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Our ref: Ofgem NI response V1.0

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Network Innovation Review: EA Technology's Response

Dear Neil,

EA Technology welcomes the opportunity to respond to Ofgem's consultation document on the 'Network Innovation Review'. EA Technology is an employee-owned SME with a long history of innovation in the electricity distribution industry. We believe that our practical experience as the only non-Distribution Network Operator (DNO) to lead either a Low Carbon Network Fund Tier 2 project (My Electric Avenue) or a Network Innovation Competition project (OpenLV) has given us helpful insights.

It is our view that innovation is critical to the efficient development of electricity networks, to ensure that customers receive value in the way in which networks are designed and operated. We applaud Ofgem's strong leadership, introducing mechanisms like the Low Carbon Network (LCN) Fund, the Network Innovation Competition (NIC) and Network Innovation Allowance (NIA) to place innovation at the heart of business activity within the DNO sector and making it a key pillar of the RIIO regulatory framework.

We strongly believe there is a continued need for innovation in the sector, however we also recognise that modifications to the existing framework would broaden the participation of non-DNOs hence deliver better value for customers. We believe strongly that any changes to the framework should be set forth with these aims in mind and we expand upon these points in our specific responses to the questions set out in Chapters 3 – 5 of the consultation document below.

Chapter 3

Question 1: What are your views on our proposals to introduce a requirement for the network companies to jointly develop an industry-wide innovation strategy?

- **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?**
- **How often should the strategy be updated?**

An industry-wide strategy can help to ensure that key innovation areas are recognised, prioritised and addressed, and reduces the possibility of inefficient replication. Indeed, we note that this mirrors the approach that is being taken in Australia as part of their Electricity Network Transformation Roadmap project, where the strategy is set to be administered by Energy Networks Australia. A centralised strategy can become inflexible, out of date and unhelpful. Informed, incisive debate is essential to ensure that a centralised strategy becomes and remains a helpful enabler rather than a barrier to innovation. Therefore, our view is that

companies should retain their own strategies and jointly develop an industry-wide innovation strategy by engagement with knowledgeable and experienced third parties. Having a central strategy will place more emphasis on the sharing and dissemination of learning, provided that the terms of reference of the body or bodies responsible for the strategy require that the strategy is challenged in the light of real lessons learned. The various parties responsible for delivering the elements of the strategy can work together, or report back via a central body, to comprehensively share project learning (both positive and negative).

Who will be responsible for the industry-wide strategy and ensuring that projects are aligned? How will they be held to account? These are simple questions to ask but not to answer effectively. The consultation document does not explicitly state who Ofgem believes should be accountable. It could be the network operators themselves, or perhaps the Regulator.

The difficulty in maintaining a centralised strategy is that there must be a body responsible for maintaining the strategy and efficiently determining which network operators should be responsible for delivery of which elements of the strategy. This will require a high degree of buy-in from all network operators and, if it is to be managed centrally and portions of the strategy allocated to certain DNOs, it also requires safeguards to be in place to ensure that good ideas are not precluded because 'you are not the DNO responsible for this portion of the strategy'. While the intention of a centralised strategy is to encourage innovation, it should be recognised that it might have the opposite effect. If the strategy is too narrow (or out of date), it could have the undesirable effect of stifling genuinely innovative projects.

EA Technology would want to see the widest possible range of stakeholders involved in development of the strategy. Alternatively, if DNOs and third parties are free to bid for projects that broadly align with the strategy, there is a higher risk that the bids may contain greater levels of duplication, which could mean insufficient projects are developed to effectively enact the strategy.

There is a real risk that knowledge sharing is not carried out to the required degree as it can be difficult to ensure that all the learning, captured along the journey of delivering a project, is shared in full. This produces a barrier for DNOs to quickly adopt learning from projects they have not themselves completed. They feel they need to have 'lived it' to develop a good understanding of the potential risks and pitfalls, hence be able to make a sound judgement as to the feasibility of adopting the learning, associated with it.

From the above, there are potential drawbacks to a centralised strategy and, if such an approach is adopted, the oversight of its implementation must not become burdensome.

If a centralised strategy is adopted, it seems more prudent to retain one for electricity and another for gas as this will aid the efficient delivery of the strategy by the necessary parties and can call upon the relevant expertise of reviewers from each industry sector. This does not mean that cross-vector projects should be dissuaded; in fact, they should be encouraged, but we envisage the strategies will be publicly available to facilitate this.

Again, assuming this approach is adopted, a formal review period of two years sounds reasonable. More frequent would be overly burdensome and would not necessarily allow for sufficient time to develop project ideas from inception, through feasibility into a field trial ready state, but less frequently would not allow the industry to sufficiently keep pace with the level of change occurring. However, this should not preclude informed, evidenced, cross referenced, commentary on the strategy between the formal reviews, indeed this should be encouraged to ensure the formal review is efficient and effective.

Question 2: What are your views on our proposals to help facilitate increased involvement of third parties in the NIC via the network companies?

EA Technology supports the increased involvement of third parties in the delivery of NIC projects. Bringing together the expertise of a wider range of key players in the industry will increase the number of ideas, which in turn can only benefit the quality of projects that will be brought forward. Having more projects led by third parties increases the amount of innovation activity that can be carried out in parallel. Having the network operators issue 'challenges' to the industry, respond to ideas from third parties publicly and take on board the best approaches for development of innovation projects is to be commended and we support the proposal. Increasing the number of full submissions for projects that network companies can put forward would offset the possibility that network companies might feel disinclined to put forward third party projects, if this is perceived to be a real risk.

We understand Ofgem's arguments to remove from the Network companies the successful delivery reward and the provision to recover bid preparation costs. Providing that companies can demonstrate that they benefit financially from the adoption of the outputs of innovation projects and that this benefit outweighs the risk adjusted cost of their contribution to innovative projects, then shareholders should recognise that it is in their interest to contribute.

There is a risk that this proposed action in respect of Network companies could have the unintended consequence of placing a barrier to increased involvement of third parties in the NIC. The upfront costs of bid development are considerable and can only be absorbed by the very largest of companies, for whom the costs are a fraction of a percent of annual profit. Smaller, innovative SMEs depend on the existing allowance as an essential contribution towards the cost of preparing a quality bid, because the cost of a single bid can represent a substantial proportion of annual profit. If such funding provision is removed, the quality of bids is likely to fall and innovative SMEs may be excluded from the bidding process altogether.

Question 3: What are your views on providing direct access for third parties to the NIC?

At present, the NIC governance arrangements are very much geared to the way in which DNOs operate. If third parties (especially SMEs) are to access the NIC fund directly, rather than via a partner DNO, then the governance would need to be revisited and updated in several key areas.

For example, SMEs rely on regular cash flow to survive. The payment structure currently in place is incompatible with this requirement. The conditions that are placed on the funding, including restrictions on when it can be spent and key stage gates that are introduced during the project approval process, are onerous and can mean that an innovative project with a reasonable degree of technical uncertainty represents an unacceptably high risk for a small organisation. We would like to direct Ofgem to the independent review carried out by Ricardo of the EA Technology-led My Electric Avenue project which had some observations and recommendations concerning the viability of third-party leadership of such projects¹.

We would also point out that successful innovation projects are built on the foundation of strong partnerships. Good NIC projects require a strong partnership between innovation providers and the network company. It would be vital to ensure that 'direct access' does not make an attempt to circumvent the need for there to be a strong partnership (and high level of trust) between the DNO and third party. To take an extreme view, we do not want the situation where any third

¹ <http://myelectricavenue.info/sites/default/files/RD15-002325-3%20My%20Electric%20Avenue%20-%20M36%20Review%20Report.pdf>

party can bid into the fund and then a DNO would be obligated to accept their innovation onto the network, without first having established appropriate ways of working together and a robust project plan, including allowing for and mitigating likely risks arising from the innovation. To do otherwise would not be in the interests of customers on the network where the innovation is trialled.

Question 4: What are your views on our proposals to remove the Successful Delivery Reward and the provision to recover Bid Preparation Costs?

We do not support this proposal. It is the stated intention of Ofgem to widen the participation of third parties in the NIC; a goal that is fully supported by EA Technology. Such projects are incredibly complex and require a great deal of commitment from a potential innovation provider, with no guarantee of the project being approved.

There is, necessarily, a high bar set by Ofgem to demonstrate that customers' money should be used to pursue a particular project. To reach this bar, a bidder must invest considerable time and resource into the development of the project documentation, attendance at meetings and responding to challenges from Ofgem's Expert Panel and independent consultant. The reason for doing this is the opportunity to lead a project that will deliver great value to the wider industry and help achieve a smoother transition to a lower carbon economy. However, the risks associated are significant, particularly for an SME.

In order to justify these risks, the provision of a contribution towards the costs involved in preparing the bid, and the incentive of a reward of up to 10% of the project value for a successfully run project are essential. Without this incentive, there is a very real risk that fewer participants will come forward to offer their ideas and, without the incentive for efficient delivery of complex innovations, there is also a risk that 'safer bets' will be favoured by DNOs to ensure returned value to shareholders. This approach is unlikely to deliver the greatest wider benefits across the country over the longer term.

We would also point out that, to date, EA Technology is the only non-DNO to have successfully been awarded a LCN Fund Tier 2 or NIC project (My Electric Avenue and OpenLV) and, to the best of our knowledge, only one other bid has been led by a non-DNO (Proteus by Ricardo). To secure more third party involvement, it seems that greater levels of incentive, rather than less, would be required.

We believe that there should be some safeguards to ensure projects deliver. The Successful Delivery Reward provides a clear financial incentive for successful project delivery and appears to be achieving that aim. We cannot see, from the consultation document or elsewhere, an alternative mechanism that is as clear and straightforward.

Chapter 4

Question 1: What are your views on the rationale for reducing the level of electricity NIC funding pot?

We acknowledge that the level of bidding into the LCN Fund and NIC pots over recent years has been below the maximum permissible amount and we feel that Ofgem's proposal to reduce the contribution from the electricity distribution price control from £60 million to £40 million per year over 2017 – 2023 is unlikely to be detrimental to customers.

Question 2: What are your views on the proposed funding level of the electricity NIC?

Given the recent levels of bidding, the proposed level of funding on an annual basis appears to be reasonable.

Chapter 5

Question 1: Do you agree with our proposals to clarify the circumstances we do and do not expect change requests are submitted to us?

- **If you agree, do you think our proposed draft explanation of material changes is clear?**
- **If you think alternative drafting would achieve this more effectively please provide this drafting.**

In our view, reducing the burden with regard to change requests is a positive step. These requests currently take a long time to process and present obstacles to project delivery. We welcome the proposed clarification that a material change is one which could have significantly affected the Panel's decision. Successful delivery should be the primary incentive; precisely how successful delivery is achieved should be left to the participant to determine. This is a core principle of effective project management: it is essential that (inevitable) changes to project plans are not be subject to slow, bureaucratic "approval" processes.

We have no comments on the precise wording used.

Question 2: Do you have any feedback on our proposal to publish a plain English guide to our default intellectual property (IP) requirements?

Clarification on IP is always welcome; particularly so for third party providers who may be bringing background IP to, and/or developing foreground IP within, the project. A guide to the types of non-default IP arrangement that Ofgem has approved in the past and types that Ofgem would not be willing to approve would be helpful.

It is, however, important that any new wordings or guidelines do not have the unintended consequence of acting as a disincentive for third parties. Providing that a third-party organisation can demonstrate that there is a reasonable chance of benefiting financially from commercialising the outputs of innovation projects via Intellectual Property Rights and that this benefit outweighs the risk adjusted cost of their contribution to an innovative project, then shareholders of the third-party organisation might recognise that it is in their interest to engage with the NIC.

We recognise the importance, for Ofgem as surrogate customer, of demonstrating value for money when customers' money is expended. It is however important to remember that the aim of the NIC is to stimulate the development and deployment of technology which will reduce customers' costs compared to alternatives. In a competitive market economy, this will only occur effectively if the actors that are engaged are not only expected, but are actively encouraged to make profits. Ofgem has extolled the virtues of ISO55000 to align interests across each network company, to promote efficiency and effectiveness. We encourage a similar enlightened aim for alignment of interest, across the sector, to save customers' money through successful exploitation of innovation.

Question 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 believe that greater prominence for NIA could be productive as part of the wider collaborative innovation strategy as it would draw a clearer line of sight between different projects, demonstrating how learning is being built upon and advanced.

However, it is unclear to us from the consultation document how this increased visibility would come about. We would caution against achieving this through an increased number of dissemination events – it is already challenging to keep on top of the events taking place for the NIC projects (and the legacy LCN Fund Tier 2 projects). If an appropriate and efficient mechanism could be found for sharing learning and giving greater prominence, this would be beneficial.

In terms of ensuring that NIA is being appropriately used, again a coordinated innovation strategy could be useful here as it would allow a clear link to be established, demonstrating how the NIA project advances the aims of a particular strand of the strategy.

Question 4: Do you have any comments on any of our other proposals?

We do not have any further comments.

We hope our comments assist. Given our unique position in bidding and delivering such projects, we would be delighted to discuss any of these points in more detail if that would be helpful and look forward to seeing the outcomes of the consultation process.

Yours sincerely,



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