

Promoting choice and value for all gas and electricity customers

Electricity distribution network operators (DNOs) and other interested parties

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#### Low Carbon Networks Fund - electricity demand

Shifting or reducing electricity demand could provide Distribution Network Operators (DNOs) with a way to reduce peak loads and avoid the need for network reinforcement. This letter consults on amending the Low Carbon Networks (LCN) Fund governance to allow DNOs to trial such measures through LCN Fund projects. These projects could provide valuable learning to DNOs on how they can adapt to the needs of a low carbon economy.

Please send any comments you have on the questions raised in this letter to <a href="mailto:lcnfund@ofgem.gov.uk">lcnfund@ofgem.gov.uk</a> by 1 February 2013.

## Background

As part of the Electricity Distribution Price Control (DPCR5) Final Proposals  $^1$  we established the £500 million LCN Fund to encourage DNOs to use the DPCR5 period (1 April 2010 to 31 March 2015) to try out new technology and operating and commercial arrangements. The objective of these trials is to help all DNOs understand how they can provide security of supply at value for money as Great Britain moves to a low carbon economy. The LCN Fund is made up of two tiers. The first tier provides funding for small scale projects. The second tier provides funding for a smaller number of flagship projects. We award projects funding in the second tier through an annual competition.

#### **Electricity demand**

In August 2012, the Smart Grid Forum produced a report identifying regulatory and commercial barriers to the implementation of smart grids<sup>1</sup>. This report highlighted that measures that focus on reducing or shifting the electrical demand of commercial and domestic customers, such as energy saving light bulbs and insulation, could reduce the peak loads that DNOs experience on their networks. Reducing peak loads in this way could potentially avoid the need for reinforcement of the distribution network.

Projects that explore the implementation and effectiveness of electricity demand reduction or shifting measures in this way could provide valuable learning to DNOs on their role in supporting the development of a low carbon economy. We consider that DNOs should be able to trial such arrangements through the LCN Fund.

However, some DNOs have suggested that some projects that trial electricity demand reduction or shifting for distribution purposes may not qualify for funding under the first or second tiers of the LCN Fund.

<sup>&</sup>lt;sup>1</sup> Work stream 6 report August 2012

In order to be eligible for funding under the second tier, DNOs must demonstrate that they are trialling solutions that cause a directly measurable change in the operation of the distribution system in a controllable way. The potentially passive nature of electricity demand or shifting measures means they may not be necessarily controllable. Therefore some projects investigating electricity demand reduction or shifting may not be eligible for the second tier LCN Fund.

Further, expenditure on equipment for the smaller First Tier projects must be on equipment connected to and forming part of the existing distribution system. Electricity demand reduction or shifting measures are usually installed on customers' premises so would be unlikely to form part of the distribution system. Therefore projects investigating electricity demand or shifting may not be eligible for the first tier of the LCN Fund.

We consider that using electricity demand reduction or shifting measures could provide benefits to distribution customers. Therefore we propose to amend the LCN Fund governance to allow DNOs to trial them. We have included proposed drafting for the change in annex 1 to this letter. Any projects involving shifting or reducing electricity demand would still need to demonstrate that they meet all other LCN Fund criteria and requirements.

#### Questions

- 1. Do you agree that trialling electricity demand reduction or shifting through the LCN Fund could provide DNOs with valuable learning on their role in supporting the development of a low carbon economy?
- 2. Does the drafting proposed in annex 1 facilitate the trialling of electricity demand reduction or shifting through the LCN Fund?

We would appreciate responses to these two questions. The drafting in annex 1 should be read in the context of version 5 the LCN Fund Governance Document (the governance document)<sup>2</sup>. Please send any responses to <a href="mailto:lcnfund@ofgem.gov.uk">lcnfund@ofgem.gov.uk</a> by 1 February 2013.

## **Next steps**

If you would like to discuss any of the issues raised in this letter, please contact Sam Williams by email at sam.williams@ofgem.gov.uk or by phone on 0207 901 0532.

We intend to include this change in the next version of the governance document if, following consideration of responses, we consider that it could provide benefits to customers. We intend to consult on any changes to the governance document early next year, ahead of next year's second tier competition.

Yours faithfully,

Dora Guzeleva

**Head of Networks Policy: Local Grids** 

<sup>&</sup>lt;sup>2</sup> Low Carbon Networks (LCN) Fund Governance Document v5

## Annex 1: Proposed changes to the governance document

# **SECTION ONE – First Tier Funding Mechanism**

- 3.10. Eligible First Tier Project Expenditure is expenditure on a First Tier LCN Project that is directly related to the distribution of electricity through a licensee's Distribution System, including the purchase of ancillary services that facilitate the distribution of electricity, subject to the restrictions set out in the rest of this governance document.
- **1.** If the expenditure relates to equipment (including control and communications systems and software) then:
  - It must be incurred in relation to the procurement, installation, operation, maintenance and decommissioning of equipment (including control and communications systems and software) owned solely by or licensed to a DNO,
  - It must be connected to and form part of the existing Distribution System assets owned or licensed to and operated by a DNO.
  - Equipment (including control and communications systems and software) that is
    installed and owned by or licensed to a DNO solely for the purpose of gathering and
    analyzing data or sending or receiving control signals to assist in the control of the
    Distribution System will be deemed to be connected to and form part of the
    Distribution System where such equipment has a communications path to the
    Distribution System or analyzes data gathered from the Distribution System.
  - Equipment that is funded through the LCN Fund for the purpose of reducing or shifting the electrical demand of commercial or domestic customers will be deemed be connected to and form part of the Distribution System if it is being used to test the impact of electricity demand reduction on the Distribution System.
  - It must not be related to the procurement, installation, operation and decommissioning of any device on any customer's premises that measures the consumption of electrical energy and provides such measurement data to a licensed electricity supplier.

## **SECTION SIX - Definitions**

Direct Impact

Where the deployment of the Method will cause a directly related measurable change in the operation of the Distribution System in a controllable way. Where the Method involves measures that aim to reduce or shift the electrical demand of commercial or domestic customers, it is deemed to be controllable.