Countryside Alliance

The Voice of the Countryside

Submission to the NESO Electricity Transmission Design Principles (ETDP) Consultation

October 2025

Do you agree the Principles are written in a clear and accessible manner?

From a lay perspective the Principles do appear to be written clearly and accessibly. They include a relatively large number of terms of art peculiar to the energy sector, which is understandable given the document's subject matter and purpose, but the glossary in the consultation document – some version of which should be retained annexed to the final edition of the Principles, when published as such – will be helpful to non-expert audiences.

Given the context of the mission statement, are there any guidelines for transmission design that you think are missing?

The Principles appear to be sufficient to fulfil the mission statement as it is set out, but that statement itself suffers from a degree of internal inconsistency. Specifically, its first item states that the Principles should "[a]rticulate unambiguous guidelines on transmission technology choices," yet the very concept of an "unambiguous guideline" is paradoxical when paired with the third Principle, which admits to the possibility of "flexibilities" in their real-world application.

Where the Principles are lacking is in a clear explanation of the circumstances under which decisions might be made that do not align with what they would suggest and in particular, when and why "presumptions" – such as against the use of overhead lines in designated landscapes – might be overturned. The Countryside Alliance appreciates that the document cannot account for all eventualities nor prescribe for all circumstances, but it and its users would benefit from some attempt to address this issue.

Which Principles do you support and which do you disagree with and why?

The Countryside Alliance's approach to the Principles has been to consider the extent to which they stand to protect communities and landscapes from inappropriate development, while continuing to promote the development of a robust electicity grid that is relied upon as much by rural communities as any others. Several of the Principles, beginning with SP1 and SP3, appear to be sensible and necessary but otherwise stand beyond the scope of our expertise to evaluate.

We especially support those Principles that uphold the objective initially set out in SP2 that projects should "[p]rotect or seek to avoid landscapes, environments and amenities of cultural and community importance, and actively reflect the views of communities and stakeholders wherever practicable." We support advocacy, as in T1, of mitigations to protect natural landscapes. In relation to substations, we support – as raised in S1 – "[a] preference for

brownfield sites over greenfield, and a preference to avoid nationally important areas, such as Grade 1 agricultural land." We support the injunction in S3 to acquire sufficient land to accommodate future needs, so as to minimise future disruption to neighbouring landowners. We support the instruction in T4 to avoid or minimise impacts on areas of amenity value, and in T5 to consider natural screening and take account of cumulative visual impacts from new and existing infrastructure. We support considering landscape and community impacts in substation siting (S6), using space efficiently and minimising community disruption (S7) and considering impacts and mitigations for connections between substations and cables (S8).

There are no Principles with which we entirely disagree, but we do have concerns over some aspects of several of them. These begin in T1 with the incomplete consideration we believe has been given to the real-world impacts of overhead lines being sited within sensitive landscapes. Currently, T1 lists as design considerations, "Environmental (such as national landscape, ecological and heritage designations, hydrology and natural carbon stores)" and "Community (such as visual impact, cultural heritage, amenity, current land uses and settlement dispersion)." These characterisations are insufficiently holistic.

In February, Countryside Alliance Wales presented to the Independent Advisory Group on Future Electricity Grid for Wales the findings of our electrical infrastructure survey, which revealed the impacts of poorly planned electrical infrastructure on public health, the environment and the economy. The survey found that 93% of respondents were strongly opposed to pylon construction in their area, less than 1% of businesses believed pylons would create economic opportunities while 81% saw no benefits, and 89% of respondents strongly disagreed with a statement that pylons would positively impact tourism. Respondents also cited increased anxiety over the industrialisation of rural landscapes. T1 raises as considerations neither the potential economic impact from diminished rates of tourism nor impacts on residents' mental health. These should be considered as secondary consequences of any loss of visual amenity: it should not be regarded as solely an aesthetic concern.

T2 establishes the presumption that new transmission circuits will be overhead lines. The Countryside Alliance would prefer that this was not the case, because regardless of attempts to avoid or mitigate impacts on sensitive landscapes it makes some such impacts inevitable, but we recognise that there is little prospect of the position being reversed. We would, however, question the breadth of circumstances in which this presumption might be overturned and overhead lines judged inappropriate.

The Principle does state that "[i]n England and Wales, the starting presumption of overhead lines is reversed when proposed developments cross part of a nationally designated landscape (i.e. National Parks, The Broads, Areas of Outstanding Natural Beauty)"; NESO has already stated in response to a stakeholder question that locally designated landscapes are also relevant considerations, a clarification that should perhaps be reflected in the text. What is less clear is under what other circumstances, if any, this presumption might be expected not to be upheld.

We understand that some designated landscapes have had routes diverted around them, satisfying the letter of the injunction against their being crossed by overhead lines, but the

diversions have left the lines and pylons nevertheless visible from within the designated land area so their visual amenity has still been affected. We would also question the position of landscapes that lack any local or national designation but are nevertheless of high or locally valued visual amenity. The Principles do not appear to offer any succour to local residents or businesses concerned about either of these scenarios, nor suggest how they might seek the overturning of the presumption in the absence of a relevant designation.

Finally, T3 states that pylons should be presumed to be of a steel lattice design and that "only thoroughly tested, high-quality designs should be considered." We would question whether elements of this Principle might tend to stifle innovation and prevent the adoption of less visually intrusive or more attractive designs, such as the ENEL Power Pylons designed by Foster + Partners for use in Italy. Is NESO undertaking or supporting any work to develop, test and validate newer, better pylon designs, or will this stricture leave the country in a state of design stasis?

Electricity pylons will always struggle to attract public support, as the 26 local action groups that have co-signed a separate consultation response seen by the Countryside Alliance will attest. Undergrounding may be perceived as costlier and less convenient, but if significant numbers of projects continue to spawn local opposition leading to series of planning appeals, applications for judicial review and other legal challenges, that calculation may not hold true. We urge NESO to look again at the feasibility of underground cable technologies, including cable ploughing and underground HVDC, being deployed for transmission purposes in preference to pylon-supported overhead lines.

Do the Principles promote transparency in decision-making about new transmission projects?

The Principles stand to make a positive contribution to the transparency of decision-making. SP2 states that projects should "reflect the views of communities and stakeholders wherever practicable," and we would argue that this requirement could be strengthened if the Principles were to say more about community consultation.

In particular, the Principles should set expectations as to the stage in a project's lifecycle at which affected local communities should be informed of the proposal, when community consultation should begin, considerations as to the form that consultation might take and how developers are expected to respond to feedback that runs contrary to their initial intentions. Again, we appreciate that the Principles are not intended to be overly prescriptive, but if the stricture in SP2 is to be observed we believe there is more the document could say on these matters.

We are also concerned about the Principles' failure to establish the circumstances in which a project might not align with them, for example where feasible mitigations are not made, or a presumption as to the type of line to be deployed across a given piece of land is overturned. If a developer can simply handwave objections made to projects that do not align with the Principles on the grounds that they are not prescriptive and admit of exceptions, it is difficult to see how useful they will be in practice in promoting transparency.

Are the Principles realistic and actionable for designers and users of Principles?

The Countryside Alliance is not qualified to comment on the utility of the Principles to those directly involved in planning and executing infrastructure projects, so in responding to this question we focus instead on the user group of members of communities who are interested in projects to be sited in their vicinity. As we see it, the need of this user group is to be able to ascertain whether a project proposal aligns with the Principles and, if necessary, highlight any lack of alignment as grounds for objecting to the project in its current form and/or advocating for adjustments or mitigation.

In this context, as set out above, we are concerned that the absence of any explanation as to what circumstances might reasonably cause disalignment with the Principles, or the overturning of an established presumption, may diminish their utility to this user group.

Do you have any further comments on the Electricity Transmission Design Principles?

Project Development Principle S9 states: “Where possible, the design of substations, converter stations, access roads and other ancillary developments should consider the local environment in the vicinity of the new infrastructure.” The Countryside Alliance supports the inclusion of this reference to anciliary developments, but would argue that the Principles should explicitly recognise that these include infrastructure that a new substation would make it attractive, for reasons of cost and convenience, to seek to situate nearby. We refer in particular to solar farms.

One of the leading causes of local opposition to solar farms is the fact that because it is so attractive to site them near a substation, areas where substations are already present have seen a clustering of solar farms, and planning applications for solar farms, in their vicinity. As a result, they have created a disproportionate impact on those localities in terms of losses of productive agricultural land and the contribution hitherto made by farming to the local economy and community.

This being an identifiable trend in relation to existing substations, if, as the Countryside Alliance argues, the clustering effect is undesirable, there is an opportunity to “design it out” by including an explicit injunction in S9 (or otherwise) to consider impacts from future infrastructure that a new substation is likely to attract. Such a requirement would suggest (in addition to related remarks in S1) that substations should not be sited on or close to productive agricultural land, where their presence might tend to cause an appreciable proportion of that land to be taken out of agricultural production in the future, with consequential impacts on the sustainability of local communities and national food security.

Are you happy for NESO to publish or reference your response in any future publications on ETDP?

Yes