

Company Secretary  
Northern Gas Networks Limited  
1100 Century Way  
Thorpe Park Business Park  
Colton, Leeds  
LS15 8TU

Direct Dial: 020 7901 1851  
Email: [dora.guzeleva@ofgem.gov.uk](mailto:dora.guzeleva@ofgem.gov.uk)

Date: 19 December 2013

Dear Company Secretary,

**Project Direction ref: NGN / Low Carbon Gas Preheating / 19 December 2013**

Northern Gas Networks (NGN) submitted the project Low Carbon Gas Preheating on 9 August 2013 to be considered for funding through the Gas Network Innovation Competition (NIC). In this year's decision<sup>1</sup>, we selected the project for funding.

We have issued this Project Direction to NGN. It contains the terms to be followed by NGN as a condition of Low Carbon Gas Preheating receiving funding through the Gas NIC. It must comply with these terms, which can be found in the schedule to this direction.

**Project direction**

Paragraph 5.66 of the Gas NIC Governance Document states that a Project Direction must:

- set out the Project-specific conditions that the Network Licensee is committing to in accepting funding;
- require the Network Licensee to undertake the Project in accordance with the commitments it has made in the Full Submission. Where appropriate, the Project Direction may therefore include extracts from the Full Submission or refer to specific sections of the Full Submission;
- set out the Approved Amount for the Project, that will form part of the calculation contained in the funding direction issued by the Authority under chapter 7 of the Governance Document;
- set out the Project budget that the Network Licensee must report against and how variances against the Project budget will be reported and approved; and
- the mechanism for the Network Licensee receiving the Approved Amount is set out in the Funding Direction.

These are described for Low Carbon Gas Preheating in the schedule to this condition.

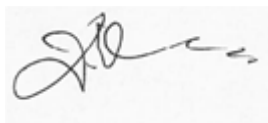
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<sup>1</sup><https://www.ofgem.gov.uk/publications-and-updates/decision-first-year-gas-network-innovation-competition>

## **Decision**

Provided NGN complies with the NIC Governance Document and the schedule to this Project Direction, Low Carbon Gas Preheating is deemed to be an Eligible NIC Project<sup>2</sup>.

This Project Direction constitutes notice pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.



**Dora Guzeleva**

Head of Networks Policy, Local Grids

**For and on behalf of the Authority**

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<sup>2</sup> Eligible NIC Project has the meaning given in definitions of the Gas Distribution licence.

## Schedule to Project Direction

### 1. TITLE

Project Direction ref: Northern Gas Networks / Low Carbon Gas Preheating / 19 December 2013

### 2. PREAMBLE

This Project Direction issued by the Gas and Electricity Markets Authority (the "Authority") to NGN (the "Funding Licensee") pursuant to the Gas NIC Governance Document issued pursuant to Part E of Special Condition 1I (Network Innovation Competition) of the Gas Distribution Licence (the "Licence") sets out the terms to be followed in relation to Low Carbon Gas Preheating (the "Project") as a condition of it being funded under the NIC and the Funding Return Mechanisms<sup>3</sup>.

Unless otherwise specified, defined terms in this Project Direction are defined in Appendix 1 of the Gas NIC Governance Document.

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

### 3. CONDITION PRECEDENT

The Funding Licensee will not access any funds from the Project Bank Account until it has signed contracts with the Project Partners named in Table 1.

**Table 1 Condition Precedent**

Proheat Systems Limited
Bruest Catalytic Heaters

### 4. COMPLIANCE

The Funding Licensee must comply with Special Condition 1I and the NIC Governance Document (as may be modified from time to time in accordance with Special Condition 1I and as modified and/or augmented in respect of the Project by this Project Direction) and the Project Direction.

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

Pursuant to Special Condition 1I Disallowed Expenditure is revenue received (whether by the Funding Licensee or another Licensee) under the NIC and Funding Return Mechanisms that the Authority determines not to have been spent in accordance with the provisions of the Gas NIC Governance Document or those of the relevant Project Direction.

Pursuant to paragraph 8.48 of the Gas NIC Governance Document, Disallowed Expenditure includes any funds that must be returned if the Project is halted without Ofgem's<sup>4</sup> permission, any funds that have not been spent in line with the approved Project Budget

<sup>3</sup> the Funding Return Mechanism is defined in part C of Special Condition 1I.

<sup>4</sup> Ofgem is the offices of the Gas and Electricity Markets Authority. The terms 'Ofgem' and 'Authority' are used interchangeably in this Project Direction.

contained within the Project Direction, and any unspent funds on the completion of the Project.

## **5. APPROVED AMOUNT FOR THE PROJECT**

The Approved Amount is £4,842,760.60

## **6. PROJECT BUDGET**

The Project Budget is set out in Annex 1. The Funding Licensee must not spend more than 110% of any category total (e.g. "Labour") in Annex 1 without the Authority's prior consent (such consent is not to be unreasonably withheld).

The Funding Licensee will report on expenditure against each line under the category total 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 8.17 of the Gas NIC Governance Document. Ofgem will use the reported expenditure and explanation to assess whether the funding has been spent in accordance with the Gas NIC Governance Document or with this Project Direction.

For the avoidance of doubt this reporting requirement does not change or remove any obligations on the Funding Licensee with respect to reporting that are set out in the Gas NIC Governance Document.

## **7. PROJECT IMPLEMENTATION**

The Funding Licensee must undertake the Project in accordance with the commitments it has made in the Full Submission approved by the Authority pursuant to the Gas NIC 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 Section 2 (Project Description);
- (ii) provide a Network Licensee Compulsory Contribution of £546,289.13
- (iii) provide a Network Licensee Extra Contribution of £868,633.67
- (iv) complete the Project on or before the Project completion date of December 2017; and
- (v) disseminate the learning from the Project at least to the level described in Section 5 (Knowledge Dissemination).

## **8. REPORTING**

Ofgem will issue guidance (as amended from time to time) about the structure and content of the reports required by paragraph 8.17 of the Gas NIC Governance Document. The Funding Licensee must follow this guidance in preparing the reports required by paragraph 8.17 of the Gas NIC Governance Document.

As required by paragraph 8.22 of the Gas NIC Governance Document, the Funding Licensee must inform the Authority promptly in writing of any event or circumstance likely to affect its ability to deliver the Project as set out in its Full Submission.

## **9. COST OVERRUNS**

The maximum amount of Discretionary Funding that the Funding Licensee can request as additional funding for cost overruns on the Project is 11.4% of the Approved Amount.<sup>5</sup>

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<sup>5</sup> This is the amount requested by the Funding Licensee in its Full Submission.

## 10. INTELLECTUAL PROPERTY RIGHTS (IPR)

In Section 5 (Knowledge Dissemination) the Funding Licensee has stated that the Project does conform to the default IPR arrangements set out in Chapter Nine of the Gas NIC Governance Document and must therefore undertake the Project in accordance with the default IPR arrangements.

## 11. SUCCESSFUL DELIVERY REWARD CRITERIA

The Project will be judged by the Authority for the purposes of the NIC Successful Delivery Reward against the Successful Delivery Reward Criteria set out in Table 3<sup>6</sup> below (that comply with paragraphs 5.26 – 5.29 of the Gas NIC Governance Document).

**Table 3. Successful Delivery Reward Criteria**

Successful Delivery Reward criterion	Evidence
<b>Preheating Site Selection</b>  Each of the 12 sites is selected based on the identified criteria to ensure that the sites represent a good sample of preheating sites and operating characteristics.	Ensuring that project results are both scalable and can be replicated across other sites and networks by March 2014. <ul style="list-style-type: none"><li>• Publication of site evaluation criteria.</li><li>• Publication of preheating site evaluation results and details of analysis undertaken.</li><li>• Publication of sites identified for inclusion in project.</li></ul>
<b>Preheating Site &amp; Technology Design</b>  Completion of the detailed designs of smart metering, HotCat and LP Steam technologies at each of the selected sites.	<ul style="list-style-type: none"><li>• Smart Metering to install alongside existing technology – June 2014</li><li>• HotCat and LP Steam Small Site Design – January 2014</li><li>• HotCat &amp; LP Steam Medium and Large Site Design - December 2014</li></ul>
<b>Technology Build &amp; Installation</b>  All hardware, including metering technology, telemetry, HotCat and LP Steam preheating assets installed and commissioned on each of the selected sites by December 2015.	<ul style="list-style-type: none"><li>• Smart metering, monitoring &amp; telemetry equipment to be installed to existing WBH &amp; BH sites – December 2014</li><li>• HotCat, smart metering, monitoring &amp; telemetry equipment installed to selected sites - December 2015</li><li>• LP Steam, smart metering, monitoring &amp; telemetry equipment installed to selected sites - December 2015</li></ul>
<b>Successful trialling and demonstration of alternative preheating technologies</b>  The knowledge, learning and understanding gathered from the trialling of the two alternative preheating technologies will be captured and shared within the project timescales.	This will include: <ul style="list-style-type: none"><li>• Designs published alongside knowledge and learning and disseminated via project website – December 2014</li><li>• Knowledge and learning associated with the installation and commissioning of alternative technologies published and shared via project website – January 2016</li><li>• Technical data relating to the operational performance of preheating technologies – ongoing to December 2017.</li><li>• Asset performance including planned and reactive maintenance requirements – ongoing to December 2017.</li></ul>
<b>Successful estimation of system efficiencies of existing preheating</b>	<ul style="list-style-type: none"><li>• System efficiency data calculated in accordance with efficiency calculation</li></ul>

<sup>6</sup> These are the Successful Delivery Reward Criteria set out in the Funding Licensees Full Submission

<p><b>technologies</b></p> <p>The system efficiency of existing technologies will be monitored continuously over the period from installation to the end of the project.</p>	<p>specified within the project (as set out in Section 2). Information to be provided 2 months post installation of smart metering and monitoring technology at each site.</p> <ul style="list-style-type: none"> <li>• System efficiency data published to the project website via a live feed and available for download – December 2015 (all sites won't be installed and commissioned until 2015 see 9.3).</li> </ul>
<p><b>Knowledge, Learning &amp; Dissemination Strategy</b></p> <p>Deliver project website, accessible by all interested parties and able to receive and publish data on system efficiency for all selected sites.</p>	<ul style="list-style-type: none"> <li>• Website Procured – March 2014</li> <li>• Website development completed to deliver reporting of system efficiencies, knowledge and learning sharing – December 2014.</li> <li>• Capability for data and information to be downloaded from website – December 2014 (for Small site builds and existing technologies)</li> <li>• Capability for data and information to be downloaded from website – December 2015 for all sites NGN participation in the Annual NIC Fund Conferences with Low Carbon Gas Preheating project information in 2014, 2015 &amp; 2016.</li> </ul>
<p><b>Project Evaluation &amp; Final Project Report</b></p> <p>Produce a detailed final report to close down the project which will include project findings, knowledge and learning generated and clear recommendations on the system efficiencies of existing and alternative technologies. The report will clearly set out recommendations on the potential for alternative technologies to provide the preheating requirements at sites of different scales of heat output and operating conditions.</p> <p>The report will also evaluate the benefit of a longer term monitoring study of sites and technologies included within project.</p>	<p>Publish final report by December 2017.</p>

The maximum amount of the NIC Successful Delivery Reward (which will not exceed the Licensee Compulsory Contribution) that the Project will be eligible for is £546,289.13

## 12. USE OF LOGO

The Funding Licensee and Project Partners, External Funders and Project Supporters<sup>7</sup> may use the NIC logo for purposes associated with the Project but not use the Ofgem or Ofgem E-Serve logos in any circumstances.

## 13. AMENDMENT OR REVOCATION

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

<sup>7</sup> As listed in Box 1.5 in Section 1 of the Full Submission pro-forma.

- (i) if the Funding Licensee considers that there has been a material change in circumstance that requires a change to the Project Direction, and the Authority agrees (paragraph 8.23 of the Gas NIC Governance Document); or
- (ii) if Ofgem agrees to provide Contingency Funding, which requires the re-issue of the Project Direction (paragraph 8.42 of the Gas NIC Governance Document); or
- (iii) if the Funding Licensee 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 8.42 of the Gas NIC Governance Document).

#### **14. HALTING OF PROJECTS**

This Project Direction is subject to the provisions contained in paragraphs 8.30 to 8.34 of the Gas NIC 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 Special Condition 1I.

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 Funding Licensee 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 Gas NIC Governance Document issued pursuant to Part E of Special Condition 1I of the Licence, the Authority hereby issues this Project Direction to the Funding Licensee in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.

## **ANNEX 1: PROJECT BUDGET**

<b>Cost Category</b>	<b>Cost</b>
<b>Labour</b>	<b>2,406,800</b>
<b>Equipment</b>	<b>3,055,000</b>
<b>Contractors</b>	<b>n/a</b>
<b>IT</b>	<b>150,000</b>
<b>IPR Costs</b>	<b>n/a</b>
<b>Travel &amp; Expenses</b>	<b>n/a</b>
<b>Payments to users</b>	<b>n/a</b>
<b>Contingency</b>	<b>719,725</b>
<b>Decommissioning</b>	<b>n/a</b>
<b>Other</b>	<b>n/a</b>
<b>Total</b>	<b>6,331,525</b>