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Dear Neil

**The network innovation review: consultation proposals and proposed legal drafting consultation**

Thank you for the opportunity to respond on the content set out in the above documents. This letter should be treated as a consolidated response 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. It is not confidential and can be published on the Ofgem website.

We have set out our detailed feedback on the consultation proposals in the appendix to this letter (Appendix 1) and on the legal drafting in the attached MS Excel file (Appendix 2). Please find below some of the key messages underpinning our response to the consultation proposals.

- We support the majority of proposals in this consultation and recognise the value of an industry-wide innovation strategy, increasing the participation of third parties, and consolidating and improving visibility of innovation activities such as reporting and trial data.
- Continuing to improve the value for money to customers of the innovation mechanisms is clearly of utmost importance, and we recognise the renewed focus that reduced funding can bring through increased competition.
- We believe that the innovation competition is working – we concur it has delivered significant value to customers, and our view is supported by the conclusion of the Poyry report. We agree that change is required and sensible to further improve the return on investment for customers.
- However, changes in the governance should seek evolutionary steps to improve the mechanism and should not be sudden or radical changes to the competition (such as some of those proposed) that risk moving innovation backwards, not forwards, and undoing the good work to date. Below are a few of the specific examples from the consultation where we believe a more incremental approach will support the continued, and improved, success of the innovation funds.
  1. We believe that the inability to recover bidding and compulsory contribution costs would result in a situation where network operators would not be incentivised to innovate at scale, pursue innovation where the primary beneficiary is the end customer, or invest in solutions that address future and/or low carbon uncertainties. In our view, these are the very behaviours the innovation funding mechanisms were implemented to address. If

value for money to customers is being sought then a gradual transition, once the industry has moved well beyond a 'moderate' level of innovation internally, should be favoured over a sudden change to recovery mechanisms.

2. We would be grateful if Ofgem could clarify how third party-led projects would work and precisely what third party-led means, as this is currently unclear and parties would benefit from a common understanding of the obligations they would be under for such projects.
3. There are a number of documents, beyond the actual governance documents, which licensees are required to comply with, e.g. the submission pro forma/spreadsheet and close down report guidance. All such documents should be formalised as part of the governance document to ensure appropriate change control governance is placed upon them. Their current version control status outside of the governance document means licensees and Ofgem are exposed to risks of challenge on these. This is particularly concerning bearing in mind the need for licensees to comply with these documents as if they were licence conditions.
4. Finally, we are concerned that the proposed amendments to change control governance for future NIC projects would have the effect of increasing the cost and effort of governance, as opposed to the stated aim of reducing the governance burden. We have analysed the change control activity of LCNF Tier 2 and NIC projects to date and propose some simple amendments to the consultation's interim governance proposal. We believe that this alternative proposal will effectively and pragmatically achieve the stated aim of reducing the governance burden.

In conclusion, we are supportive of the need for change to the innovation mechanisms to help drive further innovation and value for money for customers. This change must however be balanced against the success of the existing structures. For example the net savings that customers have received through our flexible DG connections in the 2015-16 year alone (which was piloted under the LCNF Tier 2 project Flexible Plug & Play) paid customers back all of the innovation competition funding UK Power Networks has received to date, including our 2016 project PowerFuL-CB. We welcome this and any future opportunities to work together to further the success of innovation in the industry.

If you have any questions, please do not hesitate to contact Ian Cameron in respect of the consultation proposals or Paul Measday in respect of the legal drafting.

Yours sincerely



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## Appendix 1: Feedback on consultation proposals

### **Question 3.1: What are your views on our proposals to introduce a requirement for the network companies to jointly develop an industry-wide innovation strategy?**

We agree that a high-level industry-wide innovation strategy (supported by existing more detailed licensee specific strategies) would support best value for money for customers and would help focus on priority innovation areas and support sharing of lessons learnt.

We would be supportive of an industry-wide innovation strategy intended to:

- identify common activities, priorities and gaps among licensees; and
- inform all of the industry's external innovation stakeholders of those areas of common ground.

However, it is important that this innovation strategy is not a restrictive requirement for licensees' innovation activities. We would be concerned if the innovation strategy was used to focus activity on the most communal or the most topical priorities to the exclusion of the most valuable innovation for our customers. This needs to be avoided through careful drafting of its scope in the associated licence condition. We propose that this drafting does not seek to fully define the content required, but leaves this to the licensees to define, as per the existing Innovation Strategy requirement. For example, the industry-wide strategy should outline a common process that third party innovation partners can expect when responding to calls for innovation, but should not impose a single, coordinated call for innovation as an industry requirement.

To this end, we believe it important that an industry-wide innovation strategy is developed based on those common areas of focus from the existing licensee strategies, and does not introduce new activities or focuses that are not present in individual company strategies.

#### **(3.1A) If you agree, should companies retain their own strategies, and in addition should there be a single system strategy, or one for gas and another for electricity?**

We believe that companies should and will still have their own innovation strategies as different networks and different licensees will always face different challenges. For example, our most recent innovation projects, Powerful-CB and Transmission Distribution Interface v2.0, whilst working towards learning that will benefit the whole industry, would likely not be seen as innovation priorities across the industry. Other networks facing these challenges may see notable different uptake timescales.

Whilst we recognise that there are benefits to be achieved through cross-sector innovation with gas and electricity, we believe that, at this stage, two separately developed sector strategies would be more efficient and more effective than a single document.

#### **(3.1B) How often should the strategy be updated?**

We believe that the review requirements should be documented in the actual strategy, in line with the obligations on the DNOs for their individual strategies.

### **Question 3.2: What are your views on our proposals to help facilitate increased involvement of third parties in NIC via the network companies?**

As Ofgem notes, there is already significant third party involvement in the NIC. UK Power Networks has successfully collaborated with a diverse range of third parties – including

aggregators, energy suppliers, community groups, local government and academic institutions – on a range of innovation projects. In particular, we already issue calls for ideas on a regular basis and are registered members of the Energy Innovation Centre, which interfaces with thousands of third party companies related to innovation in energy.

In principle, we support the proposal to require companies to undertake an annual call for ideas and to report on the outcome annually; however, we recognise that not all such ideas are appropriate to link directly to NIC submissions. In some cases, those ideas will be more appropriate for NIA or internal funding mechanisms; in others, they may not deliver as much value to customers as an internal idea.

We also believe that each company should hold its own call for ideas. This would allow each company to set out a range of ‘problem’ statements that relate to the specific challenges it is experiencing on its network(s). For the avoidance of doubt, this would not preclude third parties from coming forward with their ideas at any time, or prevent licensees from grouping together to produce a call for ideas if they chose to.

Furthermore, the governance in this area should not restrict the licensee such that it can only use ideas from a specific call or time-period for third party participation in NIC, as this would unduly restrict licensees from using the best ideas available to them at the time of formulating their bid.

We recognise that the development of active, third party-led participation in the competition may be enabled by increasing the number of bids allowed to four. However, we note that even for third party-led bids the licensee still bears the obligations associated with the NIC governance and their own licence, and so development and preparation effort associated with developing a bid would still be non-trivial for the licensee.

We also note that Ofgem needs to define what a third party-led project is, as this impacts bidding eligibility and it is not clear at this stage how this would be judged. Our projects have historically included significant collaboration and leadership from third parties even though they were not labelled as such. We would support a definition that defined a third party-led project as one where the third party (a non-licensee) bears the 10 per cent mandatory contribution cost, though it would need to be clarified in the governance that the licensee did not need to directly provide this funding and could be allowed to pass through third party funding for this contribution.

### **Question 3.3: What are your views on providing direct access for third parties to the NIC?**

Overall, we agree that increasing the participation of third parties in the innovation funding mechanisms is helpful to their success. We have a track record of working collaboratively with third parties both to source ideas and to deliver projects; however, we recognise three major challenges in producing even greater levels of benefits through direct third party access to innovation funding:

1. Robust sharing and coordination of results and intellectual property across the industry

With licensee-led bids, the licensed company shoulders the responsibility to protect customers’ and the wider industry’s interest in the foreground IPR. A third party bidder (e.g. a product supplier) may stand to lose more from robust dissemination and/or licensing of foreground IPR than they are liable for through the mechanism as an unlicensed company.

## 2. The efficient transition from development to BAU

We are unclear how Ofgem and the expert panel would assess suitability of solutions within network businesses. Licensee-led bids will inherently be selected with internal input on viability. Direct third party access would not have this endorsement and it is likely that solutions funded would pose fundamental challenges for transfer into BAU – already a challenging activity. The Poyry report noted a successful ‘conversion rate’ of projects to BAU solutions and it is likely that this success rate would decrease in a direct third party access environment.

## 3. Handling of bidding costs, 10 per cent contribution requirement and any successful delivery reward or clawback mechanism

Should bidding costs and the compulsory 10 per cent contribution be borne by the third party, and these costs are not recoverable, then third parties may require a share of the benefits from successful innovation projects in order to be incentivised to come forward with ideas, and to prepare the projects to Ofgem’s expected maturity for the competition process. This would mean developing a mechanism to fund these payments out of regulated revenue, and at this stage it is unclear how this would be achieved.

Any mechanism enabling direct third party access would need to address these issues, among others, in order to ensure value for money to customers. At this stage, we believe that allowing third parties direct access to the NIC should only be pursued if there is evidence that they are not gaining access via the calls for ideas proposal.

### **Question 3.4: What are your views on our proposals to remove the Successful Delivery Reward and the provision to recover Bid Preparation costs?**

In a competitive environment companies innovate to gain market advantage and earn higher returns. Network operators have been funded for both bidding and their share of the innovation funding, because Ofgem requires companies to recognise the direct benefits that the project delivers within the current price control period, as part of the bidding process. We note that during the RIIO-ED1 settlement process, Ofgem assumed that a certain level of innovation savings would be delivered as a result of funded development and trials, and built these into the cost allowances as benefits accruing to customers without a licensee sharing factor.

We believe that the inability to recover bidding and mandatory contribution costs would result in a situation where network operators would not be incentivised to innovate at scale, pursue innovation where the primary beneficiary is the end customer, or invest in solutions that address future and/or low carbon uncertainties. In our view, these are the very behaviours the innovation funding mechanisms were implemented to address.

Regarding bidding cost recovery in particular:

- Ofgem noted that bidding cost recovery is not a common feature of innovation funding mechanisms. However, the level of maturity a project must be at in order to be successful in the NIC is significantly more onerous than that of other funding mechanisms – for example, European funding mechanisms and Innovate UK, which do not require the same level of detail and documentation around budget, delivery plans and lifetime benefits analysis. As such, we propose that a reduced level of effort should be proportional to the reduced bid recovery.

- We also note that, typically, we spend more than the currently recoverable amount in order to fully develop a project concept to bid readiness. It is worth considering that robust development of a major innovation project (with financial and/or carbon benefits for all of the country) requires significant time and effort from experts in our business dedicated to bid preparation. It requires the preparation of up to 100 pages of narrative and project formulation, the development of new partner relationships, the securing of financial and benefit in kind contributions, feasibility assessments, benefits analysis, and extrapolation and forecasting for a national-scale roll-out. Additionally, robust bids will coordinate this work across key stakeholders, external experts, and consultants to ensure bid quality and the feasibility of the solution.
- Lastly, pioneering projects such as our Low Carbon London and Smarter Network Storage projects have been placed at the leading edge of high uncertainty low carbon technology scenarios. These projects have delivered critical and timely smart grid experience for the industry, but would likely have suffered for being (correctly) identified as higher risk and higher complexity projects to bid for at the time of submission. Support for preparing these projects to a high maturity, so that the expert panel and Ofgem can make an informed decision on the allocation of funding, is, we believe, an effective way of developing a high level of innovation within the industry, and one that protects customers' interests.

Regarding the successful delivery reward recovery of mandatory contribution costs, we recognise this as a significant driver both for incentivising innovative solution bids where the benefits accrue to customers and for maximising the learning and achievement of a funded project. Flexible Plug & Play, Kent Active System Management and energywise are projects in which we have directly invested over £3 million – of which £2 million was compulsory – and are all designed to deliver benefits that largely or wholly accrue to customers.

Ofgem and the Poyry report note that a “significant portion” of the benefits of innovation flow directly to network companies. However, the significant *majority* of benefits do not; they flow to customers or other stakeholders. In our 2015/16 smart savings regulatory reporting table (E6) the example of our customer-focused Flexible Plug & Play project is delivering a significant majority of those reportable savings. Should network companies bear the ‘entry’ costs as well as the compulsory contribution without an incentivising recovery mechanism in the NIC, then we expect that the resulting innovation-funded portfolio will be biased to:

- address short-term problems only;
- target benefits that accrue to network companies at the expense of customer-focused solutions; and
- limit the willingness of third parties to participate in the competition.

If Ofgem does remove the ability to recover bidding costs and Successful Delivery Rewards, then the recognition of direct benefits should be excluded from the NIC bidding process.

We believe that the bid preparation cost and compulsory contribution recovery mechanisms are critical factors driving the increase in innovation ambition in the network licensees recognised by Poyry. We also believe that these mechanisms have directly supported some of the most successful innovation projects from our customers' perspective. We support the need to continue to increase the value for money to customers of the innovation mechanisms, however a sudden removal of these support mechanisms is more likely to drive a reduction in participation and benefits delivered to customers. In the long term, we recognise and agree that licensees should assume more of the cost of innovation, but this should be a gradual transition, not a sudden change.

**Question 4.1: What are your views on the rationale for reducing the level of electricity NIC funding pot?**

We agree that the level of challenge facing DNOs today and the amount of uncertainty with regard to the low carbon transition mean that the continued support of the funding is critical to our ability to effectively respond to these challenges. As such, we fully support Poyry and Ofgem's conclusion that the innovation funding mechanism represents value for money to customers.

With the above in mind, we agree that decreasing the overall funding available will increase the level of competition among participating licensees whilst recognising that DNOs will need to continue to increase the level of innovation culture within their businesses, independent of central funding. The Smart Grid Development team we have built within our Asset Management directorate is an example of how we recognise this importance.

**Question 4.2: What are your views on the proposed funding level of the electricity NIC?**

At this time, we do not have any reason to believe it likely that the proposed level of funding would have a detrimental impact on our innovation programme or the benefits we believe we can deliver to our customers through the innovation competition. However, we note that if the innovation competition mechanism does indeed deliver a good return on investment for our customers, then it is possible that in some future scenarios such decreases in funding could result in a decrease in benefits delivered to customers.

We suggest that the option to increase funding later in the price control period should be retained by Ofgem to safeguard innovation in a transitioning industry.

**Question 5.1: Do you agree with our proposals to clarify the circumstances we do and do not expect change requests are submitted to us?**

**(5.1A) If you agree, do you think our proposed draft explanation of material changes is clear?**

While we fully support Ofgem's aim of reducing the burden of processing change requests and also agree that clarification is needed on when formal change requests should be submitted, we think the proposals consulted on require some further refinement to achieve this aim. Ofgem's proposals place the decision on materiality with the licensee; therefore, although Ofgem will likely see less change requests, there will be no less burden on the licensees, as they will still be required to go through the full change review process to determine if it would be a material change and therefore need submission to Ofgem.

With this in mind, although we appreciate the benefits of being the decision maker on whether a change is material, we propose that Ofgem go one stage further in this area and work with licensees to develop a simple list of scenarios which do not require approval, therefore leaving all other scenarios to be processed via Ofgem for approval. This list would need to be part of the governance document.

Regarding the proposed governance change for future projects: We are concerned that the proposal to complete a detailed external audit on the success and quality of each output of a project will significantly increase, not decrease, the burden of governing change and quality of innovation projects. We also note that completing such audits for all projects would increase the overall cost of the governance, which would be funded by customers. This of course would further reduce the funding pot available for actual innovation.

We also note that a change control process that takes place during the lifetime of the project is more likely to arrive at an effective decision that supports value for money to customers and which identifies improvements the project can undertake in flight in order to deliver on the project's original learning objectives. A post-hoc audit and clawback mechanism would not best support an agile innovation portfolio, addressing unproven solutions and customer needs in uncertain scenarios. If the aim is to reduce the burden of governance and change control, then we do not agree that this proposal will better facilitate efficient project governance and change control – in fact, the addition of an external audit increases the burden in this area.

Finally, in respect of future projects, it was unclear from the Ofgem hosted meeting on 11 January, when compared to the legal drafting, whether the material change process Ofgem had proposed was also to apply to future projects, or solely existing projects. We consider that the proposal should apply to all projects – existing and future.

**(5.1B) If you think alternative drafting would achieve this more effectively please provide this drafting.**

Please also see our answer to question 5.1A.

Considering the stated aim of reducing the burden of processing change requests, we therefore propose rules for change control that include in the governance document both a definition of material changes, as proposed in the consultation, but also including an identified list of some key examples, of what does not constitute a material change.

Proposal: material changes do not include:

- Changes in budget or cost category allocation that do not increase the project's initial net funding request;
- Changes that do not impact a successful delivery reward criteria milestone or the committed learning outcomes; and
- Changes that do not introduce a delay in the project end date or successful delivery reward criteria milestones of more than a year.

Please see our response in Appendix 2 on the legal drafting for further details.

We have completed an analysis of the change requests that have been published by Ofgem relating to LCNF Tier 2 and NIC funded projects, and it can be seen that of 21 change requests processed from the start of the LCNF programme up to the end of the 2015/16 regulatory year:

- 12 have related to minor delays of less than a year, cost category changes without an overall change in funding requested, or minor method changes that did not impact learning outcomes; and
- 9 have related to changes in scope, increases in budget, or extensions greater than 1 year where it could be expected that formal change requests would still be submitted.

It could then be estimated that under our proposed change control governance rules, the burden of processing change requests would be more than halved (57% fewer formal change requests). We believe that this represents a pragmatic approach to enhancing the governance arrangements for NIC project change control rules, which evidence shows will achieve the desired reduction in governance burden for all parties.



**Question 5.2: Do you have any feedback on our proposal to publish a plain English guide to our default intellectual property (IP) requirements?**

We recognise that the handling of intellectual property involved in innovation is a complex area, and it is important that it is understood and carefully implemented to facilitate third party participation in the competition while ensuring customers can access the outputs and benefits of the funding.

We agree that clearly setting out overarching aims and principles of the NIC IP governance would support this implementation and coordination with third parties; however, a plain English guide to IP would (necessarily) over-simplify the legal reality of the IP arrangements, and would potentially conflict with the actual governance document and subsequent third party agreements.

If such a summary or set of high level principles were to be drafted we would advocate that it be incorporated into the existing governance document and that it be made clear that it is to be used as a plain English guide only and is subordinate to the actual detailed requirements.

Finally, we also note that such guidance would require additional consultation beyond the currently drafted legal text under consultation. We believe that this would be required in order to ensure that Ofgem's plain English guide is clearly understood by all parties and does not introduce further ambiguity into the process.

**Question 5.3: Do you have any views on our proposals to improve the visibility of the NIA projects? What are your suggestions for a proportionate way to get assurance that the NIA is being used by network companies in an appropriate way?**

We recognise and agree with the importance of maintaining good visibility of our innovation activities. In the first instance, we believe that any form of coordinated industry innovation strategy will support the aim of improved visibility and updating of innovative solutions across all DNOs. It is likely that much of this benefit will come from top-down changes introducing coordination, not (only) bottom-up NIA governance changes.

Stepping through the proposals, our feedback is:

- **Data sharing:**  
We agree with the ambition of increasing data sharing, and have a history of publishing data from our innovation projects for external interested parties. We are supportive of providing data to interested parties upon request; however, we note that there are some situations where it would not be appropriate for us to share data, with or without anonymisation, and it is important that any governance requirement considers these limitations. These exceptions should include, as a minimum:
  - where the data includes private data or data where we otherwise do not have the right to issue the data externally;
  - data that is commercially sensitive; or
  - data regarding critical network infrastructure or network capacity that would inappropriately influence connections activity on those networks.
- **Requiring BAU roll-out plans, why/why not decisions and forecasted benefits:**
  - We do not believe that the RIGs are an appropriate place to include forecast solution roll-outs, benefits achievement, or articulate the reasons for a BAU roll-out decision. Innovative solutions are by their nature more uncertain, and once a small-scale pilot has been completed and a BAU roll-out decision made, it is still likely that there will be greater uncertainty in forecast costs, volumes and benefits than is

- appropriate for RIGs submissions. These assessments will be bespoke for most if not all solutions and will entail a high degree of uncertainty. We note that RIGs submissions must achieve a high level of auditability and consistency (note the DAG framework) that innovative solutions will not always reach for such submissions.
- Additionally, it is important to note the significance of the reporting effort inherent to such a requirement, which by its definition would not be a part of an innovation funded activity. In the last 12 months there have been 63 NIA funded, electricity distribution projects new or updated on the Smarter Network Portal. Assessing future expected roll-out scale, costs and benefits and completing a roll-out plan and decision for all projects documented in an annual RIGs submission would be a reporting requirement with effort measured in man-years.
  - We recommend an iterative approach, outside of the RIGs procedure, to develop and consolidate reporting on BAU roll-out plans across the industry. If a portion of the NIA allowance could be allocated to the post trial, BAU roll-out phase of the innovative solution lifecycle, regardless of the originating DNO, we believe that would be an effective way of further improving the conversion rate of innovation projects into BAU solutions.

**Question 5.4: Do you have any comments on any of our other proposals?**

Please find below our comments on each element of the other proposals detailed in section 5.19 of the consultation document:

- **Merging NIC and NIA reporting:**
  - We welcome Ofgem’s aim to reduce the reporting burden associated with innovation projects, and we also note that the good level of visibility and governance established through our internal governance processes will continue unchanged.
  - We do not support the proposal to move to a 12 monthly Ofgem reporting cycle for NIC projects. A licensee with good governance processes in place will be capturing and reporting (internally) the information required as part of PPRs on an ongoing basis. For Ofgem to not have visibility of progress information for up to 12 months at a time results in a risk that Ofgem may not be in possession of useful material in a timely manner to allow it to discharge its obligations as a regulator.
  - We do think that these progress reports should stand on their own and not be merged with any other documents. The NIA progress and summary reports focus on explaining status and an overall summary of a much larger portfolio of smaller innovation projects, whereas the NIC reports provide significant detail on all learning aspects from these larger projects. We would be concerned that merging them together may reduce their usability for customers.
  - We would, however, support including our NIC projects in what is currently the annual NIA summary. This would provide an overall picture of our portfolio and include the appropriate references and links to allow stakeholders to access the more detailed information on any project(s) of interest. For this to be implemented as a requirement, it would have to be determined in which governance document it was to be included.
- **Justifying why projects are eligible:**

We are happy to support expanding the PEA form to include explanation of why new NIA projects are eligible. However, we would seek any particular points of clarity or expectations that Ofgem would have in that content, particularly if any of the specific requirements outlined in section 3 of the NIA governance document require description. We also note that our governance procedure already ensures that a senior manager, typically the Head of Innovation, approves new projects prior to registration.