

NOA Team  
Electricity Network Development,  
National Grid House,  
Warwick Technology Park,  
Gallows Hill,  
Warwick,  
CV34 6DA

15 June 2018

Dear NOA Team,

### **Network Development Roadmap Consultation – May 2018**

Scottish Southern Electricity Networks (SSEN) welcomes the opportunity to respond to National Grids' first consultation on the proposed expansion to the Current Network Options Assessment (NOA) via, the Network Development Roadmap.

We agree that the NOA adds value in facilitating the development of a secure, coordinated and efficient electricity transmission system across GB and we would like to see the NOA coverage of the transmission system requirements broadened to cover more network requirements beyond the boundary based requirements. would considered the NOA, and any future development of the NOA, should seek to retain proportionality. The scale and depth of the analysis is time-consuming and has an associated cost. Thus, it should be used where this cost can be justified and is proportionate to the benefits. This is the case for large boundary reinforcements, but might not be appropriate for smaller scale options. Such analysis should sit with the TO / DNO.

We note that the role of the NOA framework will depend on how the industry develops over the coming years, responding to changes in the demands on network assets. We feel that such framework changes should be the product of ongoing regulatory review and assessment. It is essential that open and transparent consultation on the options for the transformation of the GB market to respond to the challenges of a smart energy future precede changes to the role of industry parties. This is necessary in order to build confidence in the future alternative models being rolled out.

Some of our general concerns include:

- It is important to ensure that system security considerations are taken into account especially when introducing third party commercial solutions with short development lead times compared to some of the more traditional asset based solutions. We

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would expect the roadmap to identify these practical issues. We appreciate there are some challenges on the network that require immediate attention and these should be rightly progressed but should not unduly fast-track the process required to develop a whole system-wide planning, development, and operation framework.

- The title of the document, together with some statements in the consultation document seem to suggest that the SO undertakes GB network development. Our view is that the SO is undertaking a necessary coordination role in system planning and the TOs play a vital role in the identification and development of the options. TOs already closely work with the DNOs in a number of areas ranging from planning to operational issues. It is important to be clear that further coordination between multiple parties is desirable which whilst acknowledging the current level of collaboration.
- While it is right to place focus on the economics of system development, it is important to consider the implications of some of the solutions on system security and what the minimum compliance requirements should be for system security.

Yours sincerely

Sajidha Iqbal  
Networks Regulation, Transmission

## Appendix 1

**Q1: Do you consider there is value in expanding the NOA to allow network and non-network solutions across the transmission and distribution networks to compete to meet transmission network needs at least cost? What are the downsides or complexities we should consider? How could we go further in promoting competition?**

SSEN is clear that the development of further competition within, and between sectors, of the GB energy industry must be based on the solid foundation of guidance from Parliament. As noted in the introduction, the provision of that guidance, followed by clear development of regulatory policy in an open and transparent way is the foundation on which changes to existing industry codes, guidance and practice should be based. Without this solid foundation, we do not support the expanded role of the NOA.

Our view is that it is not the role of the SO to develop regulatory policy, but to implement it. We would argue that it is not for the SO to “promote competition” but instead for the SO to undertake analysis to assist in facilitating this framework.

There are many complexities which will have to be identified and addressed as we move towards a flexible framework in which parties from all across the industry can take part in providing efficient solutions to meet network needs.

**Q2: What do you see as the opportunities and limitations of bringing a probabilistic approach into analysis?**

Probabilistic planning will help unlock network capacity. Care needs to be taken to ensure that the level of risk due to possible extreme events at the end of the statistical distribution curves of power flows, voltage profiles, etc. do not lead to system shutdown due to system operability issues. The NOA, and any future development of the NOA, should seek to retain proportionality. The scale and depth of the analysis is time-consuming and has an associated cost. Thus, it should be used where this cost can be justified and is proportionate to the benefits. This is the case for large boundary reinforcements, but might not be appropriate for smaller scale options. Such analysis should sit with the TO / DNO.

**Q3: Do you consider there is value in expanding the network needs covered by the ETYS and NOA to a greater extent across the year and to more regional voltage challenges? What are the downsides or complexities we should consider?**

Yes, there is value in expanding the network needs covered by the ETYS and NOA to a greater extent across the year and to more regional voltage challenges. However, before tackling the regional issues, we believe it is important to further develop the NOA to consider transmission issues that are not necessarily boundary capacity related, for example, system operability issues and issues related to declining system fault levels due to the changing

generation mix. In the interest of transparency, the methodology for assessing requirements and solutions for these issues should be consulted upon as is currently done with the boundary capacity based methodology.

**Q4: Do you consider there is value in expanding the NOA to cover system stability needs? What are the downsides or complexities we should consider?**

It is important to note that the current NOA implementation allows the stability limits to be incorporated in the boundary capabilities used in the CBAs. Where stability is known to be a constrained, this is reflected in the boundary capability. Due to the time required to carry out stability studies, if more analysis is required in this area, it may be appropriate or necessary to reduce the frequency of the NOA report.

**Q5: Which other network requirements do you consider the NOA approach could be expanded to cover in order to drive value to consumers? What are the key benefits and considerations?**

The NOA approach could be further developed to cover wider works in connection offers which do not necessarily provide boundary capability uplift. If the NOA covers all wider works in connection offers, then there may be scope to simplify connection offers. NOA needs to also capture other network requirements other than those related to boundary capability, e.g. fault level and system operability issues. The benefit to consumers is that if the NOA can assess these requirements and solutions, this will allow the most efficient solutions to be developed.

**Q6: Do you agree with the proposed approach to phasing information throughout the year? If not, how could we best present this information, with the aim of avoiding publishing all in one large publication per year?**

We agree with the proposed approach to phasing information throughout the year but we also think that there is value in having a consolidated report at some point in the year tying up all work done for that year – even if this is a high-level report focusing on main findings, way forward, etc. and making specific references to the individual published reports. This allows the high level all round whole system view to be presented in one place.

**Q7: What information and in what format would you find beneficial in order to understand the network needs and submit well thought-out options? This could be specific data, guidance to understand the process or support as you go through it.**



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**0800 300 999**



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In order to understand the network needs, we feel it is important to have a good technical description of the issue to be addressed, how it has been assessed by the SO, and sufficient technical model and modelling details to be able to develop solutions which meet the requirements. It is also necessary to understand the SO process for assessing the performance of the candidate solutions so that the solution provider is able to prioritise those options which are likely to perform well both technically and economically.