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By email only to: flexibility@ofgem.gov.uk

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

Dear Nathan

This response is on behalf of UK Power Networks' three distribution licence holding companies: Eastern Power Networks plc, London Power Networks plc, and South Eastern Power Networks plc. We are the UK's largest electricity Distribution Network Operator (DNO), dedicated to delivering a safe, secure and sustainable electricity supply to 8.3 million homes and businesses.

We support Ofgem's objective to clarify Whole System responsibilities through new licence conditions. To facilitate the energy transition in a cost efficient way it will be critical to have a common framework for developing Whole System solutions. To this end, we believe that the proposed new Whole System licence conditions and guidance should apply to the Electricity System Operator (ESO) in the same way as it does to other electricity distribution holders. Without this there is a real risk of misalignment between the expectations key parties have when working together to deliver Whole System benefits. For example, the Power Potential project is an excellent Whole Systems case study whereby UK Power Networks and the ESO have been working collaboratively to address technical and commercial issues that cut across electricity distribution and transmission. This joint project has involved UK Power Networks, and the ESO, both exhibiting many of the behaviours Ofgem describe in the draft licence conditions and guidance. Therefore, having equivalent requirements on these parties will further encourage this type of work going forward.

We have set out our answers to your specific questions in Appendix 1, with Appendix 2 (a separate file) containing track changes to the draft licence condition and guidance to aid you in your review.

I hope you will find our comments useful. If you wish to understand any part of the response in further detail, or indeed wider issues, myself, or members of my team would be happy to discuss.

Yours sincerely

James Hope
Head of Regulation and Regulatory Finance
UK Power Networks

Copy Sotiris Georgiopoulos, Head of Smart Grid Development, UK Power Networks
Paul Measday, Regulatory Compliance and Reporting Manager, UK Power Networks
Daniel Saker, Distribution Policy Manager, UK Power Networks

Appendix 1

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 are supportive of clarifying responsibilities through licence conditions and supporting guidance. Encoding obligations, rights etc. will ensure that all stakeholders (be they the licensees or other parties) have clarity and are operating to the same rules. The potential benefits that can be gleaned from whole system working have been well documented through the work that we have undertaken both bilaterally with the ESO, through the South Coast Regional Development Programme, and at industry level to mitigate the stability issue derived from the use of RoCoF and Vector Shift protection on distributed generation. Our experience of the Vector Shift Project is that the DRS mechanism works at a basic level, however, we do not think it is the most efficient mechanism in many future cases, as the allowed margin could be minimal compared to the incentive on output delivery. This could be remedied by refining the DRS routes to ensure they better reflect risk and reward.

It should be noted that whilst considerable benefit was accrued by customers these examples also came with an additional cost to network operators, over and above that considered within the regulatory allowance. In addition, the way in which funding and benefits have been realised to date for these one off projects is not conducive to an enduring requirement to deliver on whole system solutions. As such we would expect consideration to be given to and specification of the appropriate funding mechanisms and incentives to be made in the upcoming RIIO-2 price control.

Whilst the draft licence condition and guidance sets out the behaviours Ofgem expect licensees to exhibit to support the energy system, we believe greatest progress will be made through refining the regulatory framework as part of RIIO-2. We therefore expect RIIO-2 to clarify roles and responsibilities as well as how Whole System activities will be funded in the future.

We also seek clarity on whether this new licence condition intends to cover both the technical and commercial aspects of Whole Systems, as currently it is unclear what is in scope. We note that the guidance sets out high-level expectations on data transparency, levels of engagement and practices, but is unclear how this will be monitored and assessed. For example, it states that “Licensees should seek to optimise flexible resources and capacity on a system wide basis”, but does not clarify how this will be governed.

Going forward we welcome the development of a common approach to the quantitative assessment and comparison of the costs and benefits of a particular Whole System approach. Whilst this may only provide an initial estimation of the most cost efficient option, it will help define which party has responsibility for conducting a full CBA (and therefore owns the output).

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 are unclear why the definition of Whole System in the draft licence condition is inconsistent with the definition used in the recent RIIO-2 sector specific consultation; as the latter was broader and included both electricity and gas networks. Our initial position is that we support the narrow definition Ofgem use in the draft licence condition as we are experiencing issues that cut across electricity transmission and distribution. However, we are yet to experience material issues across our networks and the gas network.

The above scope point aside, we have track changed and added comments against the version of the licence condition and guidance you published in the consultation. This is attached as appendix 2. We look forward to further engagement on the drafting of the licence conditions and guidance as this is key to the successful implementation of Ofgem's policy.

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 with this approach, as long as it applied with the appropriate level of proportionality. To ensure that the optimal whole system benefit is derived, a targeted approach to engagement (situation dependant) will be the most efficient and productive approach. Open Network trials looking at distribution solutions to mitigate a transmission voltage constraint, have shown that optionality can be stifled if the engagement is too restrictive or untimely; conversely if is too wide the process becomes unwieldy and inefficient. The process that defines the level of coordination needs to be robust, transparent and able to illustrate where cost outweighs benefit.

We believe that focus should be given to ensuring a level playing field between different licensees who can potentially deliver the same outputs at a different whole system cost. For example, Ofgem is proposing stronger financial incentives for the ESO to deliver whole system solutions, however, Ofgem have similar expectations from DNOs without equivalent incentives being in place. This is despite the DNO being well placed to identify and resolve many of the forthcoming Whole System issues.

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?

It is likely that changes to the provision and use of certain datasets will be required. Both the RDPs and recent pathfinding projects initiated under the Open Networks project have highlighted the deficiencies in data available to DNOs and National Grid (ESO and TO), including that supplied under Week 24 and 42 submissions. This could have implications for Grid Code, STCs, CUSC and as such will need to be further assessed to understand the breadth of changes required.

Alongside this we believe that Ofgem should be engaging the industry on Code modifications to ensure alignment between the Codes and the licence conditions.

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

We have identified three areas which should be considered:

- Charging arrangements – the differences in the transmission and distribution charging frameworks can be a blocker to efficient Whole System solutions. One example of this would be the difference in connection charges e.g. a transmission connection could be cheaper for the customer but have a detrimental impact to the wider customer base.
- Funding mechanisms – clarity as to how distribution solutions to transmission issues will be funded and how the outputs are considered will be fundamental to both business plans and effective cost benefit analysis. For example differences in who owns the output and who owns the risk means there would potentially be a different costing model based on whether this was funded through a DRS or a totex allowance. Furthermore, an additional complexity is brought in by the different sharing factors between licensees and how that could affect the analysis of options.
- We think there is a need for greater representation of DNOs/DSOs in the development of European Network Codes as these are increasingly having an impact on how we run our network. To date engagement has primarily been from the GB TSO through ENTSOE-E, which was appropriate when distribution networks played a more passive role. Now, however, we see merit in either expanding the remit of ENTSO-E, or creating a new body to look more specifically at distribution issues.

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.

There must be clear boundaries in the roles and responsibilities of different parties to avoid driving competition between licensees that is not in the interests of consumers. As early as possible outputs should be given to the party best able to deliver them, and if it is appropriate outputs should be transferable between parties within price control periods.

There is currently some uncertainty within the industry as to whether the offering of an alternative/flexible connection is in keeping with the inferred requirements of the licence and as such whether it should always be the primary offering. There will be benefit in further clarifying the use of such connections as the primary offering where this continues to be the most efficient and cost effective way to manage network capacity. We understand that this is being discussed within the Access Reform Project.

Whilst there are clear requirements at distribution level to allow connectees to go with an ICP/IDNO there is no such equivalent across network boundaries and therefore such customer connection offers may not be in keeping with the best whole system solution.

As stated in our response to Question 1 we believe the focus should be on removing existing barriers to realising Whole System benefits, which we have experienced first-hand. The energy transition has had a profound impact on our networks and we are forecasting even more change to come as greater volumes of EVs and DG connect to the network. It is therefore critical that arrangements enable us to connect this new technology as cost efficiently as possible. We believe that smarter distribution networks will be central to doing this and ensuring that value flows back to customers e.g. by engaging in flexibility. By way of illustration, there will be cases where the

transfer of outputs from a TO to a DSO, which are related to the connection of EVs on the distribution network, will enable the DSO to simultaneously resolve both T&D issues for the least cost. Importantly, with the right regulatory arrangements (e.g. re-openers in RIIO-2) this could be achieved without any costs being incurred by the TO.

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?

Both the recent pathfinding projects conducted under the Open Networks project and the Regional Development Programmes in the South East and South West have highlighted a number of areas where transparency/provision of transmission data would be of considerable benefit in making both whole system and distribution network assessments. Whilst a detailed view on this is provided in the recent Open Networks WS1 publications, at a high level this amounts to the need for a more complete view in both operational and planning timescales of the transmission system and any resources that reside/operate within the distribution networks. As highlighted in Q.4a this has likely implications to the Grid Code, and will also require changes to the contractual terms for those customers proving service to the transmission system.

The new Energy Data Task Force initiated by BEIS should be seen as a key forum for this area of work. We are actively involved in this and are already pushing for greater data access, such as acquiring DVLA's data to help us better forecast EV clustering.

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.

We are supportive of the new obligations being applied to all DNOs, IDNOs, onshore TOs, as well as the ESO. A level playing field with all relevant parties having the same obligations is key to ensuring a successful whole systems approach. Ofgem should also consider the fact that IDNOs are not currently subject to the proposals Ofgem are making in RIIO-2 on Whole Systems. We believe this will need to also be addressed to ensure a level playing field in the future.

Appendix 2

See separate file.