



AQUIND Limited

AQUIND INTERCONNECTOR

Position Statement on EN-5

EXA WQ PP1.13.3

The Infrastructure Planning (Examination Procedure) Rules 2010, Rule 8(1)(b)
The Planning Act 2008

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1. INTRODUCTION

1.1.1.1. This statement is made by WSP UK Limited on behalf of AQUIND Limited (the 'Applicant') in relation to the application for development consent to authorise the elements of AQUIND Interconnector within England and the waters adjacent to England up to seaward limits of the territorial sea (the 'Proposed Development') made on 14 November 2019 (the 'Application'). The Application was accepted for examination by the Planning Inspectorate ('PINS') on behalf of the Secretary of State on 12 December 2019.

1.1.1.2. The Examining Authority ('ExA') has issued a number of written questions in relation to the Proposed Development. This statement has been prepared in response to the ExA written question with reference PP1.13.3, in relation to the applicability of National Policy Statement EN-5 ('NPS EN-5') to the Proposed Development.

1.1.1.3. For ease of reference, the ExA written questions with reference PP1.13.3 states as follows:

"With reference to paragraph 3.9.1.3 of the Planning Statement [APP-108], could the Applicant please explain the applicability of National Policy Statement (NPS) EN-5 to the Proposed Development, given that the proposal is for an underground cable.

How does the Applicant believe that the Proposed Development performs when tested against NPS EN-5?"

1.1.1.4. Noting the reference to it in the written question posed, paragraph 3.9.1.3 of the Planning Statement [APP-108] states as follows:

"There are a range of other national and local policies that may be important and relevant to the SoS's decision making process, in accordance with s104 of the PA 2008. However, EN-1 confirms that in the event of a conflict between EN-1 and other local or national policy, EN-1 will prevail due to the overwhelming need to deliver new energy infrastructure."

2. EXPLANATION OF THE APPLICABILITY OF NPS EN-5 TO THE PROPOSED DEVELOPMENT

2.1.1.1. The Applicant submitted a statement in relation to the applicability of EN-5 to the Proposed Development in advance of Procedural Deadline A [PDA-001], which confirmed the view of the Applicant’s legal advisors that NPS EN-5 is not a ‘relevant national policy statement’ as defined at section 104(2)(a) of the Planning Act 2008 (the ‘Act’).

2.1.1.2. In summary the reasons for that view are as follows:

- The direction issued pursuant to section 35 of the Act by the Secretary of State dated 30 July 2018 (the ‘Direction’) confirming that the Proposed Development, together with any development associated with it, is to be treated as development for which development consent is required did not direct that NPS EN-5 was to have effect, as it did in relation to NPS EN-1;
- Section 1.8 of NPS EN-5 entitled “Infrastructure covered by this NPS” confirms the specific descriptions of development to which NPS EN-5 relates and will be a ‘relevant national policy statement’ in relation to.
- Paragraph 1.8.2 of NPS EN-5 states “This NPS covers above ground electricity lines whose nominal voltage is expected to be 132kV or above. Any other kind of electricity infrastructure (including lower voltage overhead lines, underground or sub-sea cables at any voltage, and associated infrastructure referred to above) will only be subject to the Planning Act 2008 – and so be covered by this NPS – if it is in England, and it constitutes development for which consent is sought along with an NSIP such as a generating station or relevant overhead line”.
- No part of the Proposed Development is an above ground electricity line.
- The assumption in the remainder of paragraph 1.8.2 of NPS EN-5 is that any other kind of electricity infrastructure which the NPS could be applicable to would be associated development in connection with other Nationally Significant Infrastructure Projects, being a generating station or an overhead line.
- The Proposed Development is not of itself associated development, rather it is development for which development consent is required by virtue of the Direction.

- The circumstance where a Direction is issued which provides for other types of electricity network infrastructure to require development consent is not considered by the NPS.

2.1.1.3. It is therefore the view of the Applicant that NPS EN-5 is not a relevant national policy statement in relation to the Proposed Development which the Secretary of State must have regard to.

2.1.1.4. It is acknowledged however that where an NPS is not a 'relevant national policy statement' in relation to an application, it may still be a matter which the Secretary of State thinks is both important and relevant to their decision and which they must have regard to.

3. THE RELEVANCE OF NPS EN-5 TO THE PROPOSED DEVELOPMENT

- 3.1.1.1. The policies contained within NPS EN-5 are of most relevance to the electricity networks infrastructure which they have been produced in relation to. Nonetheless, there are still some elements of the policies which could be considered to be relevant to the Proposed Development. This section of this statement identifies those policies which are considered to be relevant to the Proposed Development, and having done so, then explains how the Proposed Development performs against those policies.
- 3.1.1.2. The policies contained in NPS EN-5 are contained at Part 2, which is entitled 'Assessment and Technology-Specific Information. The policies contained in Part 2 of NPS EN-5 are broken down into the following headings:
- Factors influencing site selection by applicants
 - General assessment principles for electricity networks
 - Climate Change Adaptation
 - Consideration of good design
 - Biodiversity and Geological Conservation
 - Landscape and Visual
 - Noise and Vibration
 - Electric and Magnetic Fields (EMF's)
- 3.1.1.3. The relevance of policies contained within Part 2 of NPS EN-5 under each of the above outlined headings and where relevant how the Proposed Development performs in relation to those policies is explained below.

4. SITE SELECTION

- 4.1.1.1. This section explains the factors which influence site/route selection by applicants. Paragraph 2.2.1 of NPS EN-5 is clear that this section does not provide Government policy but is included to provide background information that applicant's consider when choosing a site or route. Despite not providing Government policy, it was thought helpful to identify the relevance of the background information provided in this section to the Proposed Development.
- 4.1.1.2. Paragraph 2.2.2 identifies that the location of electricity network infrastructure is often determined by the location of existing network infrastructure taking electricity to centres of energy use, and that this gives a locationally specific beginning and end to a line.
- 4.1.1.3. This background information is considered to be relevant in the context of the Proposed Development, where the location of the Converter Station will inevitably be dependent on the location of the substation to which it connects into and located within a reasonable proximity to it. Furthermore, by virtue of the cable circuits connecting the UK and France, it is always the case that it will be necessary to determine a route which comes ashore at the south coast of England and routes to the location of the Converter Station. It is then necessary for an applicant to determine the landing point and the route between that point to the Converter Station, taking into account a number of factors, including engineering and environmental considerations. The considerations of the Applicant in this regard are explained in Chapter 2 of the Environmental Statement [APP-117] and the Supplementary Alternatives Chapter contained in the Addendum to the Environmental Statement (document reference 7.8.1.3).
- 4.1.1.4. Paragraphs 2.2.3 and 2.2.4 discuss the position in relation to the need for an undertaker to be able to lawfully install, inspect, maintain, repair, adjust, alter, replace or remove an electric line (above or below ground) and that to do so they will need to own the land in which construction takes place or hold sufficient rights over it. It is noted that where such land and rights over land cannot be acquired voluntarily, an undertaker may seek to compulsorily acquire the land and rights over land required via provisions in a DCO. This is relevant only in so far as to state it is correct, and that the Applicant is seeking to acquire the land and rights required over land in connection with the construction and operation of the Proposed Development voluntarily and has included provisions in the DCO for their compulsory acquisition for in the event those negotiations are not successful.
- 4.1.1.5. The Proposed Development does not involve substations and therefore paragraph 2.2.5 of NPS EN-5 is not relevant.

- 4.1.1.6. With regard to paragraphs 2.2.6 and 2.2.7, it is acknowledged that the Applicant, by virtue of holding an interconnector licence granted pursuant to the Electricity Act 1989, is subject to the duty provided by Schedule 9 to the Electricity Act 1989. The Applicant considers that it has complied with this duty, noting that the Proposed Development consists of underground cables with very minimal above ground infrastructure proposed along the Onshore Cable Route leaving little to no lasting impact on features, and has located and designed the Converter Station so as to be as integrated into the landscape as possible, taking into account the locational constraints provided by the need to locate in proximity to an existing substation and operational requirements of the Converter Station which drive its form to a large extent.

5. GENERAL ASSESSMENT PRINCIPLES

- 5.1.1.1. Paragraphs 2.3.1 to 2.3.3 discuss the submission of applications for generating stations and related infrastructure in a single application or multiple applications. The Proposed Development is a single application with no further application for development consent required for its holistic construction and operation. These paragraphs are not considered to be of any further relevance other than to note this.
- 5.1.1.2. Paragraph 2.3.4 identifies that if the ExA “believes it needs to probe further then factors it may wish to consider include whether the project would make a significant contribution to the promotion of renewable energy, the achievement of climate change objectives, the maintenance of an appropriate level of security of electricity supply or whether it helps achieve other energy policy objectives.”
- 5.1.1.3. All of those listed factors are relevant to the Proposed Development, with the explanation of how they are relevant and the benefit to be derived from the Proposed Development in relation to them explained in the Needs and Benefits Report [APP-115] and the Addendum to the Needs and Benefits Report (document reference 7.7.7). Those matters are not repeated in this statement.
- 5.1.1.4. Paragraph 2.3.5 is specific to National Grid and paragraph 2.3.6 is specific to network reinforcements. Neither of these matters are directly relevant to the Proposed Development.

6. CLIMATE CHANGE ADAPTATION

- 6.1.1.1. Paragraphs 2.4.1 discusses climate change adaptation and states that, in addition to the more generic considerations that should be taken into account outlined in Section 4.8 of NPS EN-1, in relation to infrastructure located in areas susceptible to flooding or near the coast or an estuary or underground where climate change is likely to increase risks to the resilience of the infrastructure, applicants should set out to what extent the proposed development is likely to be vulnerable and, as appropriate, how resilient it would be to:
- Flooding, particularly for substations that are vital for the electricity transmission and distribution network;
 - Effects of wind and storms on overhead lines;
 - Higher average temperatures leading to increased transmission losses; and
 - Earth movement or subsidence caused by flooding or drought (for underground cables).
- 6.1.1.2. Paragraph 2.4.2 outlines that the resilience of projects to climate change should be assessed in the Environmental Statement accompanying an application.
- 6.1.1.3. The Proposed Development may be susceptible to climate change and as such it is considered the policies at paragraph 2.4 are of relevance to it, however it is noted that as the Proposed Development does not include overhead lines the second bullet point provided at paragraph 2.4.1 (effects of wind and storms on overhead lines) is not relevant.
- 6.1.1.4. An updated version of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy (APP-360, Rev 002) is submitted as Appendix 7 to the Onshore Outline CEMP (APP-505, Rev 002) and is submitted in connection with the
- 6.1.1.5. Application which provides details on how surface water is to be managed within the Converter Station Area to avoid the risk of flood events. The Optical Regeneration Stations ('ORS') are located at the Landfall which is at the coast at Eastney. A Flood Risk Assessment was submitted in connection with the Application (APP-439), and a Flood Risk Assessment Addendum (document reference 7.8.1.8) is submitted at Deadline 1 to address the position in relation to the change of the Flood Zone within which the ORS are located from Flood Zone 2 to Flood Zone 3 following the submission of the Application.
- 6.1.1.6. The Flood Risk Assessment Addendum (document reference 7.8.1.8) identifies that the design measures proposed for the ORS in order for them to be resilient to the effects of climate change, including a raised external threshold to 0.95 m above existing ground level and the raising of internal electrical equipment internally by 300

mm remain sufficient to adequately protect the ORS from 1:1000 extreme flood events. Accordingly, the Proposed Development has been designed as necessary to be resilient to flood events including where worsened due to climate change.

6.1.1.7.

With regard to the resilience of the Proposed Development to climate change and the hazards associated with this more generally, Chapter 28 to the Environmental Statement submitted in support of the Application (APP-143) assesses the resilience of the Proposed Development to climate change. This identifies that following the application of appropriate mitigation measures, neither the construction or operation of the Proposed Development are predicted to give rise to any significant impacts relating to climate change and the hazards associated with it.

7. CONSIDERATION OF GOOD DESIGN

- 7.1.1.1. Paragraph 2.5.1 states that the principles of good design are covered by section 4.5 of EN-1. Paragraph 2.5.2 states that proposals for electricity networks infrastructure should demonstrate good design in their approach to mitigating the potential adverse impacts which can be associated with overhead lines. The Proposed Development does not include an overhead line and therefore the policies at paragraph 2.5. which specifically relate to adverse impacts associated with overhead lines, are not relevant to the Proposed Development.

8. BIODIVERSITY AND GEOLOGICAL CONSERVATION

- 8.1.1.1. Paragraph 2.7.1 of EN-5 notes that large geese and swans may collide with overhead lines, particularly in poor visibility. The Proposed Development does not include overhead lines And therefore the policies contained at paragraph 2.7 of NPS EN-5 are not relevant to the Proposed Development.

9. LANDSCAPE AND VISUAL

- 9.1.1.1. Paragraph 2.8.1 notes that generic landscape and visual effects are covered in Section 5.9 of EN-1. It goes on to state that there are additional specific considerations which apply to electricity networks infrastructure, with remainder of paragraph 2.8 setting out considerations in relation to visual impacts of overhead lines.
- 9.1.1.2. The Proposed Development does not include overhead lines. It is noted however in relation to the policies contained at paragraph 2.8 of that the Proposed Development has purposefully chose to underground the onshore cables associated with it so as to avoid adverse visual impacts associated with overhead lines. In this regard it is also noted in particular that in urban areas where residential and recreational land will be situated along the route of an overhead line, applicants should carefully assess the comparative costs of undergrounding, which is an acknowledgment that adverse visual impacts in those locations may not be capable of being made acceptable without undergrounding.
- 9.1.1.3. Noting the above, it is considered that the policies contained at paragraph 2.8 are relevant to the Proposed Development, and that the Proposed Development has taken an acceptable approach to its design by including only underground onshore cables and avoiding the use of overhead lines in all instances.

10. NOISE AND VIBRATION

- 10.1.1.1. Section 2.9 of EN-5 deals with specific considerations which apply to electricity networks infrastructure, being overhead lines. As previously stated, the Proposed Development does not include overhead lines, rather it comprises underground cables and, as such, operational noise will not be an issue in the same way as overhead lines. Accordingly, the policies contained at paragraph 2.9 in the main are not considered to relevant to the Proposed Development.
- 10.1.1.2. Paragraph 2.9.7 identifies that audible noise effects may also arise from substation equipment such as transformers and other electrical equipment. Whilst not a substation, the Converter Station will include similar electrical equipment and this paragraph could be considered to be relevant. It is also noted that the ORS has the potential to give rise to audible noise during operation.
- 10.1.1.3. The operational noise associated with the Converter Station and the ORS have been fully assessed within Chapter 24 of the Environmental Statement (APP-139) submitted in support of the Application. The assessment undertaken has identified that audible noise effects are predicted to be negligible on surrounding sensitive receptors in relation to both the Converter Station (subject to appropriate embedded design measures) and the ORS. To ensure there are adequate controls in place to limit the operational noise that may emanate from both, Requirement 20 of the draft DCO (APP-019) provides requirements for the broadband and octave band noise criteria that must be achieved at surrounding sensitive receptors.

11. EMF

- 11.1.1.1. Paragraph 2.6.2 of EN-5 states that the NPS contains technology-specific considerations for the impact of EMFs, which is not an impact considered in EN-1. Paragraph 2.10 provides more specific information in relation to EMFs, identifying that EMFs can have both direct and indirect effects on human health and that whilst putting cables underground eliminates the electric field, they still produce magnetic fields, which are highest directly above the cable.
- 11.1.1.2. Paragraph 2.10.3 identifies that to prevent known adverse effects occurring, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) developed health protection guidelines in 1998 for both public and occupational exposure which have been adopted in the UK (as stated in paragraph 2.10.5), and that compliance with the reference levels provided by those guidelines will ensure that the basic restrictions are not reached or exceeded.
- 11.1.1.3. The Applicant assessed the Proposed Development in respect of the potential to give rise to effects associated with EMF within the Onshore Electric and Magnetic Field Report submitted as part of the Application (APP-361). Sections 1.6.3 and 1.6.4 of this report provide as follows:
- Summary
 - Due to the earthed shielding of the HVAC Cables and HVDC Cables there will be no electric field present along the Onshore Cable Route.
 - The HVAC Cables are laid in agricultural land and the magnetic field strength is well below the guidelines and reduces rapidly with distance from the Cables.
 - The HVDC Cables are laid mainly along public highways and the magnetic field strength is well below the guidelines and reduces rapidly with distance from the Cables.
 - There will be no AC electric field outside of the Converter Station due to the earthed perimeter fence.
 - The Converter Station reactors must be designed and positioned to limit AC magnetic fields at the compound perimeter to levels below the guideline levels.
 - Compliance
 - The assessed components of the Proposed Development produce field strengths which are less than the public exposure limit in areas where the time of exposure to the general public is considered significant.
 - The HVAC and HVDC Cables are deemed to comply with public exposure guidelines for electric and magnetic fields.

- At the time of writing the detailed and final design has not yet been performed for the Proposed Development. In the final design it shall be ensured that the Proposed Development complies with all guidelines and codes of practice applicable to the UK for the Converter Station and Onshore Cable Route.”

11.1.1.4. Accordingly, it has been established that the Proposed Development will not give rise to adverse effects related to EMFs, with it being identified that the Proposed Development is compliant with the reference levels contained in the ICNIRP health protection guidelines.

12. CONCLUSION

- 12.1.1.1. Whilst the Applicant considers that NPS EN-5 is not a 'relevant national policy statement' as defined at section 104(2)(a) of the Act, this statement demonstrates that in so far as NPS EN-5 can be considered to be relevant to the Proposed Development, the Proposed Development is in accordance with the policies contained therein.

