

By e-mail to: flexibility@ofgem.gov.uk

11 February 2019

Dear Nathan,

ELEXON's response to your consultation on licence conditions and guidance for network operators to support an efficient, coordinated, and economical Whole System

We welcome the opportunity to input into Ofgem's thinking. We believe taking a whole system approach is essential to the development of new flexibility markets, and delivering the best possible outcomes for consumers. However, we believe it is important that a 'whole system approach' is not narrowly defined in terms of investments in electricity transmission and distribution wires networks, but should include a holistic approach to investments, operations, markets and financial settlement in electricity, gas, transport and heating. See our answers to Question 2 of the consultation.

As you know, ELEXON is the Code Manager and Delivery Body for the Balancing and Settlement Code (BSC). We are responsible for managing and delivering the end-to-end services set out in the BSC and accompanying systems that support the BSC. This includes responsibility for the delivery of balancing and imbalance settlement and the provision of assurance services to the BSC Panel and BSC Parties. We manage not just the assessment, but also the development, implementation and operation of changes to central systems and processes. In addition, through our subsidiary, EMR Settlements Ltd, we are the Electricity Market Reform (EMR) settlement services provider, acting as settlement agent to the Low Carbon Contracts Company (LCCC), for the Contract for Difference (CfD) and Capacity Market (CM). EMR services are provided to the LCCC through a contract and on a non-for-profit basis.

We are strongly supportive of the developing flexibility markets, and stand ready to facilitate them in whatever way we can. This includes supporting initiatives to widen access to the energy markets, such as [Project TERRE¹](#), driving changes to improve efficiencies, such as [market-wide Half-Hourly Settlement](#), and proposing solutions to energy market problems, such as our [white paper on multiple suppliers](#) which is now being progressed as [BSC Modification P379](#).

The views expressed in this response are those of ELEXON Ltd alone, and do not seek to represent those of the BSC Panel or Parties to the BSC.

Yours sincerely,

Peter Frampton
Market Architect, Design Authority

¹ In addition to providing access to the TERRE platform, Modification P344 will enable aggregators of 'behind-the-meter' assets to easily participate in the Balancing Mechanism.

WHOLE ELECTRICITY SYSTEM THINKING: ELEXON'S RESPONSE

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?

Yes, we agree with the proposal to clarify Whole System responsibilities through Licence and supporting Guidance. As you have identified, the nature of the electricity system in GB is changing, as more capacity is needed on the distribution networks and the way in which we use electricity is changing. It seems clear to us that there are benefits for the GB consumer in coordinating a response to these issues across licensees in GB (and indeed beyond just those actors, to cover parties involved in the gas, heat and transport industries). Therefore we support the introduction of 'Whole System' obligations into licences.

We anticipate a number of benefits to accrue from a Whole Systems approach. These include:

- more resilient systems;
- more efficient systems; and
- better customer experience.

In particular, we believe that greater visibility and understanding of energy resources at each level of the system between all network operators will result in a better understanding of the issues faced on the networks, and of the options available to resolve them. This includes the availability and use of assets in each area of the system. ELEXON already publishes a significant amount of this data for the transmission system, via the [Balancing Mechanism Reporting Service \(BMRS\)](#). This service could be expanded to cover information from Distribution level markets, providing a one stop shop for energy market information.

The greater proliferation of flexibility to solve network issues provides an alternative to traditional network reinforcement, which should reduce costs and improve network efficiency. And the provision of Whole System data will enable innovators to develop new products and services, both improving resilience and efficiency as outlined above, but also them to create new products and services for customers, which should improve their experience of the market.

We don't expect direct material costs or issues to ELEXON from these proposals. We do believe that settlement will need to develop in accordance with future Whole System developments, however we are of the opinion that changes are likely to be necessary anyway and will be dependent on future models of system operation. For example, ELEXON's current role means that we will need to facilitate new market entrants and data flows from new markets to ensure accurate settlement of imbalance. In a more comprehensive overview of market arrangements, our organisation's unique expertise qualifies us to design and manage the delivery of regional balancing markets.

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?

We strongly believe that the definition of 'Whole System' is not wide enough, although we appreciate that the current licensing regime may be too restricted in scope to effectively address Whole System issues. At the very least, we believe 'Whole System' should encompass both the electricity and gas networks. This is because, with 40% of GB power generation fuelled by gas² and the likely importance of gas/electricity interchange³ as a short to medium term flexibility source, developments in electricity networks will impact on gas networks and usage, and vice-versa.

Additional activity to address this could include reviewing the legislative and regulatory framework behind the licences, and identifying opportunities to reframe the licences to better facilitate Whole System outcomes. This could develop include licences or sections of the licences applying to multiple types licensees, and may require licensing more parties but granting them greater freedom to operate across sectors.

We also believe there is a strong case for the definition of Whole System to be expanded beyond gas and electricity networks to encompass transport, heat and planning. Given the background context which is driving electricity network development⁴, it is increasingly likely that these other sectors will affect and be affected by electricity network developments. This is due to the decarbonisation of the transport and heat sectors likely requiring extensive electrification, thus necessarily placing additional demands on, and providing additional opportunities for, electricity networks. Interaction with planning is important, given the impact it has on the development of new assets and solutions in each of the other systems.

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?

Yes, we agree with this approach, although we note that this requirement is difficult to achieve with precision. Placing information on a website will not necessarily provide a sufficient level of engagement, especially where licensees have a wide range of business activities and therefore an expansive web presence. Similarly, licensees will not be aware of all stakeholders who may have an interest, and will therefore struggle to engage with them directly. We therefore believe there needs to be a degree of flexibility within this condition.

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?

² BEIS Energy trends, <https://www.gov.uk/government/statistics/electricity-section-5-energy-trends>

³ For example gas/electric hybrid boilers or heat pumps, distributed gas fired power generation

⁴ Decarbonisation, improved quality of life, better social outcomes

b) Have you identified any interactions of these provisions with wider aspects of industry arrangements which should be considered in developing them?

We believe it is important that Whole System outcomes are facilitated throughout the regulatory system, and not just within the licences. This can be achieved in a number of ways, and we are engaging the Ofgem and BEIS Energy Codes Review⁵ to ensure Codes continue to play their critical role in setting out the rules required to ensure the safety and reliability of our energy system. Under the Codes Review ELEXON is calling for a consolidation and simplification of the current Codes landscape, proposing that the current eleven Codes within the market could be consolidated into three Codes, one covering Retail aspects of the market, one covering Wholesale/Settlement and the other covering Networks. Under the ELEXON proposals the Codes would be dual fuel. We believe that the consolidation of the gas and electricity Codes covering the network aspects of the market could be key enabler to delivering the DSO model and benefits.

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 guidance on connections and constraint management will be dependent on the developments in DSO markets, currently being addressed by the ENA's Open Networks programme. As the future operational environment for DSOs becomes clearer, we would expect that additional and more specific licence conditions and guidance can be introduced to help facilitate operation of the market.

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?

We are actively participating in the Energy Data Taskforce and via that have identified a set of information which we believe is important for the effective management of the electricity system. We are happy to provide further information if that would be of benefit.

With regards Whole System outcomes in particular, we believe there is benefit in the wide availability of data on all generation above 1MW in capacity. This data could include live metered output, location and technology type. This would enable an accurate view of real demand in GB and provide insight into the resources available to resolve various network issues, and better predictions of where future network issues might arise. This could be achieved by developing a centrally managed resource register, and introducing an obligation on generators (via licences or codes) to maintain an up to date register entry.

We support the widespread availability of energy market data, which should be open to all and provided at cost. This will provide the maximum opportunity for innovation and value added data services. The BMRS is an example of this model of providing data, where most balancing and

⁵ https://www.ofgem.gov.uk/system/files/docs/2018/12/tor_revised_final_301118.pdf

settlement data is available on the BMReports website and via APIs. Other settlement data is provided via licence, priced at cost.

While individual consumption data may be subject to privacy issues, network level data should be able to be made public without a detrimental impact on privacy.

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.

Yes, we agree overall with this proposal to apply these provisions to all electricity distribution licence holders, including IDNOs and onshore TOs. We believe it is important to maintain alignment with ESO licence conditions, and agree that the more limited role of offshore TOs and interconnectors means that these licence conditions should not necessarily be extended to them.