



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

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Date: 17 December 2010

Dear Company Secretary,

Project Direction ref: CN(East)/Low Carbon Hub/17-12-10

Project Direction issued to Central Networks (East) Plc ("CN East") pursuant to the LCN Fund Governance Document¹ issued pursuant to Part E of Charge Restriction Condition 13 (Low Carbon Networks Fund) ("CRC13") of the Electricity Distribution Licence setting out the terms to be followed in relation to the Low Carbon Hub project (the "Project") as a condition of it being funded under the Second Tier and Discretionary Funding Mechanism².

CRC13 establishes the arrangements, known as the Low Carbon Networks Fund ("LCN Fund"), for the purposes of incentivising the development of low carbon networks.

Part E of CRC13 requires the Gas and Electricity Markets Authority (the "Authority") to issue the LCN Fund Governance Document for the purposes of regulating, governing and administering the LCN Fund.

Part G of CRC13 defines a Project Direction as a direction issued by the Authority pursuant to the LCN Fund Governance Document setting out the terms to be followed in relation to the Eligible LCN Fund Project³ as a condition of its being funded pursuant to the Second Tier and Discretionary Funding Mechanism. A Project Direction must, by virtue of paragraph 3.64 of Section Two of the LCN Fund Governance Document:

- set out the Project-specific conditions that a distribution network operator ("DNO") is committing to in accepting Second Tier Funding⁴;
- require the DNO to undertake the Project in accordance with the commitments it has made in the Full Submission⁵. Where appropriate the Project Direction may therefore include extracts from the Full Submission; and
- set out the Approved Amount for the Project, as defined in CRC13.28, that will form part of the calculation contained in the direction issued by the Authority under CRC13.16 (the Funding Direction).

¹ http://www.ofgem.gov.uk/Networks/ElecDist/lcnf/Documents1/LCN_Fund_Governance_doc_v.3_Final_published.pdf

² Second Tier and Discretionary Funding Mechanism has the meaning given in CRC 13.3(b).

³ Eligible LCN Fund Project has the meaning given in Part G of CRC 13.

⁴ Second Tier Funding has the meaning given in CRC13.11.

⁵ Unless otherwise specified, defined terms (terms in capitals) in this Project Direction are defined in Section seven of the LCN Fund Governance Document.

CN East submitted the Project for funding under the LCN Fund on 3 September 2010 and the Authority decided to award the funding to CN East in a decision dated 29 November 2010 (the "Decision Document")⁶ subject to CN East complying with CRC 13, the LCN Fund Governance Document (as may be modified from time to time in accordance with CRC 13 and as modified and/or augmented in respect of this Project by this Project Direction) and this Project Direction. In accordance with the LCN Governance Document the Authority hereby requires CN East to comply with the conditions set out in the Schedule to this Project Direction.

The Approved Amount set out in section 5 of the Schedule is different to the amount set out in the Decision Document. This is because, following the decision, it was discovered that the spreadsheet included as part of the submission pro-forma overstated the DNOs' earnings from bank interest on the amount requested from the LCN Fund. This resulted in the funding request amounts for all projects being understated. In addition CN East had made a revision to their submission spreadsheet prior to the Authority's decision which was not reflected in the Decision Document. This also resulted in the requested amount for the Project being understated. The revised amounts do not affect the Authority's decision on who should be awarded funding.

This Project Direction is issued by the Authority, and provided CN East complies with the LCN Fund Governance Document and this Project Direction, the Project is deemed to be an Eligible LCN Fund Project, as defined in CRC13.

This Project Direction constitutes notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.



Rachel Fletcher
Partner, Distribution

Signed on behalf of the Authority and authorised for that purpose by the Authority
17 December 2010

⁶ http://www.ofgem.gov.uk/networks/elecdis/lcnf/Documents1/LCNFunddecision_Final.pdf

Schedule to Project Direction

1. TITLE

Project Direction ref: CN (East)/Low Carbon Hub/17-12-10

2. PREAMBLE

This Project Direction issued by the Gas and Electricity Markets Authority (the "Authority") to Central Networks (East) Plc (the "Implementing DNO") pursuant to the LCN Fund Governance Document issued pursuant to Part E of Charge Restriction Condition 13 (Low Carbon Networks Fund) ("CRC 13") of the Electricity Distribution Licence (the "Licence") sets out the terms to be followed in relation to the Low Carbon Hub (the "Project") as a condition of it being funded under the Second Tier and Discretionary Funding Mechanism⁷.

Unless otherwise specified, defined terms in this Project Direction are defined in section 7 of the LCN Fund Governance Document.

References to specific sections of the Implementing DNO's Full Submission in this Project Direction are, for ease of reference, made by referring to the box number in the Implementing DNO's Full Submission pro-forma.

3. COMPLIANCE

The Implementing DNO must comply with CRC13 and the LCN Fund Governance Document (as may be modified from time to time in accordance with CRC13 and as modified and/or augmented in respect of the Project by this Project Direction) and the Project Direction.

Any part of the Approved Amount that the Authority determines not to have been spent in accordance with this Project Direction (or the LCN Fund Governance Document) is deemed to be Disallowed Expenditure.

Pursuant to CRC 13.14 Disallowed Expenditure is revenue received (whether by the Implementing DNO or another DSP) under the Second Tier and Discretionary Funding Mechanism that the Authority determines not to have been spent in accordance with the provisions of the LCN Fund Governance Document or those of the relevant Project Direction.

Pursuant to paragraph 3.93 of Section Two of the LCN Fund Governance Document, Disallowed Expenditure includes any funds that must be returned if the Project is halted without Ofgem's⁸ permission, any funds that have not been spent in line with the approved Project Budget contained within the Project Direction, and any unspent funds on the completion of the Project.

4. APPROVED AMOUNT FOR THE PROJECT

The Approved Amount is £3,063k.

5. PROJECT BUDGET

The Project Budget is set out in Table 2. The Implementing DNO must not spend more than 110% of any category total (e.g. Box 6 Employment costs) without the Authority's prior consent (such consent is not to be unreasonably withheld).

⁷ Second Tier and Discretionary Funding Mechanism has the meaning given in CRC 13.3(b).

⁸ Ofgem is the offices of the Gas and Electricity Markets Authority. The terms 'Ofgem' and 'Authority' are used interchangeably in this Project Direction.

The Implementing DNO will report on expenditure against each line in the Project Budget, and explain any projected variance against each line total in excess of 5%, as part of its detailed report which will be provided at least every six months, in accordance with paragraph 3.68 of Section Two of the LCN Fund Governance Document. Ofgem will use the reported expenditure and explanation to assess whether the funding has been spent in accordance with the LCN Fund Governance Document or with this Project Direction.

For the avoidance of doubt this reporting requirement does not change or remove any obligations on the Implementing DNO with respect to reporting that are set out in the LCN Fund Governance Document.

Table 2. Project Budget

Box 6 (Employment costs)	
Project Manager	£241k
Trade Staff	£80k
Construction Project Management	£66k
Protection and Commissioning	£30k
System Design & Commercial	£27k
Communications Engineers	£3k
Box 7 (Equipment costs)	
FACTS Units	£500k
2 x 33kV Ring Main Unit	£280k
4.5 km circuit overhead line & 0.5 km underground cable	£164k
5 x unit protection schemes	£150k
Filters	£76k
Overhead line rebuilds	£75k
Optical fibres	£76k
1 x circuit breaker	£47k
Box 8 (Contractor costs)	
FACTS provider	£30k
Communications (fibre & microwave)	£210k
Legal	£80k
Box 9 (Customer and user payments)	
Box 10 (Other costs)	
IT costs – software development	£238k
Contingency	£209k
Decommissioning	£29k
Abnormal travel	£36k
Professional services	£103k

6. PROJECT IMPLEMENTATION

The Implementing DNO must undertake the Project in accordance with the commitments it has made in the Full Submission approved by the Authority pursuant to the LCN Fund Governance Document and the terms of this Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with the description set out in Box 1 (Project, Method and Solution) and Box 2 (Project description);
- (ii) provide a DNO Compulsory Contribution of £350k;
- (iii) complete the Project on or before the Project completion date of 28 February 2015; and

- (iv) disseminate the learning from the Project at least to the level described in Box 18 (Arrangements for disseminating learning).

7. REPORTING

The Implementing DNO must submit to the Authority, within two months of the date of this Project Direction, how it proposes to comply with paragraph 3.68 of Section Two of the LCN Fund Governance Document, including how it will assure us that the information in the report is accurate.

Ofgem may produce further guidance about the structure and content of the reports required by paragraph 3.68 of Section Two of the LCN Fund Governance Document.

8. COST OVERUNS

The maximum amount of Discretionary Funding that the Implementing DNO can request as additional funding for cost overruns on the Project is 5%.⁹

9. INTELLECTUAL PROPERTY RIGHTS (IPR)

In Box 19 (Arrangements for Intellectual Property Rights) the Implementing DNO has stated that the Project does conform to the default IPR arrangements set out in Chapter 2 of Section Five of the LCN Fund Governance Document and must therefore undertake the Project in accordance with the default IPR arrangements.

10. SUCCESSFUL DELIVERY REWARD CRITERIA

The Project will be judged by the Authority for the purposes of the Second Tier Successful Delivery Reward against the Successful Delivery Reward Criteria set out in Table 3¹⁰ below (that comply with paragraphs 3.17 and 3.18 of Section Two of the LCN Fund Governance Document).

Table 3. Successful Delivery Reward Criteria

Successful Delivery Reward criterion	Evidence
Host a successful workshop with Distributed Generation developers and feed learnings into the project plan.	Holding an interactive workshop by the end of 02/2011, collating feedback from attendees during the workshop sessions. A satisfaction survey will be carried out within 30 days of the event to gauge the value of the workshop to participants and identify any further follow up actions.
Development of a UK technical recommendations for: 1. Installing optical fibre on existing wood pole overhead lines; 2. Installing optical fibre on new wood pole overhead lines 3. Installing microwave or radio antennas and associated equipment within the proximity of distribution assets including the configuration of equipment for effective system protection.	A set of three comprehensive documents sent to all UK DNOs and IDNOs before 31/05/2011. These documents could form the basis of future ENA Engineering Recommendations. The technical recommendations will provide costs and designs for generic overhead line construction. Central Networks will also present lessons learnt from project management and engineering experiences associated with delivery of the three aspects. This will be carried out on a minimum of an annual basis. A final report will be included in the project

⁹ This is the amount requested by the Implementing DNO in its Full Submission.

¹⁰ These are the Successful Delivery Reward Criteria set out in the Implementing DNOs Full Submission

	closure documentation in 02/2015.
Completion of the first application of dynamic system control and operation using GE PowerOn ^{Fusion}	Evidenced through the handover of the capability to the Network Control centre. In accordance with our normal IT business processes the handover will have a documented Operational Acceptance certificate approved by the project board during the 08/2012 meeting.
<p>Determining the degree to which voltage can be controlled by installing and operating a FACTs device.</p> <p>In particular, ascertain whether the device improves quality of supply to demand customers and/or improves generator network availability.</p>	<p>Install a FACTs device, and connect to our network by 01/2014. We will operate the FACTs device under a variety of network conditions and demonstrate how generation could be used to support the system under abnormal operating conditions.</p> <p>The knowledge learnt from this element of the project will be disseminated through a technical paper. The dissemination will be supported by a site visit for interested parties to the FACTs device location. The paper and the visit will be completed by 07/2014. A final report will be included in the project closure documentation in 02/2015.</p>
Development of a stronger relationship with distributed generation developers directly impacted by the Low Carbon Hub.	A telephone survey will be conducted by an external agency before and after the project (12/2010 and 02/2015 respectively). During the project we will continuously collect and review feedback, which will be formally reviewed at the four lessons learned sessions detailed in the project plan.
The capture of sufficient information to determine the business case for operating active 33kV ring networks using innovative solutions.	Project closure documentation (02/2015) will include a cost benefit analysis for each of the techniques deployed and the combination of all aspects.
Disseminate knowledge and evaluate the potential for similar projects throughout the UK.	<p>The project closure documentation will detail the knowledge generated from the design, construction operation and commercial aspects from the Low Carbon Hub before 02/02/2015.</p> <p>The final project report will be shared with DNOs and IDNOs and interested parties along with:</p> <ul style="list-style-type: none"> • An internet presence • ENA workshops • Publications • Appropriate industry conferences • Etc.

The maximum amount of the Second Tier Successful Delivery Reward (which will not exceed the DNO Compulsory Contribution) that the Project will be eligible for is £350k.

11. BANK ACCOUNTS

The Implementing DNO has requested an exemption from the requirement in paragraph 3.66 of Section Two of the LCN Fund Governance Document to keep the funds from the Second Tier Funding for this Project in a separate bank account. The Authority has decided to grant this exemption subject to the conditions set out in this section.

The Implementing DNO must provide a financial tracking and reporting system which is functionally equivalent to a separate bank account for this Project. This means they must hold any Approved Amounts, the DNO Compulsory Contribution and all other funding from the Implementing DNO, External Collaborators and External Funders, that the Implementing DNO has identified within its Full Submission as being used to fund the Project, unless otherwise agreed by Ofgem in a memorandum account¹¹ which is capable of providing all the information that would be available from a separate bank account. This memorandum account must:

- (i) show all transactions relating to (and only to) the Project;
- (ii) be capable of supplying a real time statement (of transactions and current balance) at any time;
- (iii) accrue expenditures when a payment is authorised (and subsequently reconciled with the actual bank account);
- (iv) accrue payments from the moment the receipt is advised to the bank (and then subsequently reconciled with the actual bank account);
- (v) calculate a daily total; and
- (vi) calculate interest on the daily total according to the rules applicable to the account within which the funds are actually held.

The Implementing DNO's auditors must review the systems and processes that the Implementing DNO is proposing to use to conform to the requirements set out in this section and provide a signed statement to Ofgem that the systems and processes are fit for purpose, before the Project is initiated and any funds are spent.

The Implementing DNO's auditors must provide an annual report to Ofgem to confirm that the Implementing DNO is conforming to the requirements set out in this section.

The Implementing DNO must provide an audited schedule of all the memorandum account transactions, including interest (calculated according to subpoint (vi) above), as part of its detailed progress reports¹² to Ofgem.

The Implementing DNO is still required to comply with the remainder of paragraph 3.66 (in relation to the date on which the funds will be deposited and the requirements of use) and the rest of the LCN Fund Governance Document, and for the purposes of such compliance the requirements set out in this section are considered to comprise the Project Bank Account.

13. USE OF LOGO

The Implementing DNO and External Collaborators or partners¹³ may use the LCN Fund logo for purposes associated with the Project but not use the Ofgem or Ofgem E-Serve logos in any circumstances.

¹¹ Or equivalent unique code within their financial system, if approved as functionally equivalent by the Implementing DNO's auditors. For this direction, the term memorandum account will also refer to the equivalent unique code if the auditors approval has been obtained..

¹² The detailed report is described in Section Two, paragraph 3.68 of the LCN Fund Governance Document.

¹³ As listed in Box 23 of the Full Submission pro-forma.

14. AMENDMENT OR REVOCATION

As set out in the LCN Fund Governance Document and this Project Direction, this Project Direction may be amended or revoked under the following circumstances:

- (i) if the Implementing DNO considers that there has been a material change in circumstance that requires a change to the Project Direction, and the Authority agrees (paragraph 3.70 of Section Two of the LCN Fund Governance Document); or
- (ii) if Ofgem agrees to provide Discretionary Funding, which requires the re-issue of the Project Direction (paragraph 3.78 of Section Two of the LCN Fund Governance Document); or
- (iii) if the Implementing DNO applies for Discretionary Funding to cover a decrease in Direct Benefits and the Authority decides it would be in the best interest of customers to make changes to the Project Direction before the Discretionary Funding would be awarded (paragraph 3.77 of Section Two of the LCN Fund Governance Document).

15. HALTING OF PROJECTS

This Project Direction is subject to the provisions contained in paragraphs 3.79 to 3.83 of Section Two of the LCN Fund Governance Document relating to the halting of projects. By extension, this Project Direction is subject to any decision by the Authority to halt the Project to which this Project Direction relates and to any subsequent relevant Funding Direction issued by the Authority pursuant to CRC13.16.

In the event of the Authority deciding to halt the Project to which this Project Direction relates, the Authority may issue a statement to the Implementing DNO clarifying the effect of that halting decision as regards the status and legal force of the conditions contained in this Direction.

NOW THEREFORE:

In accordance with the powers contained in the LCN Fund Governance Document issued pursuant to Part E of CRC13 (Low Carbon Networks Fund) of the Licence the Authority hereby issues this Project Direction to the Implementing DNO in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 49A of the Act.



Rachel Fletcher
Partner, Distribution

Signed on behalf of the Authority and authorised for that purpose by the Authority
17 December 2010