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5 October 2020

The Planning Act 2008, Section 89, and The Infrastructure Planning (Examination Procedure) Rules 2010, Rules 8, 9 & 13

Application by AQUIND Limited for an Order Granting Development Consent for the AQUIND Interconnector Project

Written Representation on behalf of CPRE HAMPSHIRE
(Reference 20024996)

CPRE Hampshire, the countryside charity, considers that a Development Consent Order should be refused for the reasons set out below.

We have studied the documents forming part of the Environmental Statement (ES) which are relevant to this Written Representation, including ES Chapter 2 - Consideration of Alternatives [APP-117], ES Chapter 15 - Landscape and Visual Amenity [APP-130] (the LVA) and related documents APP-242 to APP-273, APP-401 to APP-408, and ES Chapter 24 - Noise and Vibration [APP-139] As required, we set out in the text below the parts of those documents with which we agree and the parts with which we do not agree.

Landscape Character, Visual Amenity and Tranquillity of Convertor Halls

The proposed Convertor Station includes two convertor halls, each measuring 90 metres in length, 50 metres in width and 26 metres in height. These are very large buildings, with a height in excess of the largest agricultural buildings and mature trees. Our specific concern relates to the landscape, visual amenity and tranquillity impact of these Converter Halls.

An experienced team of CPRE Hampshire volunteers has toured the 3 kilometre study area and visited a number of the Viewpoints identified in the LVA. Based on that evaluation, we accept as correct the Significance of Effects in terms of landscape and visual amenity set out in the LVA for the Converter Halls at Year 0.

The LVA finds that within 3 kilometres the Converter Halls would be prominent and have Significant Adverse Effects on the following landscape character areas:

- South Downs National Park (SDNP) D (D2 Hambledon and Clanfield Downland Mosaic)
- Winchester City Council Hambledon Downs 17 (LCTW2), and
- East Hampshire District Council LCT 3 Downland Mosaic (LCA 3fi)

And finds that the Converter Halls would have Significant Adverse Effects on visual amenity, resulting in a noticeable deterioration of existing views, from:

- the Monarchs Way. This is a nationally recognised long distance and much used path, which is an important recreational resource as it passes through the SDNP and within 650 metres of the Converter Halls
- the path leading round Broadhalfpenny Down, in some locations. Again this path is an important recreational resource as it passes through the SDNP
- the two footpaths leading from Broadway Lane to Broadway Lane South, which are in regular use by local residents, and
- the minor roads within the 3 kilometre study area through gaps in the hedgerows. Some of these roads are within the SDNP, including Old Mill Lane and Broadway Lane. These minor roads form an attractive

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network of historic rural roads, narrow and winding with high bounding hedgerows, and provide a strong sense of place. We saw on our tour that they are in regular use for recreation by walkers, cyclists and horse riders, who have greater opportunity to enjoy views through gaps in the hedgerows than faster moving motorists.

These Significant Adverse Effects on landscape character and visual amenity would inevitably have significant adverse effects on the tranquillity (in its widest sense) enjoyed by users of roads and public rights of way in the 3 kilometre study area, notably including the Monarchs Way where the loss of tranquillity would contrast strongly with that enjoyed as this long distance path passes elsewhere through the SDNP. Tranquillity in terms specifically of noise is referred to below.

We understand that for technical reasons it is not possible to reduce the size of these buildings and, while planting and use of appropriate colours to mitigate impacts is to be encouraged, the sheer height, scale and prominence of these Converter Halls in this rural setting means that these Significant Adverse Effects cannot be much mitigated.

In paragraph 5.9.9 of NPS EN-1 it is recognised that national parks have the highest status of protection in relation to landscape and scenic beauty, and that conservation of the natural beauty of the landscape and countryside of these areas should be given substantial weight. In this respect paragraph 5.9.12 provides that the aim should be to avoid compromising the purposes of designation, including where proposals lie outside the designated area.

As part of the Development Plan for the SDNP, the South Downs National Park Local Plan 2014-2033 (adopted 2 July 2019) sets out in policies SD1-SD10 the strategic planning principles to be applied to development within the SDNP. The proposed Converter Halls would not be within the SDNP but the relevant strategic planning principles should nevertheless guide the assessment required by paragraph 5.9.12 EN-1 as to whether the identified Significant Adverse Effects caused by the Converter Halls on the Special Qualities of the SDNP, notably landscape character, visual amenity and tranquillity, would avoid compromising the purposes of designation of the SDNP. Of particular relevance in this respect are:

(a) Strategic Policy SD4 - Landscape Character - which only permits development proposals that conserve and enhance existing landscape character features which contribute to the distinctive character, pattern and evolution of the landscape, and that safeguard the experiential and amenity qualities of the landscape

(b) Strategic Policy SD5 - Design - which only permits development proposals which adopt a landscape led approach and respect the local character, through sensitive and high quality design that makes a positive contribution to the overall character and appearance of the area

(c) Strategic Policy SD6 - Safeguarding Views - which only permits development proposals that preserve the visual integrity, identity and scenic quality of the National Park, in particular by conserving and enhancing key views and views of key landmarks within the National Park. This would include key views leading out of the SDNP.

(d) Strategic Policy SD7 - Relative Tranquillity - which only permits development proposals that conserve and enhance relative tranquillity, considering the direct impacts that the proposals are likely to cause by changes in the visual and aural environment in the immediate vicinity of the proposals, and the impact on the experience of users of the public rights of way network and other publicly accessible locations, and

(e) Strategic Policy SD8 - Dark Night Skies - which provides that development proposals must demonstrate that all opportunities to reduce light pollution have been taken, and must ensure that the measured and observed sky quality in the surrounding area is not negatively affected

As to the impact of the Converter Halls on the landscape outside the SDNP, EN-1 paragraph 5.9.15 provides that the Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not

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offset by the benefits (including need) of the project. The Halls would be located within Winchester District for which, as part of the Development Plan, the Winchester Local Plan Part 1 Joint Core Strategy (adopted March 2013) sets out the core planning principles to be applied to development within the District. Of particular relevance in respect of the Converter Halls are:

(a) Core Policy CP12 - Renewable and Decentralised Energy - when assessing proposals for large-scale renewable energy and decentralised energy schemes, account will be taken of the impact on areas designated for their local, national or international importance, such as the SDNP, and conservation areas and heritage assets, including their setting; and effect on the landscape and surrounding location

(b) Core Policy CP19 - SDNP - Development within and adjoining the SDNP which would have a significant detrimental impact to the rural character and setting of settlements and the landscape should not be permitted unless it can be demonstrated that the proposal is of overriding national importance, or its impact can be mitigated, and

(c) Core Policy CP20 - Heritage and Landscape Character - which supports development which recognises, protects and enhances the District's distinctive landscape; with particular emphasis to conserving natural landscapes, local distinctiveness, tranquillity, sense of place and setting

Having regard to the above planning requirements, CPRE Hampshire considers that the identified Significant Adverse Effects on landscape character, visual amenity and tranquillity caused by the Converter Halls, as set out in the LVA;

(a) would compromise the purposes for which the SDNP was designated, contrary to NPS EN-1 para 5.9.12, in that development of the Converter Halls would not

(i) conserve or enhance the natural beauty and tranquillity of the national park, or

(ii) promote public enjoyment of the special qualities of the national park,

and would not comply with the strategic planning principles designed to further those purposes, as set out in South Downs National Park Local Plan 2014-2033

And

(b) would be so damaging to the landscape, visual amenity and tranquillity outside the SDNP, within the 3 kilometre study area, that it:

(i) would not be offset by the benefit of the project, contrary to NPS EN-1 para 5.9.15, and

(ii) would not accord with core planning principles of the Winchester District Local Plan Part 1 - Joint Core Strategy 2013

And accordingly a Development Consent Order should be refused

In this context, we note that in the LVA it is said that most of the Significant Adverse Effects on landscape character and visual amenity will become not significant after 20 years due to maturity of the mitigation planting. We are sceptical of this assertion, based on our experience of mitigation planting, which often does not reach the height intended, or is not properly maintained, or even cut down to make way for further development. It is not clear how the applicant would ensure long term maintenance of hedgerows and trees over which it does not have control. So, we largely discount the longer term impact of the mitigation planting and consider that the landscape and visual effects need to be judged solely on the assessment at year 0, with the outcome set out above.

Landscape impact of cable circuits

Further, the installation of the cable circuits has the potential to impact on landscape as sections of hedgerow and trees are removed. It is noted that the cable corridor west of Waterlooville follows the Hambledon Road before turning north off the eastern side of Denmead. This area of open countryside is valued as an open gap

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between the existing settlements. There is the potential for the loss of trees and hedgerows to install the cables in the road and to enable the establishment of the vehicle access point and for the two cable circuits. Sections of hedgerow are also under threat on Anmore Road. If, contrary to the above, a Development Consent Order is approved then details of precisely what vegetation will be impacted should be submitted before any work is undertaken. Loss of hedgerow and trees should be kept to the absolute minimum and any gaps replanted as soon as practical.

Cumulative Impacts

The Lovedean substation is also attracting applications for battery storage and large solar farms. If the Converter Station were to be permitted such future development would have a cumulative impact with it and the Lovedean substation, which would likely exacerbate the Significant Adverse Effects described in the LVA. So if, contrary to the above, this Development Consent Order is approved, it needs to be stated within the accompanying Decision Letter that the Converter Station is not to be considered as a precedent for further energy related development in the vicinity of Lovedean substation, which must be judged solely on its own merits and in the context of cumulative impact with all then existing energy related development.

Noise and Vibration Assessment

Noise is an element of tranquillity which is an important public health issue. It is recognised in paragraph 5.11.1 of NPS EN-1 that excessive noise can have wide-ranging impacts on the quality of human life, health (for example owing to annoyance or sleep disturbance) and on the use and enjoyment of areas of value such as quiet places and areas with high landscape quality, and that similar considerations apply to vibration. This reflects WHO Environmental Noise Guidelines 2018. Tranquillity and its positive benefits to human and environmental welfare are given due prominence in the SDNP and Winchester District Local Plans.

Paragraph 5.11.4 of EN-1 provides that the noise assessment provided by applicants should include the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise generated, and the characteristics of the existing noise environment and a prediction of how that will change at particular times of the day, evening and night as appropriate.

The use of BS4142 as the standard in the ES does not properly reflect these requirements. Direct determination of noise amounting to a nuisance is specifically outside the scope of BS4142 (Sub clause 1.3) as nuisance is determined on a case-by-case basis by the Courts and the relevant considerations are far broader than those covered by BS4142. Paragraph 5.11.6 of EN-1 directs to the "*Association of Noise Consultants Good Practice Working Group – March 2020"* Specifically section 6*, Measurement Procedure*; section 7 *Specific Sound Level* and section 8 *Background Sound Level*. It is critical when assessing the impact of this project that the starting point is the status-quo conditions surrounding the site, which must not be adversely affected. This means initial accurate measurement of background noise is essential and needs to be agreed by all stakeholders prior to commencement.

BS4142: 2014 + A1: 2019 is too prescriptive and excludes many of the practical conditions applied to background noise, such as variable weather conditions, and the assessment of seasonality and ecological impacts (paragraph 5.11.7of EN-1).

Paragraph 5.11.19 of EN-1 provides for mitigation measures to be put in place to ensure that noise levels do not exceed any limits specified in the Development Consent Order. However, the project takes no account of uncertainties – i.e. unquantifiable in terms of direct measurement of background noise and vibration which may include:

a) Seasonal variations on sound levels particularly wind and rain. - It is suggested that a 12-month measurement cycle is undertaken at each receptor to account for variations which could be as high as +10dBA on predicted

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levels depending on wind strength and direction. As a rule-of-thumb, every 10dBA transmission increase, produces a doubling of perceived loudness (volume) of the noise level at the receptor, hence this needs to be further addressed.

b) Operational uncertainties such as variation of workload in the Converter Station. – given that the converter will operate 24/7, then its predicted operational extremes, and likely shift effects, should be addressed separately. ie will there be a difference in operational noise between day and night time working? What level of emergency loading is acceptable?

c) Non-typical working conditions during background measurements which are undertaken on a short time scale – see (a) above.

d) No reference is included to ground-borne effects, i.e. vibrations, from the operation. – these are presumably assessed from ground surveys, predictive modelling and experience of similar operations and deemed insubstantial? However, the lower band width frequency of 31.5Hz is insufficient to include such noises (and any similar air-borne frequencies emanating from the Converter operating plant). A more realistic frequency would be 10Hz. It has been well researched that the main source of sleep disturbance and annoyance emanates from the transmission of low frequency sound and this should be included in the Environmental Statement. A verbal agreement with WCC to use an octave band range of 31.5Hz to 8KHz is not acceptable and should be changed to 10Hz to 8KHz.

The effect of traffic and construction equipment noise during the construction phase has been extensively dealt with in the ES. The operational noise associated with the Converter Station is not expected to be significant and has therefore been scoped out. This ignores the cumulative effect and should be reinstated since it is not envisaged running the converter station in isolation from normal operating traffic. A list of predicted noise, i.e. All noise from the total operation, has not been produced and should be included. This is becoming accepted best practice and is not unreasonable since the acoustic environment consists of sounds from more than one source and the inclusion of low frequency sound is well documented as having effects on public health and on many environmental issues.

In conclusion if, contrary to the above, this Development Consent Order is approved the effect of noise on the local community and sensitive environment needs to be revisited for all the reasons expressed above. We consider a further body of work, combining the notes on noise with WHO and the Association of Noise Consultants would be an appropriate starting place.

Consideration of alternative sites

CPRE Hampshire has concerns over the way in which the choice of site appears to have been made as outlined in the 6.1.2 Environmental Statement - Volume 1 - Chapter 2 Consideration of Alternatives document (APP-117).

The Consideration of Alternatives document states that the optioneering process used has adopted a holistic approach, using detailed assessments to refine the selection, and takes into account the inter-relationships between the grid connection, the Converter Station location, the Onshore Cable Corridor, the Landfall location and the Marine Cable Corridor. However the objectivity of the process is called into question where Aquind had in fact signed a potential Electrical Connection agreement with the National Grid several years ago featuring Lovedean as the site of the Converter Station. So, it would appear that Aquind have spent several years working towards Lovedean as being their preferred site for the Converter Station.

Following paragraph 4.4.1 of NPS EN-1, the Applicant is obliged to include in the ES, as a matter of fact, information about the main alternatives studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility.

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In this context we note the lack of information provided in the ES as to the rejection of some of the alternative sites. For example as to why the potential site at Fawley (one of the original 10 possible converter sites) was rejected at such an early stage. Fawley appears to present a closed mega power station site on the coast and well away from all housing and environmental concerns, with a full National Grid pyloned 400kV overhead lines connection. Yet it did not make the short-list.

Further, the several disused Portsdown Hill chalk quarries, the nearby overhead pyloned grid power lines and the large Cosham electrical sub-station are all within 8km of the Eastney cable landfall site do not appear to have been considered at all. Yet would be socially and environmentally much more acceptable, saving some 10km of underground cable tunnel digging, and the consequent social, transport and environmental disturbance through the densely populated Waterlooville conurbation, as well as saving all the identified Significant Adverse Effects on the landscape, visual amenity and tranquillity arising at the Lovedean site.

Conclusion

Overall, it is the view of CPRE Hampshire that the Converter Station ought be located in a more industrial location away from the SDNP. We do not have the resources to examine alternative sites and we appreciate that, following EN-I, there is no requirement for the Examining Authority to consider alternatives to the Lovedean site or to establish whether the proposed project represent the best option. However, the fact that there appear to be alternative sites available in more industrial locations is, we consider, pertinent to the planning balance as between the benefit of siting the Converter Halls at Lovedean and the consequent Significant Adverse Effects, especially on the nationally designated landscape which is the South Downs National Park.

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