



Electricity distribution network operators (DNOs), independent distribution network operators, distributed generators, electricity suppliers and other interested parties

Promoting choice and value for all customers

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Dear Colleague,

Decision on the Low Carbon Networks Fund Two Year Review

The Low Carbon Networks Fund

The challenges presented by the transition to a low carbon economy will directly impact distribution networks. To meet these challenges in a timely and cost effective way DNOs will need to innovate in the way they design, build and operate their networks. Therefore as part of Distribution Price Control Review 5 (DPCR5) we created a £500 million Low Carbon Network (LCN) Fund to encourage the DNOs to use the period to 31 March 2015 to try out new technologies, operating practices and commercial arrangements. The learning from these trials and demonstration projects will help DNOs understand how they can play their role in the transition to a low carbon economy whilst maintaining security of supply and providing value for customers. You can find more information on the design and process of the LCN Fund in the LCN Fund Governance Document¹ (the Governance Document).

Summary

This letter contains our decision on the review of the LCN Fund following two years of operation. The DPCR5 final proposals said that we would undertake this review to assess whether the design of the LCN Fund was delivering its intended objectives². We launched the review on 11 December 2011 with a consultation that set out a number of potential areas for refinement but did not consider any fundamental changes to the fund³. We considered the LCN Fund has worked well to date and has successfully incentivised DNOs to undertake a range of innovative projects. We asked for views on how it could be further improved.

We are pleased to note that respondents to our open letter consultation⁴ supported our views and emphasised the role the LCN Fund has played in stimulating innovation. Consequently, rather than a wholesale reform, we have decided to implement a number of refinements through changes to the Governance Document and submission materials. These changes will allow the LCN Fund to provide better value for money to current and future customers. These changes will be incorporated into the next version of the LCN Fund Governance Document (v.5) which we will seek to publish in April. These changes are:

¹ [Low Carbon Networks Fund Governance Document v.4](#)

² [Electricity Distribution Price Control Review Final Proposals – Incentives and Obligations](#)

³ [Low Carbon Networks \(LCN\) Fund: Two year review](#)

⁴ A summary of responses is available at annex 1

- A greater emphasis on DNOs to demonstrate their approach to collaboration;
- A new approach to the cost benefit analysis of projects;
- The opportunity for DNOs to make limited changes to their submissions during the evaluation process;
- Changes to the structure of evaluation criteria to remove duplication;
- Additional elements in evaluation criteria, including value for money.

These changes will only affect future projects. They will not impact on projects that have already been awarded funding. We will also look to incorporate these changes into the development of the Network Innovation Competition (NIC)⁵ where relevant. The following sets out our decision based on responses to the consultation, wider stakeholder feedback and lessons learnt from the first two years of the process.

Evaluation criteria and duplication

We asked whether or not the LCN Fund evaluation criteria has driven certain types of projects at the expense of others or led to unnecessary duplication. Respondents generally considered that there were no significant learning gaps but some areas might be lacking, including commercial innovation. We do not intend to make any changes to focus the direction of projects at this stage but may revisit the criteria in future years if we see evidence of gaps.

Respondents said that there had not been unnecessary duplication and that, in fact, some duplication is often desirable for capacity building and adapting learning to specific circumstances. However, we consider that it is important for new projects to build on previous projects. Therefore we will expect DNOs to outline how their project builds on the relevant learning emerging from existing projects.

More specifically, we asked whether the degree of network monitoring that we are seeing across First and Second Tier projects was a concern. Respondents said that the degree of monitoring is not duplication as it is an essential part of most projects, but some noted that it may be useful to develop a set of common standards for monitoring. We will explore this as part of our ongoing work on dissemination of learning.

Learning

Our December open letter asked what we can do ensure that industry can maximise value from the learning which is emerging from projects. Second tier projects are now generating learning that will help DNOs understand their role in facilitating a low carbon economy, including the impact of low carbon technologies and the role of demand response. Respondents commented that a more structured dissemination strategy may be required in order for this learning to reach all interested parties. We consider the successful dissemination of learning across industry to be a crucial aspect of the LCN Fund. Therefore we will consider what more can be done to further facilitate the dissemination of learning across industry this year. We are aware of the role that groups such as the Energy Networks Association (ENA) and Smart Grids Forum could play in disseminating learning. One of the key roles of the Smart Grids Forum is to facilitate the exchange of information and knowledge. Part of their work over the next year will focus on the management, curatorship and dissemination of smart grid information and knowledge. This will include how to get the most out of the learning from LCN Fund projects.

We also asked how we can gain better clarity on the learning outcomes of larger, more complex projects. Respondents put forward a number of proposals, including being more specific in setting out learning outcomes in submissions and breaking down larger projects

⁵ We will introduce the NIC as part of the RIIIO-T1 and GD1 price controls. These are annual competitions for electricity and gas, where network companies compete for funding for research, development and trialling for new technology, operating and commercial arrangements. More information on the NIC is available on the Ofgem website.

into smaller elements in multiple phases. We will consider ways to amend the full submission pro-forma to present the expected learning with more clarity.

Collaboration

A key element of the LCN Fund is collaboration between parties. We asked for respondents' views regarding the website and portal⁶ overseen by the ENA and other means of facilitating collaboration. A number of respondents noted that they have successfully made direct approaches to DNOs. However, through broader stakeholder engagement some organisations expressed concerns that they have faced difficulties in finding DNOs to support their proposals for LCN Fund projects. A number of respondents commented that the existing collaboration portal was not widely used. One reason for this was that organisations were not willing to post their innovative ideas on a public forum.

We emphasise our expectation that DNOs should work collaboratively to maintain and update the collaboration portal, taking into account public consultation with all relevant stakeholders. We will closely monitor the evolution of the portal, both for the LCN Fund and for the NIC.

We will also make changes to the Full Submission evaluation criteria to assess the systems and processes used to identify potential collaborators for Second Tier projects. This will include:

- how DNOs have made interested parties aware of the LCN Fund and the collaboration portal;
- how DNOs have actively sought out ideas for projects; and
- the processes DNOs go through to decide which of the available ideas they take forward as Second Tier projects.

As this is an important issue, we may strengthen these requirements for the fourth year's competition. This could be in the form of additional criteria at the initial screening process (ISP) that will require DNOs to demonstrate they have in place effective systems and processes for identifying project ideas and partners. Any such requirement would take into account the experience from full submission in this year's competition.

In addition, we may also require DNOs to publish on the portal or their own websites who in their organisation is the key contact for innovative ideas and the timeframes for when they will be considering ideas to take forward into First or Second Tier projects.

Cost benefit analysis

We set out in our December open letter that, without detailed guidance, the quantification of carbon benefits has proven to be subjective and of limited use in the evaluation process. We sought views on how we could design guidance on carbon benefit analysis so as to be able to compare a range of different projects. Respondents agreed that the carbon benefits of innovation projects are difficult to quantify. A number of respondents said that, due to this difficulty, analysis of carbon benefits in submissions should be qualitative and indicative. One respondent suggested that we should look at how the project enables low carbon technologies rather than the carbon that it abates.

We consider that these proposals have merit and we will not be asking for exact quantification of carbon benefits, either in financial terms or tonnes of carbon abated. However, we do consider that providing a quantitative indication of a project's carbon benefits is a useful tool for evaluation. We consider we can achieve this by looking at how LCN Fund projects are reducing barriers to the connection of low carbon technologies. We intend to look at this in two ways:

⁶ <http://www.ena-eng.org/lcn/Home.aspx>

1. Projects can help connection of low carbon technologies by reducing the costs of connection. Therefore we will retain the existing requirement for DNOs to provide an estimate of how the project method reduces the costs of creating capacity compared to conventional methods.
2. Projects can help connection of low carbon technologies by providing capacity more quickly than through conventional methods. We will require DNOs to provide an estimation of how much capacity their project method will release and how much more quickly this will be released than with conventional methods.

We note that the need for any reinforcement, even if at a lower cost, could act as a barrier to the deployment of renewable technology. To reflect this, we will also ask DNOs to provide a qualitative description of the type and scope of the conventional reinforcement avoided by the method, and how much of a barrier this reinforcement usually is to the take up of low carbon technology. The quantification of carbon benefits is just one part of the evaluation under this criterion. DNOs will also be able to provide a wider, more holistic and qualitative description of how the project facilitates the move to a low carbon economy.

We note that the two elements detailed above currently take account of two separate Full Submission evaluation criteria – ‘accelerates the development of a low carbon energy sector’ and ‘has the potential to deliver net benefits to existing and/or future customers’. We have therefore decided to merge these two separate evaluation criteria.

The NIC will also evaluate wider environmental benefits. This poses an additional challenge to quantifying benefits. We will consider the suitability of the above approach in the development of the NIC governance framework over the next year.

Process

We want the second tier LCN Fund competition and first tier registration to be as efficient as possible so we asked in our open letter if there were any improvements we could make to these processes. We are pleased to note that respondents felt the second tier competition had run more smoothly in the second year than the first. Some respondents suggested there may be advantages in bringing forward the Initial Screening Process (ISP). We will not be able to issue the next version of the LCN Fund Governance Document until mid April. This means that we are unable to move the ISP submission to before this date for this year’s competition. We will continue to look at the issue and may consider changes to timing of ISP for the fourth year’s competition. We will also consider this issue in developing the NIC arrangements.

Resubmission

In our December open letter we flagged that in last year’s second tier competition we had allowed a small window in the evaluation process for DNOs to resubmit their projects with any changes. We considered that this provided some material benefits for customers both in terms of the quality and value for money of projects. We asked respondents how we might formalise this step without undermining the competitive nature of the process.

Respondents agreed that this extra stage could improve the quality of projects and were supportive of formalising it within the governance arrangements. However, they did express concern over projects being overly influenced by comments raised by the Expert Panel. We consider that such a stage should be brought within the formal governance arrangements in order for the process to remain transparent. Therefore we will create a small window for DNOs to make minor changes to their proposals based on the implicit feedback they receive in the Expert Panel meetings or from the reports prepared by the technical consultants. This feedback is not a new step in itself as DNOs already receive this through the questions posed by the Expert Panel. These questions are usually centred on areas of a project which the Expert Panel is less certain about.

Discretion will rest solely with the DNO on how to use the opportunity to resubmit and the Expert Panel will not make any explicit request for DNOs to amend their projects. DNOs will be under no obligation to take feedback into account and responding to feedback should not create an expectation of the project receiving funding⁷. Some respondents felt that a significant amount of time may be required to unpick elements of complex projects, but we would not expect material changes to the projects at this stage. Therefore we do not intend to allow any more than two to three weeks for this step.

Lessons Learnt

We intend to make a number of further changes to the LCN Fund based on our experience of running the second tier competition and monitoring existing projects. Firstly, we note that elements of some projects are highly dependent on the take up of certain low carbon technologies and have faced some difficulty in recruiting sufficient customers for some trials. Given that there is uncertainty over the future take up of low carbon technologies, we will be asking DNOs to set out:

- their mitigations against the risk of low take up; and
- how the project will add value to distribution companies in the event that the take-up of low carbon technologies is lower than anticipated.

Finally, we will introduce explicit evaluation of how individual project components have been sourced or procured in order to provide value for money to customers. We will require DNOs to set out the processes they have in place and steps taken to maximise this value. We expect that DNOs will set out where they will be undertaking open, competitive procurement processes for the technology or services being used in their project. We consider that this will also help reduce barriers to parties looking to provide services to projects.

Transition to the NIC

In our open letter we noted that elements of the LCN Fund will overlap with the RIIO-ED1 period. Respondents were keen that we carry over all of the DPCR5 commitments. We launched RIIO-ED1 on 6 February. We are aware of issues associated with the governance of ongoing projects and raising any necessary funding. We will establish the final arrangements to resolve these transition issues as part of the RIIO-ED1 process.

Next steps

We will make a number of changes to the Governance Document to implement the policy set out in this letter. We will issue a notice of the next version (version 5) of the Governance Document, which will include these changes, in March, to take effect in April. This will govern the third annual second tier funding competition and first tier projects from this point forward. **The ISP deadline is 19 April 2012, and the full submission deadline is 17 August 2012.**

If you would like to discuss any of the issues raised in this letter, please contact Sam Williams (sam.williams@ofgem.gov.uk or 020 7901 0532).

Yours faithfully,

Dora Guzeleva
Head of Networks Policy: Local Grids

⁷ The final decision on funding rests with the Gas and Electricity Markets Authority. Whilst they act on the recommendation of the Expert Panel, they are not bound by it and therefore may take a different view on any issues addressed in a resubmission.

Appendix 1: Summary of responses

1. Do respondents consider that the evaluation criteria have driven certain types of projects at the expense of other learning outcomes? If so, what are these learning outcomes and do they need to be specifically stimulated?

Respondents generally consider that evaluation has not unduly influenced project types. The evaluation criteria are broad enough to encompass a wider range of solutions with a breadth of learning outcomes. Some respondents identified tendencies towards consumer and IT related projects, and limited commercial innovation. However, most respondents thought that this was not necessarily linked to the evaluation criteria.

2. Do the evaluation criteria ensure that the LCN fund is compatible with future developments in smart grids?

Respondents noted the importance of maintaining a link with smart grid developments. One suggested that we could include a requirement of how projects fit into a long-term strategic roadmap to smart grids. Others suggested that the criteria are too network focussed, and did not look at off grid elements, security and customer engagement. A respondent highlighted that the link to the low carbon transition would create this link.

3. We welcome your views and experiences on how we can enhance the requirements on learning dissemination for LCN Fund projects to ensure that industry gets the best value from them.

Respondents consider that a more structured strategy for the dissemination of learning is required. Suggestions included a central online register to gather information, structuring results to ensure they complement each other and creating dissemination forums under the ENA/SGF, share reports, closedown reports, successful conference, discretionary reward, internal/cultural change and dissemination.

4. We welcome respondents' views on the level of duplication across first and second tier LCN Fund projects and what changes, if any, we should make to the LCN Fund governance to address this duplication.

Respondents did not consider that there had been any unnecessary duplication. They pointed out that duplication is often necessary and desirable. It provides the opportunity to adapt technologies to different types of network, geographical and social areas and provides a more diverse mix of ideas and innovation.

5. We welcome views on whether there is merit in each DNO undertaking its own monitoring or whether this could be avoided if all monitoring data was held in a single place and accessible to all DNOs.

Respondents said that monitoring is a necessary part of most projects so it is not a concern. However, they pointed out that data could be used more efficiently. Suggestions included building a monitoring database and developing a common standard for monitoring. Other respondents suggested that this could be unnecessary and costly, and potentially stifle innovation.

6. Given their wider scope, how can we best gain greater up front clarity in submissions on the learning outcomes of the larger, more complex projects?

Respondents said that it is important to clearly articulate the context and learning outcomes of larger projects, as well as setting out the questions the trials aim to answer & learning outcomes. Some DNOs suggested breaking down larger projects into multiple

phases or parts. Respondents also said that it is important to recognise the value of unanticipated learning; not to stifle it by being too prescriptive up front.

7. We would be interested to hear your views on your experiences of this website and other means of facilitating collaboration.

Some respondents highlighted that DNOs can be receptive to direct contact, for example through conferences, trade missions and direct correspondence. They also suggested that, due to the competitive nature of the fund, the DNO collaboration portal isn't really used. Respondents suggested that the Energy Innovation Centre, academic and commercial partners, the annual conference and consultants can facilitate collaboration.

8. How should we design the form and content of guidance on carbon benefits so that they are comparable across projects?

Respondents considered carbon benefits difficult to quantify, particularly for innovative projects. Most parties supported the use of indicative, qualitative analysis to demonstrate the potential carbon benefits of a project. One respondent also suggested we focus on how projects enable low carbon technology rather than concentrate on actual carbon abatement.

9. How can we improve the LCN fund first and second tier processes?

DNOs considered the second year process to be much improved, particularly due to the greater interaction with panel and consultants. Some respondents suggested different timings, for example earlier ISP and Full Submission, and others suggested different processes for different scales of project.

10. How could we implement an additional stage to allow DNOs to amend submissions in response to comments from the Expert Panel or technical consultants without undermining the competitive nature of the process?

Respondents said that the opportunity to make minor changes to submissions could improve the value for money for projects. They had concerns that big projects can be difficult to unpick and making larger changes could be difficult. There was also a concern that such a stage could give the Expert Panel too much responsibility for steering the direction of projects. Finally, there was a suggestion to provide feedback at the ISP stage.

11. We welcome your views on the suggested timings and whether or not the delay between project submissions and potential discretionary funding dampens the incentive.

Respondents did not have any concerns over discretionary funding. One party pointed out that there is an existing incentive on the supply chain to complete projects so they can get products in to commercial use.

12. We would appreciate views on the easiest way to ensure a smooth transition from the LCN Fund to the new price control, whilst fulfilling the commitments we made on the LCN Fund in DPCR5 Final Proposals.

Parties did not identify any issues in fulfilling the commitments of the LCN fund.