appraisal submitted at Deadline 9 (REP9-075 Appendix 2) the landscape and visual impacts are substantially worsened by the extension of the National Grid substation for the NGV interconnector projects and a prolonged and uncertain construction period could become even more prolonged and uncertain depending upon the sequencing of the extension works including associated cable trenching etc.

### **Tourism**

72. SASES commented in relation to tourism REP1-353, REP2-166 and in its post hearing submission following ISH5 (REP5-101).

73. The Applicants have demonstrated they have a limited understanding of tourism in East Suffolk/Heritage Coast even failing to appreciate that Friston is close to Snape Maltings REP7-054 Section 2.1 ID2 and REP8-232 Section 2.1 ID2,

74. The Applicants economic analysis is weak and did not acknowledge the difference in spending between holiday visitors and people coming for the purposes of employment. (REP5-101)

75. There is a substantial risk that the tourism economy of East Suffolk will be damaged and the Applicants have not demonstrated that this will not be the case. In this context the Tourism Fund of £150k is immaterial.

### **Recreation (Public Rights-Of-Way)**

76. SASES refers to its Deadline 1 submissions on Footpaths (REP1-346) and ISH4 post hearing submission (REP5-100, Agenda Item 6).

77. SASES agrees with the Councils that Public Rights of Way should be treated as a topic in its own right within the Examination and that the quality of the experience of users should be properly assessed, including the permanent loss of historic Footpath 6, changes to views (including that of Friston Parish Church), noise, air pollution and tranquillity.

78. SASES does not consider that PRowS were given proper significance in site selection.

79. The northern side of Friston and its PRow network will cease to exist as an amenity to residents during the construction phase. The Applicants have failed to demonstrate how the PRow network in and around the substation site can be kept open and usable by the public during the construction phase. This is in conflict with the DCO which requires the alternative route to be complete prior to the stopping-up of FP6.

80. SASES does not agree that the proposed alternative PRow close to Grove Road is adequate compensation for the permanent loss of FP6.

81. SASES also notes that the Councils do not consider the collective mitigation measures are sufficiently adequate to mitigate the impacts caused by the development, particularly at the substation site.

### **Socio-economics**

82. Substantial long term local socio-economic benefits from these projects are far from proven based on the track record of a Scottish Power in respect of EA1 (REP5-101).

83. The compensation/financial inducements provided by the MOU and the Section 111 Agreement with East Suffolk Council are inadequate in a number of aspects not least quantum (given some amounts have been redacted) and where amounts have not been redacted no justification has been provided as to why the sums are appropriate. These documents also lack clarity. (REP9-083)