Energy Networks Association response to Consultation on Licence Conditions and Guidance for network operators to support and efficient, coordinated, and economical Whole System.

Background

Please find below the response from Energy Networks Association to the Ofgem consultation on Whole System Licence Conditions and Guidance.

About ENA and our members

Energy Networks Association (ENA) represents the companies that operate and maintain the gas and electricity grid network in the UK and Ireland. Serving over 30 million customers, they are responsible for the transmission and distribution network of “wires and pipes” that keep our lights on, our homes warm and our businesses running.

Introduction

ENA has established the Open Networks Project to transform the way that both local Distribution Networks and national Transmission Networks will operate and work for customers, underpinning the delivery of the smart grid. Launched in January 2017, ENA’s Open Networks Project has started to lay the foundations of a smart energy grid in the UK. This world leading project brings together 10 of UK and Ireland's electricity grid operators, respected academics, NGOs, Government departments including BEIS and the energy regulator, Ofgem.

As part of the Open Networks Project developments, we have been developing proposals to improve whole system processes.

Our response to the consultation is included as Appendix 1.This includes a short introduction to the response to bring out some more specific feedback. More detailed answers to each of the 7 questions are then provided.

Appendix 1 – Response

Consultation on Licence Conditions and Guidance for network operators to support an efficient, coordinated, and economical Whole System

General Comments

Context & Objectives

Network Operators already coordinate planning and operation at the interfaces of their networks and where network limitations affect wider system users. We agree that the increasing levels of resources being connected to distribution networks and the opportunities that these resources might provide through flexible operation mean that much greater coordination is required. The whole system Licence Conditions will be helpful in this respect.

As referenced in the consultation document, much work is already taking place to improve whole system coordination between network operators. This includes the Open Networks (ON) project which is taking forward work in many of the areas covered in the Guidance document. Examples include:

- ON includes the development of processes to ensure distribution resources are utilised efficiently by Network Operators and the ESO to address local and wider network needs.
- ON includes the development of whole system options (asset and non-asset based) to meet regional requirements identified by the ESO's NOA process.
- ON includes the development of a whole system Future Energy Scenario (FES) framework so that the ESO and Network Operator scenarios benefit from improved information sharing and are structured so that different scenarios can be more easily understood and compared by Stakeholders.
- ON is putting in place better access for Stakeholders to the DER information held by Network Operators.
- ON is extending the scope of information exchange between network operators to enable more effective whole system assessment for network development, network connections and constraints management.

Key to the ON work is the comprehensive review and testing of new processes and information sources so that they are fit for purpose.

Network Operators have committed to extending the ON work through 2019 and in line with Ofgem's comments on Page 5, Para 1.8 of the consultation, the programme for 2019 will have greater focus on implementation and establishing improved processes in network operator organisations.

To date, much of the ON focus has been towards electricity interactions. As part of the 2019 programme, the focus will be broadened with a specific workstream to scope and take forward relevant interactions with other energy vectors.

Draft Licence Conditions & Guidance

As proposed, the draft Licence Conditions and Guidance document cover the right areas and will be helpful in supporting the behaviours and activities of network operators going forward. The examples reflect the direction of travel for network operators including the Open Networks project.

There are a handful of areas where changes are suggested and these are detailed in the response to Question 2 below. Those that we would like to highlight here include some further qualification around Stakeholder obligations and around the wider initiatives to support the more effective use of data including the Energy Data Taskforce.

- On Stakeholder obligations, we agree that there should be obligations to share information with Stakeholders albeit we should recognise that different Stakeholders will have competing interests from time to time. Through our consultations on Open Networks, Stakeholders have been clear to us that processes and information exchange should not provide any unfair advantage to particular stakeholders. This supports the development of transparent processes as outlined in the Guidance.

  In relation to network operator interaction with Stakeholders, a specific requirement of the Licence Condition as drafted is for Licensees to take all appropriate steps including:

  > ***"identifying and considering any potential impacts on the system that could arise from the licensee's actions, actions of other Distribution Licensees or Transmission Licensees or the actions of other persons connected to the system;"*** (Draft Licence Condition Para 2 a) ii.)

  Achieving the final part of this requirement would rely on the actions of connectees being known to licensees. Whilst connectee obligations and Licensee actions to help achieve this could be put in place (through bilateral connection contracts or through increased Stakeholder engagement say), we would prefer this paragraph to be reworded to read: ***" …… or, where known, the actions of other persons connected to the system".***

- The Guidance in respect of information sharing and data provision encourages licensees to engage with and take account of the outcomes of wider industry initiatives. This is very reasonable. In the consultation document (Para 1.8), the outputs of the Energy Data Taskforce are noted. Licensees will contribute to this work and we will seek to ensure that the work on data exchange and information provision that we carry out on Open Networks is used to inform the Energy Data Taskforce. As the work of the Taskforce develops, we will identify if further changes to the Guidance document or Licence Obligations would be helpful.

Question relating to Objectives.

Question 1: Do you agree with the proposal to clarify Whole System responsibilities through licence and supporting Guidance? Where possible, please provide evidence and examples to support your views. In particular please describe:

a. The potential benefits you might expect to result from these proposals?
b. If there are any material costs or issues for you in relation to these proposals?

We agree with the proposal to clarify Whole System responsibilities. Network Operators, through the Open Networks project, are already working with other network operators and wider stakeholders to develop and implement improved Whole System approaches. The clarification of Whole System responsibilities through Licence Conditions and Guidance will help frame this work.

Network operators already take a Whole System perspective – Network operators have duties to develop and maintain efficient, co-ordinated and economical systems of electricity transmission and distribution. The physical interactions between electricity networks require them to co-ordinate planning and operational processes and to share information. Whilst clearer and more extensive Whole System responsibilities are needed, network operators already take a Whole System approach in elements of their network planning and operation. For example, the planning of network capacity requirements at the interface between transmission and distribution networks and is already co-ordinated through processes of information exchange and network reinforcement.

Open Networks is extending this Whole System perspective – In line with the consultation document, network operators recognise that achieving benefits through flexibility requires established practices to evolve. Changes to the nature, volume and location of the resources connected to electricity networks mean that new areas of Whole System coordination are needed to achieve efficient, co-ordinated and economical systems across transmission and distribution. New and improved areas of co-ordination include the efficient use of flexible resources to provide balancing and network services, the identification of more efficient network reinforcement options, more efficient constraint management and the more efficient management of network connections. Network operators are developing and implementing Whole System approaches through the Open Networks project. The focussed workstreams and products that make up this project are taking Whole System coordination much further than has previously been the case.

The benefits through a Whole System approach - By taking forward a Whole System approach, there will be benefits in each of the areas mentioned above. For example, additional resources will be available to provide services where these are effective. Additional options will be available to address capacity limits on transmission and distribution networks and this could avoid more costly network reinforcement. Customers will benefit from more efficient processes across network companies and more extensive and improved information will be available for decision making. Ultimately, the level of benefits will depend on the types and volumes of resources that are using GB networks.

The costs through a Whole System approach - There are likely to be costs to establish the new processes and information systems to support Whole System activities. Through the Open Networks project, specific and accurate requirements are being identified and agreed across network operators.

Questions relating to Draft Licence Conditions & Guidance.

Question 2: Do you agree with the proposed scope and content of these licence conditions and Guidance? Please provide any specific comments you have on the attached draft, including illustrative examples, and where possible, please provide reasons and evidence to support your response, in particular:

a. Are there other examples or areas of activity which you consider should be highlighted, or do you see the need for further clarity in any area?
b. Do you consider these would be beneficial and proportionate? Are there any aspects which should not be included?

The scope and content of the Draft Licence Obligations are broadly ok. We propose the following adjustments where changed or additional words are highlighted.

Paragraph	***Proposed Wording***	***Rationale for Change***
Para 2 a) i.	*engaging and coordinating with relevant Distribution Licensees and Transmission Licensees;*	*Not all Licensees may be relevant to individual Distribution Licensees in particular.*
Para 2 a) ii.	*identifying and addressing any potential impacts on the Whole System that could arise from the licensee's actions or from the actions of other Distribution Licensees or Transmission Licensees or, where known, from the actions of Parties Connected;*	*This uses the Defined Terms to tighten the definition.* *Secondly, an obligation relating to the actions of persons connected to the system (or Parties Connected) is also very wide ranging. These parties may not have similar obligations to work with Distribution Licensees and Transmission Licensees. So we propose that the condition is qualified to reflect this.*
Para 2 a) iii.	*developing and implementing with Distribution Licensees and Transmission Licensees transparent and coordinated decision-making and operational processes;*	*Implementation and use of the processes are also needed to achieve an efficient, coordinated and economical Whole System.*
Para 3 a)	*make effective use of information it obtains to fulfil the obligation set out in paragraph 1 of this condition; and*	*As written, this is unclear as to whether this is referring to information the licensee already has, or to information that the licensee receives from other parties in pursuit of achieving an efficient, coordinated and economical Whole System. The proposed revision is to clarify that all information is relevant.*

Likewise, the scope and content of the Draft Guidance are broadly ok. We propose the following adjustments. Again, changed or additional words are highlighted.

Paragraph	*Proposed Wording*	*Rationale for Change*
Para 1.6	*This Guidance and the licence conditions which underpin it, aim to ensure each licensee contributes effectively to an efficient, coordinated and economical Whole System, maximising benefits for consumers, now and in the future.*	*The early part of the paragraph has been simplified.*
Para 2.1	*Until recently, electricity network operation has tended to focus primarily on ensuring that individual networks run efficiently. However the evolving energy system means that decisions and actions taken in one part of the system increasingly have impacts, with cost implications, for wider parts of the system. Additionally, there are greater opportunities to deliver efficient Whole System outputs by better planning and operation across system interfaces. These include build and non-build options.*	*This paragraph has been updated to provide greater clarity.*
Para 2.11, 3rd bullet point	• *identification and assessment of how procuring services from distribution or transmission connected parties through market arrangements could minimise costs and maximise consumer benefits across the Whole System,*	*This bullet point has been clarified to cover the procurement of flexibility services from other parties.*

Question 3: These proposals require licensees to engage and coordinate with Stakeholders. This recognises that a range of parties may have an interest in different aspects of the system, and the licensees should seek to engage with those with an interest in a given situation. Do you agree with this approach?

We agree that engagement and coordination with Stakeholders is appropriate. There are some complexities with this approach which will require further consideration in practice. For example, stakeholders may have conflicting interests with Licensees or with each other such that a measured approach is needed. Also, in cases where Licensees are obligated to consider the actions of wider connectees, this may not be effective without new obligations on connectees. We discuss this further in the general comments above.

Question 4: Do you consider any changes or clarifications are needed in relation to industry code objectives, notably the Distribution Code and the Grid Code, to support the delivery of Whole System outcomes? Specifically,

a) Do you see the need for further change or clarification to the code objectives themselves, or their interpretation, eg through introduction of a specific relevant objective in relation to Whole System actions?
b) Have you identified any interactions of these provisions with wider aspects of industry arrangements which should be considered in developing them?

We think that it would be helpful to clarify code objectives to more strongly support the delivery of Whole System outcomes.

The Distribution Code currently has objectives to:

i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the distribution of electricity;
ii) to facilitate competition in the generation and supply of electricity;
iii) to efficiently discharge the obligations imposed upon distribution licensees by the distribution licences and comply with the Regulation and any relevant legally binding decision of the European Commission and/or the Agency for the Co-operation of Energy Regulators; and
iv) to promote efficiency in the implementation and administration of the Distribution Code.

And the Grid Code, currently has objectives to:

i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;
ii) to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);
iii) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;
iv) To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and
v) To promote efficiency in the implementation and administration of the Grid Code arrangements.

In both cases, it would be timely to review the objectives in light of any new Licence Obligations relating to Whole System. Whilst objective iii) of the Grid Code refers to the systems "taken as a whole", a more explicit "Whole System" objective could provide greater clarity for network operators and stakeholders. It could also be helpful to align a more explicit "Whole System" objective across the Grid and Distribution Codes.

In practice, proposed Grid Code and Distribution Code modifications are sometimes assessed by joint Grid Code-Distribution Code working groups where there are likely impacts on both transmission and distribution networks.

Question 5: Do you believe further, specific guidance in any area, and in particular in relation to efficient connections and constraint management (eg in preparedness for electric vehicles or increasing distributed generation) would be beneficial? Please provide reasons and, where possible, evidence to support your answer.

We consider that efficient connections and constraint management are part and parcel of a whole system approach across electricity transmission and distribution. Work is being carried out as part of the Open Networks project to develop and implement whole system approaches in these areas as they are fundamental to effective whole system operation. We don't think that further specific guidance is needed at this stage.

Question 6: For which relevant datasets or information do you consider the need for availability and accessibility is greatest, in order to deliver Whole System benefits? Do you consider there to be any significant barriers to sharing these? Please provide specific suggestions for what you consider to be effective sharing arrangements, including required enablers and governance, such as the development of any industry standards?

Key areas of data are being addressed by the ON project include DER resource details, transmission-distribution data exchange, network reinforcement requirements and options and service opportunities.

In most cases further work needs to be completed to determine the full scope of data to be shared and the most effective arrangements for sharing data. For example, in sharing network data to allow improved network models for analysis, it is possible that not all geographical areas require more granular data or more detailed models given that some areas may have relatively low levels of distributed resources. Where complex network models are being shared between network operators and stakeholders who may be using different types of analysis packages, it is possible that suitable standards will need to be adopted (e.g. Common Information Model).

Barriers to establishing industry datasets include the costs involved in establishing and supporting new IT systems. Another possible barrier is that unless new licence obligations are established, Licensees may be limited from publishing certain information under the Utilities Act, Section 105 which covers restrictions on the disclosure of information.

Question relating to Scope of Application.

Question 7: Do you agree with the proposal to apply these provisions to all electricity distribution licence holders, including IDNOs, and onshore TOs, and to exclude the ESO, offshore TOs and interconnectors? Where possible, please provide reasons and evidence to support your response.

In principle, we agree with this. At this time, there doesn't seem to be much value including offshore TOs and I/Cs as these networks do not have large volumes of 3rd party resources.