



**SCOTTISHPOWER
RENEWABLES**

Substation Site Selection

East Anglia TWO

East Anglia ONE North

10 December 2018 to Friston PC

13 December to Leiston-cum-Sizewell TC

Agenda

- Health and Safety
- Introductions
- Overview of Site Selection Process
- Site Selection Process Stages (Stages 1 – 7)
- Substation Site Selection Decision
- Next Steps

Overview of Site Selection Process

1) Onshore Substation Area of Search



2) Definition of Onshore Substation Zones



3) Onshore Substations Site Selection Red / Amber / Green Assessment (Updated)



4) Onshore Substations AONB Impact Appraisal Assessment (Updated) / Landscape and Visual Impact and Mitigation Feasibility



5) Phase 3.5 Consultation



6) Confirmation of the Viability of Preferred Substation

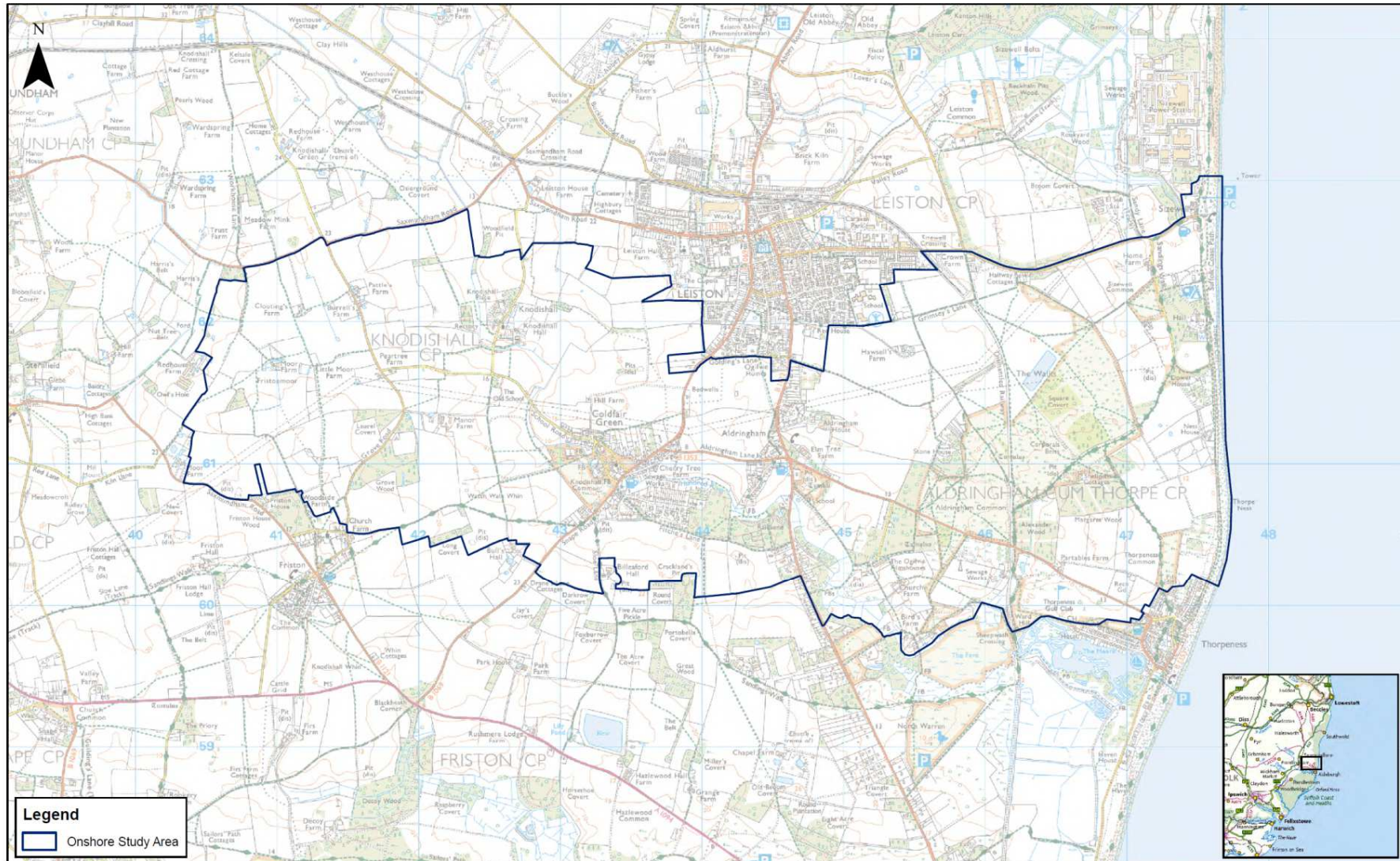


7) Substation Site Selection Decision

1) Onshore Substation Area of Search

- Discussions with EDF Energy concluded that land on EDF Estate was not available
- SPR had concerns on location of EDF land within the AONB
- Use of Magnox (Sizewell A) land was not available due to decommissioning programme
- Onshore Study Area extended west past Aldeburgh Road at request of LPAs (July 2017) to area around Grove Wood
- Onshore Study Area define as:
 - Area from Landfall (north of Thorpeness) to area around Grove Wood
 - Extending 1km north and south of existing overhead line and expanded to include field boundaries
- Onshore Study Area presented to LPAs in September 2017 and included in EIA Scoping Report (November 2017)

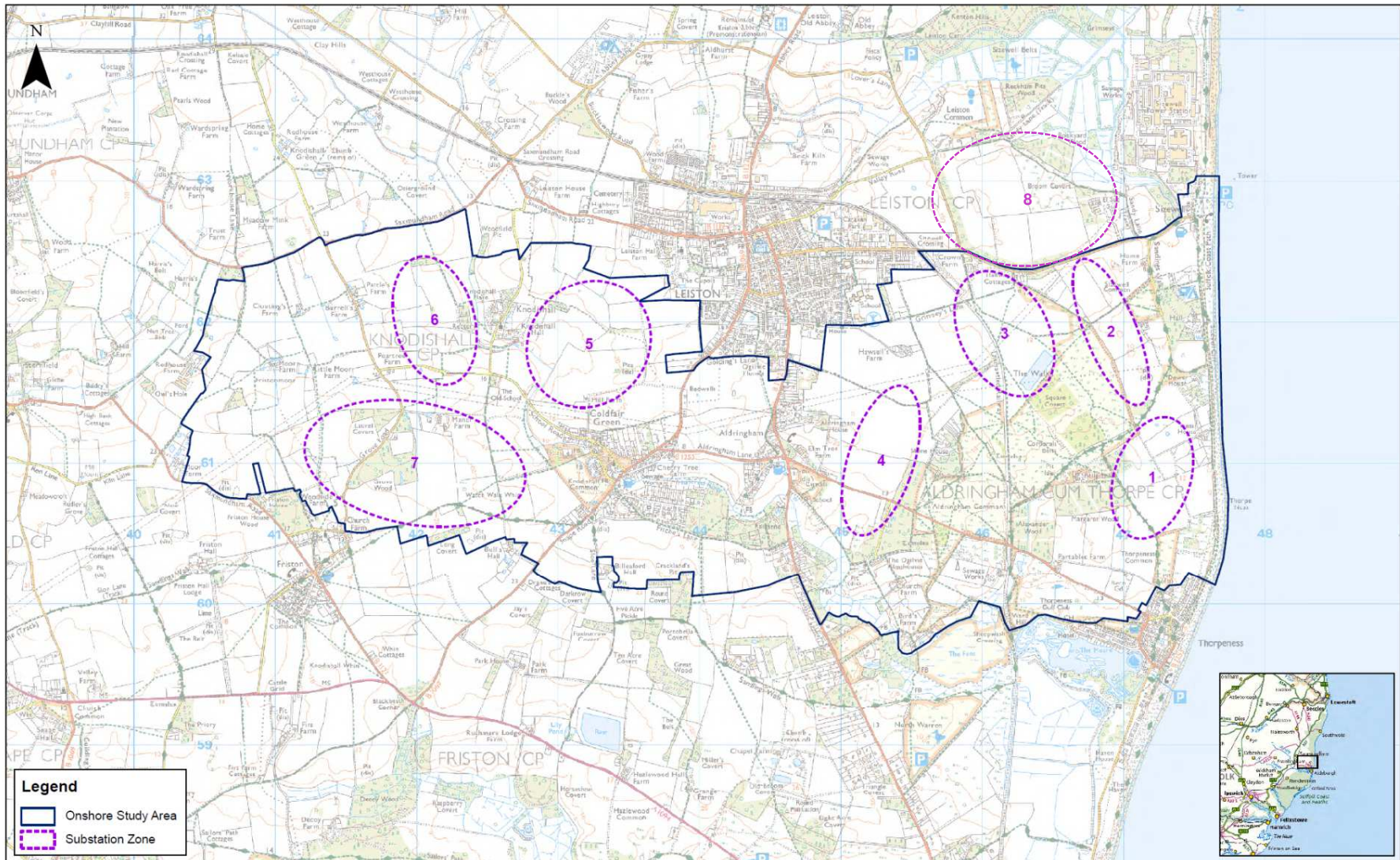
1) Onshore Substation Area of Search (November 2017)



2) Definition of Onshore Substation Zones

- Areas excluded include Internationally and nationally designated nature conservation sites, and Areas listed as Flood Zone 3
- Onshore Study Area sub-divided into zones based on available space for co-location of substations
- Experts undertook site visits in July 2017 (eastern zones) and August 2017 (western zones) to establish further understanding of the baseline environment
- LPA suggested potential for crossing Aldeburgh Road at Aldringham Court during site visit in December 2017
- Seven Onshore Substation Zones were identified and presented to ETG in February 2018 and at Public Information Days in March 2018
- Additional Onshore Substation Zone (Zone 8 - Broom Covert, Sizewell) added in September 2018
- Eight potential substation zones identified in total

2) Definition of Onshore Substation Zones



3) Onshore Substations Site Selection Red / Amber / Green (RAG) Assessment

- RAG Assessment undertaken for potential substation sites located within previously defined zones, by a team of specialists to compare substation zones
- RAG assessment does not select the site, rather informs subsequent selection work
- RAG Assessment allows a clear and direct comparison between each substation zone
- Considerations captured within the RAG Assessment were:
 - Archaeology / Heritage
 - Ecology
 - Landscape
 - Hydrology and Hydrogeology
 - Engineering
 - Community
 - Landscape and Visual
 - Property
 - Planning Applications

3) Onshore Substations Site Selection Red / Amber / Green Assessment

- RAG assessment parameters and methodology submitted to LPAs in November 2017, followed by site visit and workshop in December 2017
- LPA raised concerns regarding potential significant impact on AONB and recommended feasibility of crossing Aldeburgh Road be fully assessed, including potential to remove woodland south of Aldringham Court Nursing Home
- RAG Assessment updated following AONB Impact Appraisal (see slides below)
- RAG Assessment also updated to include Broom Covert, Sizewell

Zone	No. Red Scores	No. Amber Scores	No. Green Scores
Zone 1 (formerly E3)	8 x Red	12 x Amber	26 x Green
Zone 2 (formerly E4)	9 x Red	10 x Amber	27 x Green
Zone 3 (formerly E2)	3 x Red	21 x Amber	22 x Green
Zone 4 (formally E1)	2 x Red	18 x Amber	26 x Green
Zone 5 (formerly W3)	3 x Red	16 x Amber	27 x Green
Zone 6 (formerly W2)	2 x Red	15 x Amber	29 x Green
Zone 7 (formerly W1) – Grove Wood	2 x Red	7 x Amber	37 x Green
Zone 8 (new) – Broom Covert	2 x Red	18 x Amber	26 x Green

4) Onshore Substations AONB Impact Appraisal Assessment

- AONB Impact Appraisal: Considers potential impacts of substation on AONB
- Considered specifically substations zones:
 - **Zone 2** - Located within the AONB (and a proxy for Zone 1)
 - **Zone 3** - Located partially within AONB and partially on its immediate edge/setting
 - **Zone 4** - Located outside AONB but on its immediate edge/setting
 - **Zone 7** - Located outside AONB to the west (and a proxy for Zone 5 & Zone 6)
- Updated to include:
 - **Zone 8** - (updated) Broom Covert, Sizewell, located within the AONB
- AONB Impact Appraisal (prepared by experts in landscape and visual impact assessments) draws upon published citations that describe the ‘special qualities’ of the AONB
- The AONB Impact Appraisal will be published as part of Section 42 consultation

4) Onshore Substations AONB Impact Appraisal Assessment

AONB Impact Appraisal Conclusions

- AONB Impact Appraisal found that development within any eastern zone located within or on the edge of the AONB (Zones 1, 2, 3, 4 and 8), is likely to result in **significant effects on some of the special qualities of the AONB**
- Development in the western substation zones (5, 6 and 7) would be likely to **avoid significant effects on the special qualities of the AONB**
- Due to the likely significant effects on the AONB special qualities, siting substations of this scale within the AONB carries considerable consenting risk
- Although zones to the west are susceptible to change in their own terms, they are not subject to a nationally protected AONB landscape designation

4) Landscape & Visual Impact and Mitigation Feasibility

- High level assessment considered three zones: Zone 2, 3 and 7 and considers:
 - Sensitivity of receptors and potential magnitude of change
 - Mitigation feasibility and suitability
 - Potential significance of residual landscape and visual impacts
- Concluded that the development of substations within the eastern zones, located within or on the edge of the AONB, would result in significant effects on some of the special qualities of the AONB
- Concluded that the development of substations within the western zones, located beyond the AONB, would be likely to avoid significant effects on some of the special qualities of the AONB
- Recognised that western zones are susceptible to change in their own terms, although they are not subject to landscape designation
- Development of Zone 7 would have significant effects on fewer landscape and visual receptors overall and is likely to avoid significant effects on the AONB.

5) Phase 3.5 Consultation

- 617 responses received to date
 - 391 by Feedback Form (online / emailed / posted)
 - 200 by E-mail / Letter
 - 26 Statutory / Key Stakeholders

Opinion Expressed	Number Expressing Opinion *
Against wind/renewable development	3
Oppose development at both sites	152
Neutral or no specific comments regarding opposition or support for either site	39
Support development at Friston	25
Oppose development at Friston	155
Support development at Sizewell	172
Oppose development at Sizewell	216
Support development at either site	1

* Where stakeholders have presented more than one view (i.e. supporting one site and opposing the other site), both views are included in the above table. Where stakeholders objected to both sites, this view is included in the “Oppose development at both sites” row only)

5) Phase 3.5 Consultation

Response

*“The Broom Covert site is within the Suffolk Coast and Heaths AONB and the landscape has the highest level of sensitivity. **[Stakeholder] believes that the proposed use of this site would constitute major development in the AONB.***

*Planning policy establishes a default of no major development within the AONB unless exceptional circumstances can be demonstrated. **[Stakeholder] consider that the Broom Covert site would be extremely challenging to develop without significantly impacting on the AONB”.***

*“[Stakeholder] consider that **SPR have already identified sites outside the nationally designated AONB** during a site selection process that the developer considered suitable and indeed a preferred option was identified before this further round of consultation.*

New substations at Broom Covert have the potential to overwhelm this part of the AONB** and to squeeze out the remaining traditional landscape character and permanently close down opportunities to enhance this part of the designated area. It would also further populate with industrial development the corridor of AONB land between Sizewell and Leiston, **threatening to sever clear landscape character connectivity north and south”.

5) Phase 3.5 Consultation

Response
<ul style="list-style-type: none">• Concern expressed for substation site options stating that the Broom Covert, Sizewell site is the "least worst" option.• <i>"It is the [Stakeholder] view that although the Friston site lies outside the AONB, the development of this site [Grove Wood, Friston] would be hugely detrimental resulting in significant impacts which would be extremely difficult to mitigate. In addition to the impacts experienced at the substation site, the longer cable route associated with this site selection and the challenges and impacts involved, result in the local authorities being of the opinion that the Friston site is not an effective alternative in policy terms."</i>• Regarding Broom Covert, Sizewell, [Stakeholder] advise that although further assessments are required, <i>"there are considered some potential advantages that the Broom Covert site may be able to provide"</i>, including shorter cable corridor; less visual impact; better planting potential; better transportation routes; and lack of listed buildings nearby.• Concerns raised over drainage into adjacent Sizewell Marshes SSSI.
<ul style="list-style-type: none">• Concerns regarding surface water drainage feed into Sizewell Marshes SSSI• Broom Covert does not include groundwater source protection unlike the Grove Wood site

5) Phase 3.5 Consultation

Response
<ul style="list-style-type: none">• Greater support can be offered to selection of Broom Covert, Sizewell site than Grove Wood, Friston• <i>"If the Friston site was to be taken forward, then it is likely we would consider an objection on heritage grounds"</i>.• No designated heritage assets identified at Broom Covert, Sizewell.
<ul style="list-style-type: none">• Believes neither site is suitable for substations but Broom Covert, Sizewell has much more limited impacts compared to Grove Wood, Friston.• If Grove Wood is selected, concerns would include: Flood risk; RAG Assessment methodology; Noise from the substation and lack of mitigation commitments; Vibration ; Substation design and associated visual impact; Transportation; Landscape impact; and cumulative impact with National Grid Ventures projects.
<ul style="list-style-type: none">• Neither proposed options are considered suitable in any form• Advocated inclusion of land on the north of the Sizewell Gap Road be included in the assessment during Phase 3 consultation, although this was before the [Stakeholder] really grasped how big the EA2 and EA1N complex would be• [Stakeholder] cannot support or condone any of the proposals put forward to date .

5) Phase 3.5 Consultation

Response

- State that the **AONB is protected** and a **viable site exists outside the AONB**
 - Concern over **severance of the AONB** and impact on tourism
 - **Broom Covert, Sizewell site provides an important buffer** from Sizewell Power Stations and is an important ecological site for habitats and species
- Believe the consultation process is flawed and incomplete and the RAG Assessment is flawed and bias
 - Commissioned an independent landscape assessment concluding:
 - ***"there will be significantly less harm to existing landscape character and visual amenity if the substations were located on the EDF site. ...In contrast the landscape surrounding the Friston site has a deeply rural, unified character, with limited intrusion from modern development. The substations could not be accommodated without significant harm to the local landscape, the setting of the village and the visual amenity of the residents of Friston"***
 - Impacts on the landscape setting, traffic, noise, ecology, lack of cumulative impacts and flood risks are highlighted as concerns.
- Concerns raised over the need to upgrade existing pylons which could increase disturbance and potentially damage to habitats at the northern end of the SPA
 - The Grove Wood, Friston site is further from the Sandlings SPA, therefore once the cable route is in place, **disturbance to wildlife during operation from noise and lighting at the substation may be more limited than if the Broom Cover, Sizewell was chosen.**

5) Phase 3.5 Consultation

Response
<ul style="list-style-type: none">• No objection in principle to the proposed wind farms and associated infrastructure• Raised a technical objection at this stage due to lack of detailed information
<ul style="list-style-type: none">• The relative merits of the land at Broom Covert or Grove Wood are a matter for others to consider• Stated the Broom Covert, Sizewell land performs an important function as a wildlife receptor site and could not permit its development without the establishment of alternative satisfactory locations.
<ul style="list-style-type: none">• Concern expressed over the Broom Covert, Sizewell substations site, specifically the possible encroachment onto the Galloper land and crossing of cables/utilities
<ul style="list-style-type: none">• Presence of Sizewell Power Stations does not justify the area automatically being designated for electricity infrastructure• Understands why SPR has suggested Friston as the substation site• Understands why many residents in Friston are opposed to the substation• Seeks the Planning Inspectorate to ensure the impact on the local environment is minimised• Wishes the substation to be proactively designed and built deep into the ground.• The AONB is not a dump for energy infrastructure.

6) Confirmation of the Viability of Preferred Substation

- Considerations in confirming the viability of the preferred substation:

Category	Aspect
Land	Compulsory Acquisition Powers / Temporary Possession Powers
	Compensatory Land Requirements
	Commercial Terms
Critical Path Programme	Consenting Programme
	Construction Programme
Key Policy	National Policy Statement Compliance Regarding AONB
	National Policy Statement Compliance Regarding Historic Setting
	National Planning Policy Framework Compliance Regarding AONB Matters
	National Planning Policy Framework Compliance Regarding Landscape and Visual Matters
	Suffolk Coastal District Council Core Strategy & Development Management Policies (first draft Local Plan)
	Public Rights of Way (PRoW)
Design and Construction	Health and Safety
	Complexity of Construction
	Interaction with third party infrastructure
	Access during operational life
Operations	Access during operations
Commercial Viability/ Cost	Construction Cost
	O&M Cost

6) Confirmation of the Viability of Preferred Substation

- Significant differences between the two substation sites include:
 - Presence of Broom Covert, Sizewell within the Suffolk Coast & Heaths AONB, contrary to NPS EN-1 and NPPF policy, introducing a significant consenting risk to the project.
 - The need to secure replacement reptile mitigation land for the Sizewell C development on a voluntary basis, without the ability to secure land by compulsory acquisition
- Considering aspects such as land, critical path programme, key policy, design/constructing, operations, and commercial viability/cost considerations, **no aspect is considered to be material so as to affect the commercial viability, deliverability and consentability of the Grove Wood, Friston substation site**

7) Substation Site Selection Decision

- Balanced, robust and transparent recommendation to SPR's Management Team for **Grove Wood, Friston** being the selected substation site location. Recommendation was approved 28th November 2018
- **Grove Wood, Friston:** Located outside Area of Outstanding Natural Beauty (AONB), with onshore cable route ca. 8km, no statutory undertaker land ownership. Identified following extensive pre-application consultation
- **Broom Covert, Sizewell.** Located within AONB, onshore cable route of ca. 3km, closer to the coast, statutory undertaker land ownership
- Issues considered include but are not limited to AONB, Historic Environment, Compulsory Acquisition of Land, Interaction with Statutory Undertakers, Engineering Complexity, Project Deliverability, Cost, Environment or Ecological Impacts and Planning Policy
- Presence of Broom Covert, Sizewell within the Suffolk Coast & Heaths AONB, contrary to NPS EN-1 and NPPF.

Conclusion has been based on SPR's ability to deliver the project at Grove Wood, Friston in line with current Planning Policy

Next Steps

- Parish Briefings on 10th and 13th December 2018
- Section 42 consultation on a draft impact assessments
- Phase 4 public consultation on draft impact assessments
 - Exploring impacts and their mitigation
 - Newspaper notices and initial circulation commences week 28 Jan 2019
 - Consultation formally commences 11 Feb 2019 and ends 26 March 2019
 - 13 public consultation events from 16 Feb to 9 March 2019



Next Steps

Some of the key documentation to be available during Phase 4 consultation:

- Non-Technical Summary (hard copies will be available at the Phase 4 PIDs and on request)
- Chapter 4: Site Selection & Assessment of Alternatives, including:
 - Appendix 4.1 Onshore Substation Site Selection RAG Assessment
 - Appendix 4.2 AONB Impact Appraisal
- Chapter 20: Water Resources & Flood Risk, including:
 - Appendix 20.1: Flood Risk Assessment
- Chapter 25: Noise & Vibration, including:
 - Appendix 25.1: Baseline Noise Survey
 - Figure 25.3.2: Cumulative Operational Substations Noise Model (inc. harmonic filters)
- Chapter 26: Traffic & Transport, including:
 - Appendix 23.16: Diagram of Traffic Movements Assigned to the Highway Network
 - Appendix 26.22: Diagram of Traffic Movements Assigned to the Highway Network (EA2 & EA1N concurrently)
- Chapter 29 Landscape & Visual Impact, including:
 - Figure 29.11: Landscape Mitigation Plan
 - Figures 29.13 – 29.25: Onshore Substations Photomontage Visualisations
(hard copies will be available at Phase 4 PIDs and on request)

Questions...