



Company Secretary
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*Promoting choice and value for all gas
and electricity customers*

Our Ref: SPT2001
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Date: 19 July 2010

Dear Colleague,

Decision on SP Distribution limited (SP Distribution) Low Carbon Networks (LCN) Fund Second Tier Screening Submission

In the Final Proposals of the electricity Distribution Price Control Review (DPCR5), we proposed a £500m Low Carbon Networks (LCN) Fund to encourage the DNOs to use the DPCR5 period to try out new technology, operating and commercial arrangements. The objective of these trials and demonstration projects is to help DNOs understand how they provide security of supply at value for money as Great Britain (GB) moves to a low carbon economy, and what role they could play in facilitating the low carbon and energy saving initiatives that are underway to tackle climate change

The regulation, governance, and administration of the LCN Fund are set out in the LCN Fund Governance Document¹ issued pursuant to Charge Restriction Condition 13 of the Electricity Distribution Licence. The LCN Fund Governance Document states that under the Second Tier Funding Mechanism, DNOs can submit project proposals which compete annually for funding. In order to compete for this funding, a project must first pass the Initial Screening Process (ISP). Under the ISP, DNOs must submit a summary proposal of their project (Screening Submission) which Ofgem will use to assess the project against the Eligibility Requirements set out in the LCN Fund Governance Document.

SPT2001 – Demand side management of electric storage heating

On 21 June 2010, SP Distribution submitted a Screening Submission summarising their Second Tier LCN Project entitled 'Demand side management of electric storage heating'² (the Project). The Authority has now assessed the Project against the Eligibility Requirements using the information provided in the Screening Submission. The Authority considers the Project has **met the Eligibility Requirements and has therefore passed the ISP**. The Authority's reasons are set out below.

Authority's reasons

In order to pass the ISP a Second Tier LCN Project must meet at least one of the four specific requirements set out in the LCN Fund Governance Document.

¹ Version 2 of the Governance document can be found at:
<http://www.ofgem.gov.uk/Networks/ElecDist/lcnf/Pages/lcnf.aspx> alongside the Authority's Notice of its intention to publish version 3 of the Governance document.

²The first page of SP Distribution's Screening Submission for their Project 'Demand side management of electric heating storage' can be found at:
<http://www.ofgem.gov.uk/Networks/ElecDist/lcnf/stlcnf/Documents1/SPDTier2LCNF2001summary.pdf>

A Second Tier LCN Project must involve the trailing on the Distribution System of at least one of the following:

- A specific piece of new (i.e. unproven in GB) equipment (including control and communications systems and software) that has a Direct Impact on the Distribution System,
- A novel arrangement or application of existing Distribution System equipment (including control and communications systems software),
- A novel operational practice directly related to the operation of the Distribution System, or
- A novel commercial arrangement.

The Project meets the first and third specific requirements through the deployment of a new piece of equipment (a two-way communication device installed at customers' premises) that will be used to demonstrate novel operational practices.

In addition to meeting at least one of the Specific requirements, a Second Tier LCN Project must also meet all of the criteria set out in Chapter 2 of the LCN Fund Governance Document. The Authority has considered SP Distribution's Project against all these criteria.

(a) Accelerates the development of a low carbon energy sector

The Authority notes the Project will optimise the scheduling of electric heating to demonstrate the potential for demand side management³ (DSM) and analyse the storage capability that such heating systems possess. The Authority notes the Department of Energy and Climate Change's (DECC) Low Carbon Transition Plan⁴ cites the electrification of heating as a step towards reducing the UK's carbon emissions and this Project explores how the distribution network can adapt to this development. The Authority is therefore satisfied the Project meets this criterion.

(b) Has a Direct Impact on the operation of the distribution network

The Authority notes the Project will explore the potential of demand side management (DSM) to manage loading on distribution network assets, specifically electric storage heating. The Authority considers that this will result in the control of demand in a measurable way in order to reduce the need for reinforcement of the distribution network. The Authority is therefore satisfied the Project meets this criterion.

(c) Creates new knowledge that can be shared amongst DNOs

The Authority notes the Project will provide new learning from the use of DSM alongside active engagement with customers. The Authority considers the Project will enable enhanced data collection through automated collection and logging of real-time data using the new two-way communication device. We note that new learning will be shared amongst DNOs, academia and the wider community. Consequently, the Authority is satisfied the Project meets this criterion.

(d) Has the potential to deliver net benefits to existing and/or future customers

The Authority notes the project will optimise the use of existing electric storage heating infrastructure and explore the use of the storage capability of such devices to assist the overall management of the power system. In particular, this could extend asset life times therefore reducing replacement costs to the network. Customers will benefit from this in

³ Demand side management entails actions that influence the quantity or patterns of use of energy consumed by end users, such as actions targeting reduction of peak demand during periods when energy-supply systems are constrained

⁴ http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx

the form of lower distribution use of system charges. We are therefore satisfied the Project meets this criterion.

(e) Focuses on network Solutions which are at the trialling stage and require Second Tier funding

The Project uses a new piece of technology (a two-way communication device) to replace an old radio teleswitch system (a one-way control device) to trial DSM with energy storage assets. This combination of technologies has not previously been trialled. The Authority is therefore satisfied the Project meets this criterion.

This decision constitutes notice under section 49A of the Electricity Act 1989.

If you have any questions in relation to this letter please contact Mark Askew at mark.askew@ofgem.gov.uk or on 0207 901 7022.

A handwritten signature in black ink, appearing to read 'Rachel Fletcher', is positioned above the printed name.

Rachel Fletcher

Partner, Distribution

Signed on behalf of the Authority and authorised for that purpose by the Authority