



SPR EA1N and EA2 PROJECTS

COMMENTS IN RESPONSE TO LETTERS FROM THE DEPARTMENT OF BUSINESS ENERGY AND INDUSTRIAL STRATEGY DATED 2 NOVEMBER 2021

Interested Party: SASES PINS Refs: 20024106 & 20024110

Date: 30 November 2021 Issue: 1

INTRODUCTION

1. These comments are provided in response to the letters dated 2 November 2021 from the Department of Business Energy and Industrial Strategy. These letters invite comments from Interested Parties in respect of the matters set out in paragraphs 3(i) 3(ii) and 6 of the letters but not in respect of other matters set out in the letters.
2. Accordingly SASES' comments in the submission are limited to paragraphs 3(i) and 3(ii). SASES has not commented on the matters referred to in paragraph 6.
3. SASES' reserve the right to respond to the information supplied by the identified parties in response to all requests for comments, as referred to in paragraph 8.
4. These comments have been prepared with the assistance of Mr Clive Carpenter, Partner and Head of Water Resources at GWP Consultants [REDACTED]

FLOOD RISK

Paragraph 3(i)

5. SASES made a series of submissions during the course of the examinations concerning both operational and construction flood risk (see Appendix 1). In these SASES highlighted the defects in the Applicants' approach to both operational and construction phase flood risk. A key reason for these defects is the Applicants failure to consider pluvial/surface water flood risk as part of its site selection process despite Friston having a history of flooding and these issues being clearly communicated to the Applicants during the consultation process.
6. The NPPF as updated in July 2021 further reinforces the existing policy requirements in respect of considering all sources of flooding and the requirement to apply the sequential test in respect of all sources of flooding as part of site selection. Richard Turney of Landmark Chambers prepared a detailed analysis of relevant policy requirements (as at 25 March 2021) and this was submitted into the examinations at Deadline 8 - see Appendix 1 of REP8-227. For ease of reference this is attached at Appendix 2.
7. This further reinforcement in the NPPF is set out at the beginning of paragraph 161 which states:

“all plans should apply a sequential, respect approach to the location of development – taking into account all sorts of flood risk and the current and future impacts of climate change.”

8. Furthermore the requirement to consider all sources of flooding has also been reinforced in the draft new NPS EN-1 in respect of which SASES made a submission to the Secretary of State dated 19 October 2020 - see paragraphs 3.6 - 3.9.
9. It is clear from the Applicants' submissions in the examinations that surface water and groundwater flooding were not considered in the site selection RAG (red amber green) process - only fluvial (river) flooding was considered and accordingly the sequential test was not properly applied. Had it been Friston would have been excluded as a development site.
10. In conclusion the latest update to the NPPF does not impose any new policy requirement it merely reinforces existing requirements with which the Applicants' proposals do not comply.
11. In addition to the policy requirements SASES highlights the following points in relation to flood risk.
 - a) The pluvial flood risk baseline remains poorly defined – there has been no rainfall or run-off monitoring – and therefore not only is the QBAR poorly constrained for the watershed, but it has not been proven that QBAR itself will not cause flooding given flooding occurs regularly in Friston. Groundwater flooding risk has not been assessed at all.
 - b) SASES conclude that without understanding the baseline flood risk, the Secretary of State cannot conclude the Applicants' flood risk reduction measures will be effective and will ensure no increase in flood risk elsewhere, when it is self-evident that there will be an increase in storm water run-off volume from the impermeable areas of the proposed development.
 - c) Notwithstanding the above concerns over the operational phase of the proposed development, the Applicant continues to fail to demonstrate the difference in flood risk associated with the much larger area of disturbance of the proposed development site (including the cable route particularly as it approaches the substations and cable sealing ends site at Friston) during the construction phase. This will result in the generation of highly turbid run-off and the requirement to treat and clarify this water to ensure both adequate discharge quality is achieved and to enable ground infiltration to be an effective disposal method. The Applicants have not demonstrated that this requirement will be met.
 - d) This failure to understand the difference in the flood risk posed by the construction phase and hence demonstrate adequacy of construction phase flood risk management measures remains a critical shortcoming in meeting policy requirements to ensure flood risk is not increased from ALL and ANY sources of flood risk.

Paragraph 3(ii)

12. For clarification the river in Friston is interchangeably referred to as the Main River and the Friston Watercourse. There is attached at Appendix 3 a plan showing the main river derived from the Environment Agency's Main River Map which can be found at this link

[REDACTED]

As can be seen the main river starts at the south side of Church Road. It should be noted that this is outside the order limits for the EA1N and EA2 projects. The relevant works plan shows the southern boundary of the site ending on Church Road. See sheet 7 of 12 at the attached link.

<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010077/EN010077-005220-2.3.2%20EA1N%20Works%20Plan.pdf>

13. Interested parties are invited to comment on the implications of the Environment Agency's 20 July 21 update on climate change allowances for flood risk assessment which updated peak river flow allowances and changed the guidance on how to apply these.
14. There is a fundamental difficulty in so commenting because the Applicants have not considered the impact of the development on existing peak river flows on the Main River passing through Friston Village. The Applicants have limited their analysis to the management of surface water run-off leaving the site, on the basis that the site itself does not reside within Flood Zone 3 and focused on demonstrating they can achieve the QBAR surface water flow rate from the site.
15. However (as noted in paragraph above) the Applicants have not assessed the QBAR flow in the watershed nor the conveyance of the current flow route channel and culverts, so cannot assess the consequences of assessing impact against a revised climate change allowance. Further there has been no monitoring undertaken by the Applicants of rainfall or watercourse flows in the Friston watershed.
16. SASES contends this remains a critical failure of the Applicants to adequately assess the flows in the Friston Watercourse – indeed there has been no attempt by the Applicants to determine the flows in the Main River passing through Friston Village – and therefore the Applicant cannot consider the extent to which either the existing or the updated peak flow allowances result in a material change to flood risk in the Main River passing through Friston.

APPENDIX 1 - LIST OF SASES PRIMARY SUBMISSIONS IN RELATION TO FLOOD RISK

In addition to comments on the Applicants' submissions and those of Interested Parties SASES made the following principal submissions in relation to flood risk.

REP13-060

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 1 MB)

Deadline 13 Submission - Flood Risk – Comments on Deadline 12 Flood Risk Submissions

Examination > Deadline 13

Published: 06/07/2021

REP12-118

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 189 KB)

Deadline 12 Submission - Submission relating to Flood Risk and the Applicants' Deadline 11 and Post Deadline 11 Submissions

Examination > Deadline 12

Published: 30/06/2021

REP11-171

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 117 KB)

Deadline 11 Submission - Post Issue Specific Hearing 16 submission - Design Matters and Flood Risk and Drainage (including Appendix 1)

Examination > Deadline 11

Published: 10/06/2021

REP11-170

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 167 KB)

Deadline 11 Submission - Post Issue Specific Hearing 16 submission - Design Matters and Flood Risk and Drainage Report

Examination > Deadline 11

Published: 10/06/2021

REP9-080

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 143 KB)

Deadline 9 Submission - Comments on Deadline 8 Flood Risk Submissions

Examination > Deadline 9

Published: 19/04/2021

REP8-226

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 341 KB)

Deadline 8 Submission – Issue Specific Hearing 11 Submission - Flood Risk and Drainage

Examination > Deadline 8

Published: 29/03/202

REP5-100

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 221 KB)

Deadline 5 Submission - Post hearing Submission (ISH4) - Section 4(d)

Examination > Deadline 5

Published: 05/02/2021

REP3-138

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 1 MB)

Deadline 3 Submission - comments on the Applicants' Deadline 2 submissions - Appendix 4 thereto - Flood Risk Related Comments on Deadline 2 Submissions prepared by GWP Consultants

Examination > Deadline 3

Published: 17/12/2020

REP2-064

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 191 KB)

Deadline 2 Submission - Comments on EXQ1 Responses - 1.7 Flood Risk

Examination > Deadline 2

Published: 19/11/2020

REP1-369

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 8 MB)

Deadline 1 Submission - Written Representation Flood Risk. Drawings 1 and 2

Examination > Deadline 1

Published: 06/11/2020

REP1-370

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 271 KB)

Deadline 1 Submission - The written representation on flood risk comprising of the expert report prepared by Clive Carpenter of GWP Consultants dated October 2020.

Examination > Deadline 1

Published: 06/11/2020

REP1-344

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 11 MB)

Deadline 1 Submission - Written Representation Flood Risk – Appendices 5 and 6 to GWP report

Examination > Deadline 1

Published: 06/11/2020

REP1-347

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 7 MB)

Deadline 1 Submission - Written Representation Flood Risk - Appendix 4 to GWP report

Examination > Deadline 1

Published: 06/11/2020

REP1-356

[Substation Action Save East Suffolk \(SASES\)](#) (PDF, 7 MB)

Deadline 1 Submission - Written Representation Flood Risk. Appendices 1, 2 and 3 to GWP report

Examination > Deadline 1

Published: 06/11/2020

REP1-360

Substation Action Save East Suffolk (SASES) (PDF, 8 MB)

Deadline 1 Submission - Written Representation Flood Risk - Drawing 8 to GWP report

Examination > Deadline 1

Published: 06/11/2020

REP1-348

Substation Action Save East Suffolk (SASES) (PDF, 10 MB)

Deadline 1 Submission - Written Representation Flood Risk - Drawings 3, 4, 5, 6 and 7 to GWP report

Examination > Deadline 1

Published: 06/11/2020

APPENDIX 2 - POLICY SUBMISSION PREPARED BY RICHARD TURNEY OF LANDMARK CHAMBERS FORMING PART OF SASES SUBMISSION REP8-226

ISH 11 – Summary of Submissions

Flood risk: Policy framework

1. The starting point is the relevant policies in EN-1 which, by virtue of s 104 Planning Act 2008, need to be given statutory weight.
2. The detailed (but not the only) consideration of flood risk is in section 5.7. It explains at the outset:

“5.7.3 The aims of planning policy on development and flood risk are to ensure that flood risk from all sources of flooding is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Where new energy infrastructure is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and, where possible, by reducing flood risk overall.”
3. The first and most important part of the policy is to direct development away from areas of flood risk unless necessary. This is achieved through the application of the Sequential Test. By exception, where the Sequential Test cannot be met, the Exception Test can be followed with the objective of making the development safe, without increasing flood risk elsewhere. Importantly, the Exception Test is not engaged unless and until the Sequential Test is met.
4. Paragraph 5.7.4 of EN-1 recognises that surface water flood risk may mandate an FRA even if one is not otherwise required. Thus, pluvial flood risk is firmly within the scope of the flood risk with which the policy is concerned.
5. The **minimum** requirements of a flood risk assessment are set out at 5.7.5. They include in particular:
 - a. That the FRA must be **proportionate** to the risk and the scale, nature and location of the project;
 - b. That the FRA must consider the risk of flooding **from** the project (not just to the project);
 - c. That the FRA must consider both the **potential adverse and beneficial effects of flood risk management infrastructure, including raised defences, flow channels, flood storage areas and other artificial features, together with the consequences of their failure**;
 - d. That the FRA must **consider and quantify the different types of flooding** (whether from natural and human sources and including joint and cumulative effects) and identify flood risk reduction measures, so that assessments are fit for the purpose of the decisions being made;
 - e. That the FRA must **consider the effects of a range of flooding events including extreme events on people, property**, the natural and historic environment and river and coastal processes;

- f. That the FRA must include an **assessment of the remaining (known as ‘residual’) risk after risk reduction measures** have been taken into account and demonstrate that this is acceptable for the particular project;
 - g. That the FRA must **consider how the ability of water to soak into the ground may change with development**, along with how the proposed layout of the project may affect drainage systems;
 - h. That the FRA must **be supported by appropriate data and information**, including historical information on previous events.
6. The Examining Authority will need to scrutinise the adequacy of the Applicants’ work by reference to those clear minima set out in EN-1.
 7. EN-1 refers to PPS25 and practice guide which are now superseded by NPPF and PPG (see further below).
 8. The decision-making paragraphs provide:

“5.7.9 In determining an application for development consent, the IPC should be satisfied that where relevant:

- the application is supported by an **appropriate FRA**;
- **the Sequential Test has been applied as part of site selection**;
- a sequential approach has been applied at the site level to minimise risk by directing the most vulnerable uses to areas of lowest flood risk;
- **the proposal is in line with any relevant national and local flood risk management strategy**;
- priority has been given to the use of sustainable drainage systems (SuDs) (as required in the next paragraph on National Standards); and
- in flood risk areas the project is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed over the lifetime of the development.

5.7.10 For construction work which has drainage implications, approval for the project’s drainage system will form part of the development consent issued by the IPC. The IPC will therefore need to be satisfied that the proposed drainage system complies with any National Standards published by Ministers under Paragraph 5(1) of Schedule 3 to the Flood and Water Management Act 2010. In addition, the development consent order, or any associated planning obligations, will need to make provision for the adoption and maintenance of any SuDS, including any necessary access rights to property. The IPC should be satisfied that the most appropriate body is being given the responsibility for maintaining any SuDS, taking into account the nature and security of the infrastructure on the proposed site. The responsible body could include, for example, the applicant, the landowner, the relevant local authority, or another body, such as an Internal Drainage Board.”

9. EN-1 thus clearly indicates that development consent should be **withheld** where the sequential test has not been applied. That is unsurprising, since that is the consistent position of all relevant national flood policies. Whilst paragraph 5.7.13 of EN-1 refers to flood zones 2 and 3, the “sequential test” needs to be understood in the context of the current definition in the NPPF. Thus:

“158. The aim of the sequential test is to steer new development to areas with the lowest risk of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.”

10. It is notable that in up-to-date NPSs, the sequential test is defined by reference to the NPPF (see e.g. Airports NPS, para 5.166 and footnotes). It follows that as a matter of national policy, the sequential test is not confined to EA (fluvial) flood zones but needs to be applied to all areas at risk of flooding.

11. Crucially, it is only if the sequential test has been applied that the exception test can be engaged at all. It is not possible to “leap” to the exception test since the clear policy priority is to direct energy infrastructure away from areas of flood risk through proper application of the sequential test. **If** the exception test is engaged, then:

“5.7.16 All three elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:

- it must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk;
- the project should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously developed land subject to any exceptions set out in the technology-specific NPSs; and
- a FRA must demonstrate that the project will be safe, without increasing flood risk elsewhere subject to the exception below and, where possible, will reduce flood risk overall.

5.7.17 Exceptionally, where an increase in flood risk elsewhere cannot be avoided or wholly mitigated, the IPC may grant consent if it is satisfied that the increase in present and future flood risk can be mitigated to an acceptable level and taking account of the benefits of, including the need for, nationally significant energy infrastructure as set out in Part 3 above. In any such case the IPC should make clear how, in reaching its decision, it has weighed up the increased flood risk against the benefits of the project, taking account of the nature and degree of the risk, the future impacts on climate change, and advice provided by the EA and other relevant bodies.”

12. On mitigation, EN-1 provides:

“5.7.18 To satisfactorily manage flood risk, arrangements are required to manage surface water and the impact of the natural water cycle on people and property.

...

5.7.20 Site layout and surface water drainage systems should cope with events that exceed the design capacity of the system, so that excess water can be safely stored on or conveyed from the site without adverse impacts.

5.7.21 The surface water drainage arrangements for any project should be such that the volumes and peak flow rates of surface water leaving the site are no greater than

the rates prior to the proposed project, unless specific off-site arrangements are made and result in the same net effect.”

13. It is notable that there is no suggestion that such mitigation is not to be considered at consent stage: indeed, there is a strong indication to the contrary.

14. Other parts of EN-1 are also relevant to flood risk issues. Addressing natural hazards in substation design is part of the “good design” required by EN-1. Thus:

“4.5.2 Good design is also a means by which many policy objectives in the NPS can be met, for example the impact sections show how good design, in terms of siting and use of appropriate technologies can help mitigate adverse impacts such as noise.

4.5.3 In the light of the above, and given the importance which the Planning Act 2008 places on good design and sustainability, the IPC needs to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, **are as attractive, durable and adaptable (including taking account of natural hazards such as flooding)** as they can be.”

15. Similarly, flood risk is central to the requirement to be adaptable to climate change (e.g. 4.8.4). EN-1 also refers to the relevance of flood risk to the assessment of **cumulative effects** (in the context of Appraisal of Sustainability of the energy NPSs):

“1.7.3 There may also be cumulative negative effects on water quality, water resources, flood risk, coastal change and health at the regional or subregional levels depending upon location and the extent of clustering of new energy and other infrastructure. Proposed energy developments will still be subject to project level assessments, including Environmental Impact Assessment, and this will address locationally specific effects. The energy NPSs set out mitigation for cumulative negative effects by requiring the IPC to consider accumulation of effects as a whole in their decision-making on individual applications for development consent.”

16. The NPPF is also an important and relevant matter to the determination of the applications. Its provisions have been briefly addressed above. The emphasis is on the application of the sequential test, followed by the exception test only after the sequential test has been applied. Flood risk should not be increased elsewhere (paragraph 163). The NPPF can be read consistently with EN-1 for the reasons explained above.

17. The Planning Practice Guidance (PPG) provides further relevant detail:

- a. It confirms the interpretation of sequential test set out above, namely that it applies to all sources of flooding: *“This general approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.”* *“The Sequential Test ensures that a sequential approach is followed to steer new development to areas with the lowest probability of flooding... Within each flood zone, surface water and other sources of flooding also need to be taken into account in applying the sequential approach to the location of development.”*

- b. It emphasises the need for site specific flood risk assessment, and the contents of the FRA: *“A flood risk assessment should also be appropriate to the scale, nature and location of the development. For example, where the development is an extension to an existing house (for which planning permission is required) which would not significantly increase the number of people present in an area at risk of flooding, the local planning authority would generally need a less detailed assessment to be able to reach an informed decision on the planning application. For a new development comprising a greater number of houses in a similar location, or one where the flood risk is greater, the local planning authority would need a more detailed assessment.”*
 - c. It explains that “essential utility” infrastructure may meet the exception test but only if it **“has to be located in a flood risk area** for operational reasons, including electricity generating power stations and grid and primary substations”. However that presupposes that it has been demonstrated that the infrastructure *must* be located in an area of flood risk. It is no part of the Applicants case here (and nor could it be) that the substation site must be located in an area of flood risk. In any event, the exception test only falls to be applied after the sequential test has been performed.
18. SASES defers to the Suffolk County Council and East Suffolk Council on the relevant local policies. However, it is noted that the policies are consistent with the NPPF (and EN-1) in requiring the sequential approach to be applied.
19. The Friston Surface Water Management Plan:
- a. Clearly and unambiguously identifies the surface water flood risk, and therefore confirms that the need to treat the site as an area of flood risk for the purpose of the sequential test. It also confirms the need for a detailed analysis of the effect of the development on surface water flood risk.
 - b. It confirms the direct hydraulic connection between the substation site and the receptors in the village.
 - c. It cannot, alone, take the Applicants’ case forward because it contains no assessment of the effect of the development on surface water flooding.
20. SASES would also emphasise here the relevance of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The ES must contain:
- “7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment** and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and **should cover both the construction and operational phases.”**
21. It is well-established that if mitigation measures are relied upon they should be demonstrated to be achievable. An ES is inadequate where it does not properly address the proposed mitigation measures for both construction and operational phases.

Application of policy to the present applications

22. In summary, there is a fundamental failure to apply the sequential test. The RAG Assessment which underpins the Applicants’ site selection process did not consider pluvial flood risk at all.

Indeed, the Preliminary Environmental Information appears not to have appreciated that there was a surface flood risk at all at the Friston site. The Applicants have provided no answer to this at all.

23. It follows that, applying EN-1 (together with the NPPF and local policies), the proposals should be regarded as having failed to apply the sequential test and thus contrary to a fundamental part of the relevant NPS. It is immediately apparent from the RAG Assessment that there are other sites which are not at flood risk which would be suitable for the proposed development. Thus, if the Applicants had applied the sequential test, the inevitable conclusion would have been that the Friston site should not be preferred. Development consent should be refused on this basis alone.
24. It is not open to the Applicants to “leap” to the exception test. That can only be applied once it has been demonstrated, through the sequential test, that the development cannot be located away from flood risk.
25. In summary the Examining Authority should report that:
 - a. The Friston site is an area of flood risk;
 - b. That the sequential test has not been applied to the selection of this site;
 - c. That the applications fail the relevant policy tests in EN-1 (5.7.9), the NPPF, and in local policy;
 - d. That accordingly development consent should be refused.
26. Further and in any event, the proposals should be found to be contrary to other aspects of relevant flood policy:
 - a. The FRA is inadequate for the purposes of paragraph 5.7.5 of EN-1. See further the analysis provided by GWP Consultants;
 - b. The proposals fail properly to address mitigation contrary to paragraphs 5.7.18-25 of EN-1, and contrary to the requirements of the EIA Regulations. Again, see the further analysis by GWP.
27. For all those reasons, development consent should be refused on flood risk grounds.

APPENDIX 3 – ENVIRONMENT AGENCY PLAN OF FRISTON MAIN RIVER/WATERCOURSE

