



Northern Powergrid's response to Ofgem's consultation on the future arrangements for the electricity system operator: its role and structure

Key Points

- We think that if the UK's electricity system were being setup now, there would be no question that the Electricity Transmission System Operator (SO) function would be established as a separate, independent body. **The plans set out in the consultation are therefore a significant step in the right direction.**
- **Government made the right decision in 2015 to consider the case for greater independence for the SO function.** Furthermore, we understand why Government pragmatically has sought to implement this, at least in the interim, through a more independent electricity system operator within the National Grid Group.
 - However, even with enhanced separation within National Grid, both **running the SO as a truly independent function and credibly demonstrating that independence will be challenging.**
 - Time will see if the new arrangements are sustainable. Government should keep an open mind if legal separation of the SO function is merited in the future.
- The transmission system in the UK (made up of a set of onshore and offshore assets) is a coherent National System. It **needs a single independent SO who can, for example, also call on services from Distribution System Operators (DSOs) when doing so is the most efficient way to meet an overall system need.**
- **The SO also has a critical role to play as the UK moves to a more integrated and 'smart' whole energy system approach** managing its energy infrastructure and needs.
- **We see it hard to justify circumstances when the SO/Independent SO could or should legitimately make a profit** and, on the margin, could see circumstances where sharing debt with the rest of National Grid could hinder future separation.
 - The SO could achieve a strong credit rating on the basis of its ability to pass through costs to the customer base.
 - If debt is allocated to the SO it should be done cleanly with a clear, open and transparent rationale why this debt is legitimately the SO's rather than the transmission owner's (TO's).
 - Elexon might provide a precedent for how a non-profit making SO could charge.
- **The SO and TO functions need full physical separation** such that the 'hard' and 'soft' links between the organisations are severed. This will provide the SO with the reality and perception of independence that is essential for it to carry out its duties effectively.
 - For system planning, the SO needs to ensure that non-build and non-transmission system solutions are properly tested against simple transmission reinforcement.
 - All new, separable, significant (>£100m) work on the transmission system should also be open for competition.

Introducing Northern Powergrid

1. Northern Powergrid is a wholly-owned subsidiary of Berkshire Hathaway Energy, one of the world's largest energy companies. Berkshire Hathaway Energy is an international group made up of integrated power companies; electricity transmission and distribution network companies and gas pipeline operators.
2. In the UK, Northern Powergrid runs the electricity distribution network that provides power to customers in the Northeast, Yorkshire and northern Lincolnshire. We are responsible for the safe, secure and cost-effective delivery of electricity to around eight million people in 3.9 million homes and businesses.
3. In practice we operate as one company, but we are regulated by the energy regulator, Ofgem, as two licensed businesses: Northern Powergrid (Northeast) Ltd. and Northern Powergrid (Yorkshire) plc.
4. We are one of the largest businesses in our region, directly employing over 2,200 people and a similar number of contractors. The majority of our annual investment in the UK is in regulated electricity networks - we typically invest £340m per annum.
5. Our network underpins the economy in Yorkshire, the Northeast and North Lincolnshire, connecting homes and businesses to transmission network and to generation; we also connect a full range of generating assets to the overall energy system. We are directly important to our local economies through our commitment to on-going investment in our network and see our role as facilitating the effective and efficient operation of the overall energy system and supporting growth in our region.

Responses to Ofgem's consultation questions

Chapter 2

Question 1: What are your views on our proposed objectives for the SO (set out in para 2.1)?

6. The plans set out in the consultation are a significant step in the right direction.
7. Government made the right decision in 2015 to seek to make the SO function more independent but we understand why Government pragmatically has sought to implement this, at least in the interim, through a more independent electricity system operator within the National Grid Group. We also note the National Infrastructure Commission's view, expressed in the Smart Power report, that the separation of the system operator (SO) function from the transmission operator function should not be a priority.
8. However, even with enhanced separation within National Grid, both running the SO as a truly independent function and credibly demonstrating that independence will be challenging. Time will see if the new arrangements are sustainable. Government should keep an open mind if legal separation of the SO function is merited in the future.

-
9. We think that the SO role is well cast and its focus should be on the transmission system we agree that it will need to be able to take a whole system view and carry out certain activities that impact on the overall system. It should be able, consulting affected parties, to set parameters and standards and it should be able to draw on services from DSOs within agreed frameworks.
 10. The issue of how the *energy* system as a whole is managed – for example balancing demand across sectors and vectors is in its infancy. It is possible that the SO may ultimately evolve or combine with other bodies to become an overall *energy* system operator/‘steward’ but this has not been explored in sufficient depth and the case has not been made. Such a role would be so central to the energy market that it would have to be carried out by a fully separated entity acting as a disinterested agent of Government. For now, Ofgem and NGC need to ensure that the steps put in place today work towards a future agenda when this wider energy system role may be appropriate.
 11. It is appropriate that the scope of the SO does not extend to distribution system operation. By their nature, distribution networks are intrinsically longer and more intricate than the transmission network. As such the different set of characteristics and constraints makes the separation of distribution network ownership and system operation difficult to achieve without introducing increasing cost or reducing service levels for customers.

Question 2: What are your views on our expectations for how the SO should seek to achieve these objectives?

12. We agree that the interface between the SO and the distribution network operators (DNOs)/DSOs is a complex one that needs further work (as per consultation para 2.5).
13. It is appropriate to explore solutions to drive whole electricity system efficient outcomes through the Energy Networks Association work taking place between TOs and DNOs. In particular this work is defining how the DNOs should transition to DSOs and how this system of actively managed networks should interact with the transmission system.

Question 3: Do you agree with our proposals for what licence changes are needed to support these objectives?

14. Yes, the proposals appear reasonable.

Question 4: What are your views on the extent to which we should set specific or general obligations for the SO?

15. Overarching general obligations should be set for all aspects of the role. In addition, where possible, specific obligations should also be set in order to drive appropriate desired outcomes.

Chapter 3**Question 1: Do you agree that greater separation between NG's SO functions and the rest of the group is needed?**

16. Yes, the SO should operate as a separate entry, remote from National Grid with focused duties on its board and staff to act and be seen to act impartially.
17. We strongly agree that Elexon's ownership should be transferred to the SO.

Question 2: What are your views on the additional separation measures we are proposing?

18. The new arrangements in principle could be made to work, but time will see if the new arrangements are sustainable in practice. Government should keep an open mind if legal separation of the SO function is merited in the future.
19. We do not see circumstances when the SO/ISO could or should legitimately make a profit and, on the margin, could see circumstances where sharing debt with the rest of National Grid could hinder future separation. Elexon made a model here.
20. We also believe that the SO could achieve a strong credit rating on the basis of its ability to pass through costs to the customer base.
21. We therefore think that **if debt is allocated to the SO it should be done cleanly** with a clear, open and transparent rationale why this debt is legitimately the SO's rather than the transmission owner's.
22. On the issues of systems, process and accommodation in order for this for the independence of the SO to be credibly demonstrable we think there should be a strong presumption of separation: SO employees should only work on SO issues and TO employees on TO issues.
23. In order to avoid conflicts of interest the SO and TO must act, and be seen to act, as different organisations with different cultures and both 'hard' and 'soft' links between the organisations severed.
24. The most basic back office information services should be separated with data gateways where necessary and there should be physical separation of staff (as described in para 3.71 of the consultation). An example of this is the role of system planning where to ensure that non-build and non-transmission system solutions are properly tested against simple transmission reinforcement.
25. Furthermore, the SO should operate the Network Options Assessment (NOA) process to identify projects that are then tendered. This should include all new, separable, significant (>£100m) work on the Transmission System as set out in the NW Coast Grid Connections consultation.

Question 3: What are your views on our proposed approach for implementing these changes?

26. The proposals appear reasonable.

Chapter 4***Question 1: What are your thoughts on our proposed approach for implementing the proposed changes set out in this consultation?***

27. We support the approach set out in the consultation document.

Question 2: What further evidence should we consider in finalising our impact assessment of the proposals on the SO's roles and level of independence?

28. As discussed in our responses to earlier questions, a clearer distinction between whole electricity system and whole energy system (including gas) would be beneficial in the longer-term thinking being considered by Ofgem. It is difficult to quantify the benefits to customers from joined-up thinking on whole *energy* system optimisation. However, the value should be identified in the impact assessment and the proposed changes evaluated. In particular, there needs to be cross-working between the electricity and gas SO functions.