By e-mail to Farina.Farrier@energynetworks.org

Farina Farrier
Energy Networks Association
6th Floor, Dean Bradley House, 52 Horseferry Rd, London SW1P2AF

29 September 2017

Dear Farina,

Commercial Principles for Contracted Flexibility: Promoting Access to Markets for Distributed Energy Resources

Thank you for the opportunity to input into the development of future market arrangements for Distributed Energy Resources (DER) and coordination between Distribution System (DSO) and Transmission System (NETSO) operations.

As you are aware, ELEXON is the code administrator for the Balancing and Settlement Code (BSC). We are responsible for managing and delivering the end-to-end services set out in the BSC. This includes responsibility for the delivery of balancing and imbalance settlement. The views expressed in this response are those of ELEXON Ltd, and do not seek to represent those of the BSC Panel or Parties to the BSC.

ELEXON has explored the potential of distributed energy resources in a series of thought leadership papers. Our thinking has developed further since then, and we now see opportunities for further efficient management of DER alongside effective integration of new energy services, products and business models into the energy system. We encourage the development of effective electricity market solutions, leveraging and learning lessons from the existing frameworks while building enduring solutions for the future system.

We look forward to working together with DSOs and industry to realise the potential of DER.

If you would like to discuss any areas of our response, please contact Peter Frampton, Market Architect on 020 7380 4223 or by e-mail at peter.frampton@elexon.co.uk.

Yours sincerely,

Peter Frampton
Market Architect

List of enclosures

Appendix 1 – Responses to consultation questions for 'Commercial Principles for Contracted Flexibility'

Appendix 1 - Responses to consultation questions for 'Commercial Principles for Contracted Flexibility'

	Question	Response
1	What are your views on the models outlined in Appendix 1, and how they rate against the Assessment Criteria?	*No response*
2	To what extent do you think it will be possible/desirable to move between different models over time? Please list barriers to implementation where possible	We believe one of the barriers to effective implementation of the models relates to communications between different organisations (especially DSOs and NETSO, also other market service providers). By developing new models built on a flexible architecture with effective, robust and secure communications between the relevant organisations it should be possible to move between models, combine aspects of existing models and develop new models over time without needing large scale disruption to the underlying frameworks. In particular it is important that new market models and operations interact seamlessly with central systems and processes, for example data flows feeding in to balancing and settlement. Getting the communication right not only facilitates moving between models, but also provides a mechanism for resolving NETSO/DSO conflicts of interest by enabling multiple market mechanisms (allowing the most efficient option or options to be chosen).
3	What steps should NETSO and DSOs take to remove complexity when providers are providing multiple services to multiple market participants (both at procurement and operational stage)?	In order to reduce complexity for DER providing multiple services, NETSO and DSOs should seek to ensure that, as far as practicable, metering and settlement requirements are consistent across different services. For example: • Inconsistent metering requirements should be eliminated where possible, to provide certainty to DER that installing appropriate Metering Equipment will allow access to a wide variety of markets • A consistent approach should be taken to energy imbalance adjustment, to prevent impacts on other parties, and avoid distorting competition within or between markets We recognise that some of this will require Modifications to the BSC, and hope to work closely with NETSO, DSOs and market participants to develop these changes. If DSOs and NETSO have open, high quality communications then multiple market models can be facilitated. Depending on the model in use at any given time, NETSO, DSOs or other

		parties would be able to procure all relevant services at most efficient cost. There are a number of established mechanisms for procuring services, and the most efficient method depends on the timescales, assets and requirements for the service. In order to reduce procurement complexity, providers could be presented with all possible options at the fewest possible points of contact. A simple model could involve access to a single platform with all services being procured by NETSO and DSOs, with the DER provider then able to compare and bid for the services that best fit their assets and business models.
4	What is the role of aggregators and suppliers in helping to remove this complexity?	*No response*
5	What are the implications for your business of the need for visibility and controllability of DER output?	The impact on ELEXON would depend on the model(s) implemented. Active management of DER by DSOs could necessitate changes to the operation of settlement, classification of DSOs within the BSC or the expansion of balancing and settlement operations for example. As mentioned in our response to question three, we hope to work closely with NETSO, DSOs and market participants to ensure the necessary changes are made.
6	What are your views on the principles outlined here to ensure the various routes to market for DER can coexist and compete in a coordinated way?	*No response*
7	What else needs to be done to ensure distribution network security is maintained for all DER contracted services while at the same time allowing DER the freedom to contract in different markets?	*No response*
8	What are your views on the principles outlined in this section?	We believe it is important to ensure that DSO actions do not cause inappropriate windfall gains or losses for other BSC Parties not taking action but otherwise responsible for the assets (e.g. suppliers of customers providing DER services) as per Principle D. Appropriate mechanisms will need to be put in place to ensure that settlement still functions as intended and that imbalance positions are allocated appropriately, even where there is some stratification of markets. Current industry developments (Project TERRE Implementation and BM Lite)

		should develop a solution for properly assigning imbalance position. It is important that existing mechanisms are leveraged to minimise cost of any new system management models.
9	What are your thoughts on pricing curtailment? Are there other mechanisms that should be taken into consideration?	*No response*
10	*Not used*	
11	What are your views on how distribution constraints could be managed in the future? We have identified one option above. What other options are available?	There are already mechanisms available to NETSO for managing constraints on the system (primarily the Balancing Mechanism). This mechanism or a similar system could be expanded for the use of DSOs instructing DER on a local level. The scale and scope of such a system could vary, depending on the needs of the DSO, the DER available and the cost compared to other methods. This method would require effective communications between DSOs and NETSO, but would facilitate open competition in the provision of services by DER. ELEXON explored this concept in 'Actively Managed Distributed Generation and the BSC'. There are other methods available for managing constraints, some of which may come about without the direct involvement of DSOs, for example time of use tariffs incentivising load shifting.
12	What are your thoughts on the transition from the current approach to managing distribution constraints to a more active one that is co-ordinated with transmission constraint management?	*No response*