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5 February 2016

Dear Neil,

Consultation on reviewing the benefits of the Low Carbon Networks Fund and the governance of the Network Innovation Competition and the Network Innovation Allowance

Thank you for the opportunity to respond to the above consultation to cover the post implementation review of Network Innovation Allowance (NIA) and Network Innovation Competition (NIC) governance and reviewing the benefits of the LCN Fund.

The regulator's support of innovation through the innovation funding mechanisms has enabled us to create and deliver a successful innovation programme through DPCR4, DPCR5 and into the first year of RIIO-ED1. In addition to our own activities, we have looked to other projects being delivered across the industry to identify where new initiatives are appropriate for roll out on our own network to deliver additional benefits to our customers here in the North West.

The financial savings for customers identified in our Well Justified Business Plan are a direct result of the Ofgem innovation funding mechanisms, both in the past and in the future, and these savings could not have been achieved without innovation funding support.

Detailed responses to the specific questions posed in the consultation are appended to this letter.

Yours sincerely,

Mr Stephen Cox

Digitally signed by Mr Stephen Cox
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Steve Cox
Head of Engineering

Annex 1 Specific answers to the consultation questions

Below are our specific answers to the questions raised in the consultation.

Question 1: Should we change the NIC and NIA criteria? If so how and why?

We believe the criteria for evaluating proposed projects within both NIC and NIA is fundamentally sound. These innovation funding mechanisms provide the opportunity to investigate a range of innovation project types and differing risk profiles; for example researching higher risk but potentially higher reward techniques such as CLASS[1].

The NIA governance arrangements allow and support a broad range of innovations relevant to improving the operations and efficiency of the energy networks. We don't propose changes to the evaluation criteria as NIA allows for research projects, beginning at TRL 2, to go-ahead as long as we demonstrate that learning can be developed and shared with network licensees; that there are potential financial benefits to customers; and that the project does not duplicate work already being undertaken elsewhere.

NIA is complemented by the NIC governance arrangements which increases the lowest TRL supported by this mechanism to TRL 4 and, through the evaluation criteria (shown below), achieves a different focus from NIA.

a) Accelerates the development of a low carbon energy sector and/or delivers environmental benefits while having the potential to deliver net financial benefits to existing and/or future network customers,

b) Delivers value for money for electricity customers,

c) Creates knowledge that can be shared across energy networks in Great Britain (GB) or create opportunities for roll-out across a significant proportion of GB networks,

d) Is innovative (ie not business as usual) and has an unproven business case where the innovation risk warrants a limited Development or Demonstration Project to demonstrate its effectiveness.

Of the four evaluation criteria, we would not propose any changes to criteria b) to d). However, criterion a) as drafted makes projects for the development and demonstration of techniques and/ or products that may have a customer service or operating efficiency focus more problematic to pursue. In addition to this constraint, the criterion also stipulates that the project financial benefits must flow to distribution network customers.

In complex and wide ranging energy systems projects, where the benefits are shared more widely, this may prevent a successful funding application for a project with high potential to deliver real transformation. Whilst some work has been done in this area, we would consider it appropriate to revisit this particular aspect of funding governance as all energy sector costs can ultimately flow to customers in a properly structured market. We believe such a review is particularly timely given the findings of work such as the future power system architect which points towards much more integrated transmission and distribution operation potentially incorporating generation, storage and demand.

Question 2: Should we give more of an indication of where we consider innovation is required or is that inappropriate?

The IFI, LCN Fund, NIA and NIC projects funded to date have investigated a broad range of solutions to the challenges network operators need to address. Network operators, with the assistance of manufacturers, the supply chain and academia are adapting their networks to accommodate changing customer requirements and new low carbon technologies, including generation that will be connected to it. This has been the result of giving the energy industry

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[1] The CLASS project, funded under the Second Tier of LCN Fund, has shown it is possible to deliver a demand response by voltage regulation and it can be utilised by National Grid for system balancing. Further information on the CLASS project is available at www.enwl.co.uk/class.

freedom to select those opportunities that are likely to best address the challenges faced by network operators.

Ofgem may wish to take the opportunity under this review to clarify where they consider innovation is required. However, care should be taken to ensure that this doesn't result in narrowing the focus for potential research, development or demonstration. To obtain the maximum value for customers from innovation we should not unduly constrain its scope.

Question 3: Should the focus of the NIC and NIA be broader and cover the broader energy system?

As stated above the NIA and NIC governance arrangements are fundamentally sound and there is sufficient flexibility within the evaluation criteria to either marry gas and electricity funding mechanisms for a collaborative energy systems project or to supplement external funding with the Ofgem innovation funding. Our only concern raised above in our answer to question 1 is the constraint that the net benefit must flow directly back to distribution network customers. This is arguably an artificial boundary as all end customers benefit from network and supply chain efficiencies.

Question 4: Can we improve the process for deciding on which projects to approve and if so how?

We believe the NIC evaluation process is robust and impartial, but there are a few minor improvements that could be initiated that would make the process more transparent enabling all parties to efficiently manage their involvement in the process. The knowledge and expertise of the Ofgem appointed Expert Panel is evident throughout the evaluation process and in particular the bilateral sessions. To ensure complete transparency of independence of the Expert Panel we would welcome early sight of information on potential conflicts of interest registered by an Expert Panel member or their consultants in each competitive bidding round.

The ISP provides Ofgem with early sight of proposed projects and the opportunity to confirm compliance with the eligibility criteria and to identify projects with similar objectives that could be achieved through a joint submission. Ofgem may wish to reconsider whether the ISP in the current form is achieving its stated outcomes. We note that Ofgem extends an invitation to bidders to discuss their proposed projects on a face to face basis; if this were formalised, this could, if Ofgem wished, replace the ISP stage.

The NIC governance document clearly defines the high level evaluation process and bid teams are notified of the submission deadline dates in good time. However, earlier notification of dates such as bilateral presentation meetings and clarity about when the Q&A process starts would be beneficial. This will greatly assist in the efficient management of resources and securing the time of those needed for these activities.

Question 5: How can we improve participation in the NIC?

We have observed over the lives of the innovation mechanisms that there has been varying appetites across the network licensee community for involvement in the competitive bids processes.

Table 1 below shows the analysis of the participation levels in the competitive Second Tier LCN Fund annual process, where it is clear that there was a decline in the number of DNOs developing and submitting proposals.

Table 1: Review of LCN Fund submissions during DPCR5

	2010/11	2011/12	2012/13	2013/14	2014/15
Second Tier LCN Fund, total available, £m	£64	£64	£64	£64	£64
Second Tier LCN Fund, total awarded, £m	£61.70	£56.91	£45.50	£26.50	£21.92
Utilisation of available LCN Funds	96%	89%	71%	41%	34%
No of projects submitted	11	6	7	7	4
No of projects awarded funding	4	6	5	4	4

This is also reflected in the competitive NIC process and we note the equivalent DNO interest in this year's NIC remained static with the last year of LCN Fund at four submissions. More noticeable is the low involvement of other eligible network licensees in the schemes; to date there has only been one OFTO and no IDNO bid submissions for innovation funding.

We note that the qualification criteria issues described above may also act to limit participation as pure network benefit driven projects will by definition be finite. More encompassing projects offer greater opportunity for innovation and hence value for customers. For example non load areas have a dominant impact on customer prices.

Table 2: Review of NIC submission across RIIO - GD1, T1 and ED1

	2013/14	2014/15	2015/16
NIC, total available, £m	£30	£30	£90
NIC, total awarded, £m	£17.8	£18.7	£44.70
Utilisation of available NIC funds	59%	62%	50%
No of projects submitted	3	4	7
No of projects awarded funding	2	3	5
Success rate of awarded to submitted projects	67%	75%	71%

It may be useful, as part of this review, to understand what the perceived barriers to participation are amongst these licence holders before legislation is amended to allow non licensees to participate. We are supportive of facilitating non licensees entering the competitive bidding process as we recognise new parties can bring fresh ideas and a different perspective, but is important that suitable safeguards are put in place to ensure customers' money is protected at all times and is spent wisely for the long term benefit of customers. The partnership approaches adopted by EA Technology and SSEPN in the My Electric Avenue and Siemens and WPD in the Telecoms Templates for a Low Carbon Future projects suggest it is possible for non licensees to enter the competitive bidding process whilst protecting customers' money.

Question 6: Please comment on your experiences if you have worked with licensees when implementing NIC and NIA projects or when transferring innovation into business as usual.

It is more appropriate for our project partners, stakeholders and other organisations to respond to the question.

Question 7: Are there any other issues we and the independent evaluator should consider as part of the review?

The review must include analysis of the potential savings for customers obtainable from the rollout of the innovative technologies and/ or techniques. But as many of the Second Tier LCN Fund projects are yet to finish and those that have finished the innovations are yet to gain traction for adoption, care needs to be taken on how the potential savings are calculated. The evaluator must present credible results otherwise the reputation of the innovation mechanisms will be lost if the net benefits to customers is either undersold or oversold.

Question 8: To what extent do you consider that the LCN Fund has succeeded?

Prior to the introduction of innovation funding within the regulatory framework all innovation investment was only in low risk almost certain reward technologies and hence benefits to customers were small in scale and slow to be developed. This fitted with the perception of network licensees as low risk for investors who were reticent to fund speculative innovation.

IFI and LCN Fund, through both the First Tier and the Second Tier, has stimulated innovation across the industry, which, in turn, has encouraged greater investment within R&D across the manufacturing supply chain and delivered financial savings to customers. In our Well Justified Business Plan for RIIO-ED1 we clearly identify £129 million of direct cost savings to customers through learning from our own innovation projects and disseminated learning from other’s innovation projects; and we estimated savings in excess of £180 million in ED2.

This is a real success story for customers and justifies the bold approach adopted by Ofgem in promoting innovation and incentivising network licensees to participate. The embedding of innovation in the regulatory framework benefits customers as the price control process enables Ofgem to benchmark and capture innovation savings for all customers going forward, whilst at the same time driving innovation learning across the network licensees. Alongside this customer benefit we have seen a shift in perception of innovation projects as the success of our innovation programme has stimulated discussions on whether additional investor funds should channeled into funding innovation projects.

Question 9: To what extent do we need to continue incentivising innovation by DNOs?

We hope to see Ofgem continue the support for funding innovation as our appetite to use our NIA allowance and compete for NIC funds to deliver value to our customers remains high. The innovation funding mechanisms give us the opportunity to trial new techniques and products across all areas of business for the benefits of our customers. As a single licensee the low NIA funding allowance acts as a brake to delivering a broad innovation programme and so we have sought innovation funding from the competitive funding mechanisms to deliver larger projects, covering both technical and commercial innovations. Our preference is the funding level remains static and is opened up to third parties, working in collaboration with a network licensee to support wider project scopes and increased participants.

Question 10: Are there any other issues we need to consider as part of the LCN Fund benefits review?

We believe that the various innovation funding mechanisms, including the LCN Fund, have stimulated innovation and the price control process has released savings to customers from these innovation projects; and there should be more to come as new projects start and finish and the network licensees deploy the successful learning into business as usual. But as not all innovation learning is adopted it is unknown whether deployment obstacles exist that are either delaying or stopping wide scale adoption of the learning. So we suggest the review should consider the obstacles to adoption, including how to remove them. This will naturally include consideration of whether the deployment stimulus, the Innovation Rollout Mechanism, is aiding or frustrating the use of the innovation learning into business as usual.

It is possible that IPR rules around innovation funding has acted as a barrier to obtaining independent external funding for innovation projects. Whilst NIC and its predecessors such as Second Tier LCN Fund has secured considerable contributions from third parties ie manufacturers into research projects, the external funding could have been larger and hence the benefits to customers greater had there been a more flexible IPR regime. It is important that customers obtain appropriate benefits for their funding contribution and we would see that governance revisions to allow bodies such as the NIC Expert Panel latitude to agree those IPR arrangements most appropriate to specific projects as being of significant benefit.

We are committed to continuing the progress made with innovation activities and define a rolling programme of projects to be delivered with use of NIA and NIC funding. This has highlighted that there is an opportunity to open a discussion regarding the “use it in year” requirement of this funding mechanism versus NIA projects that span multiple years. Therefore, we would welcome a review of the governance arrangements in respect of this constraint which enables the use of the total amount of allowed NIA funding to be accessed potentially through a carry forward mechanism for unspent funds across years, like IFI.