

Company Secretary
Northern Gas Networks
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Date: 18 December 2019

Dear Company Secretary,

Project Direction ref: NGN / H21 Phase 2 / 18 December 2019¹

Northern Gas Networks (NGN) submitted to Ofgem the project H21 Phase 2 (the Project) in July 2019 to be considered for funding through the Gas Network Innovation Competition (NIC). In the 2019 NIC decision², we selected the Project³ for conditional funding.

NGN must comply with the terms contained in this Project Direction as a condition of the Project receiving funding through the Gas NIC. These terms can be found in the Schedule to this Project Direction.

Project direction

Chapter 5 of the Gas NIC Governance Document⁴ states that a Project Direction will:

- set out the Project-specific conditions that the Network Licensee (which for this project is NGN) is committing to in accepting funding;

¹ This Project Direction constitutes notice pursuant to section 38A (Reasons for decisions) of the Gas Act 1986.

² <https://www.ofgem.gov.uk/publications-and-updates/network-innovation-competition-2019-funding-decisions>

³ Unless otherwise specified, defined terms in this Project Direction have the meaning given to them in Appendix 1 of the Gas NIC Governance Document.

⁴ <https://www.ofgem.gov.uk/publications-and-updates/version-30-network-innovation-competition-governance-documents>

- require the Network Licensee to undertake the Project in accordance with the commitments it has made in the Full Submission⁵;
- 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
- set out the mechanism for the Network Licensee receiving the Approved Amount as set out in the Funding Direction.

These requirements are described for the Project in the Schedule to this Project Direction.

Decision

Provided NGN complies with the Gas NIC Governance Document and with the Schedule to this Project Direction, the Project is deemed to be an Eligible NIC Project.⁶

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



Steven McMahon

Deputy Director, Electricity Distribution and Cross Sector Policy

For and on behalf of the Authority

⁵ Where appropriate, the Project Direction may therefore include extracts from the Full Submission or refer to specific sections of the Full Submission.

⁶ Eligible NIC Project has the meaning given in definitions of the Gas Distribution licence.

Schedule to Project Direction

1. TITLE

Project Direction ref: NGN / H21 Phase 2 / 18 December 2019

2. PREAMBLE

This Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to Northern Gas Networks (the "Funding Licensee") pursuant to the Gas NIC Governance Document issued pursuant to Special Condition 1I (The Network Innovation Competition) of the NGN Gas Transporter Licence (the "Licence"). It sets out the terms to be complied with in relation to H21 Phase 2 (the "Project") as a condition of it being funded under the NIC and the Funding Return Mechanisms.⁷

Unless otherwise specified, defined terms in this Project Direction have the meaning given to them 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

In accepting funding for the Project, the Funding Licensee is subject to the following Project-specific conditions:

Condition 1

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.

⁷ The Funding Return Mechanism is defined in Part C of Special Condition 1I of the Licence.

Table 1. Project Partners

Cadent Gas
SGN
Wales & West Utilities
NGG
Health and Safety Executive Science Division (HSE-SD)
DNV GL.

Condition 2

The Funding Licensee is required to identify, and contractually secure or have a signed agreement (whichever is required) for an appropriate site for the unoccupied network operations trial on an existing, unused section of network, to demonstrate operational and maintenance procedures in action for a 100% hydrogen network. If required, the Funding Licensee will also secure planning for the unoccupied network operations trial. In receiving full funding, the Funding Licensee is committed to submit notice to the Authority confirming the identification of an appropriate site for Phase 2b as and when this occurs. The notice should confirm details of the appropriate site including its location and cost of securing the site.

If an appropriate site cannot be secured by 1 October 2020, the Funding Licensee should follow the Project Changes procedure as set out in paragraphs 8.27 and 8.33 of the Gas NIC Governance Document.

4. COMPLIANCE

The Funding Licensee must comply with Special Condition 1I of the Licence and with the Gas NIC Governance Document (as may be modified from time to time in accordance with Part E of Special Condition 1I) and with this Project Direction.

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

Pursuant to Special Condition 1I of the Licence, Disallowed Expenditure is any revenue received (whether by the Funding Licensee or by another Licensee) from the NTS Operator under the NIC Funding Mechanism that the Authority determines not to have been spent in

accordance with the applicable provisions of the Gas NIC Governance Document or the terms of the relevant Project Direction.

Pursuant to Chapter 8 of the Gas NIC Governance Document, Disallowed Expenditure includes any funds that must be returned if the Project is halted without Ofgem's permission, any funds that have not been spent in accordance with the approved Project Budget contained within the Project Direction, and any unspent funds for completed Projects, and any Directly Attributable Costs that the Authority deems to have been misreported following a Project audit. In particular, it includes the proportion of funds associated with a Project Deliverable (as proposed by the Network Licensee), where the Network Licensee is deemed by Ofgem to be at fault for the non-delivery of that Project Deliverable.

5. APPROVED AMOUNT FOR THE PROJECT

The Approved Amount is **£6,852,188.94**

The Approved Amount will be recovered by the System Operator from GB customers and transferred to the Network Licensee in the Relevant Year following the issue of the Project Direction. The Relevant Year is a period of twelve months beginning on 1 April in any calendar year and ending on 31 March of the next calendar year. Transfer of revenue between the System Operator and one or more Network Licensees must be made monthly on an equal basis, for the entirety of the Relevant Year, on the day of the month agreed by the Network Licensee making the transfer. The Network Licensee is responsible for notifying the System Operator of the bank account details to which transfers must be made. If a Network Licensee is required to return funding to the System Operator, the reverse applies.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 of this Project Direction.

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, in accordance with Chapter 8 of

the Gas NIC Governance Document. Ofgem will use the reported expenditure and the explanation to assess whether the funding has been spent in accordance with the Gas NIC Governance Document and with this Project Direction.

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 with 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) of the Full Submission;
- (ii) provide a Network Licensee Compulsory Contribution of £761,389.37;
- (iii) complete the Project on or before the Project completion date of 31st December 2021; and
- (iv) disseminate the learning from the Project as a minimum to the level described in Section 5 (Knowledge Dissemination) of the Full Submission.

8. REPORTING

Ofgem may issue guidance (and amend it from time to time) about the structure and content of the Project Progress Report required by Chapter 8 of the Gas NIC Governance Document. The Funding Licensee must follow this guidance in preparing the reports.

As required by Chapter 8 of the Gas NIC Governance Document, the Funding Licensee must inform the Authority promptly in writing of any material event or circumstance likely to affect its ability to deliver the Project as set out in its Full Submission.

9. INTELLECTUAL PROPERTY RIGHTS (“IPR”)

In Section 5 of its Full Submission (Knowledge Dissemination) the Funding Licensee has stated that the Project conforms to the default IPR arrangements set out in Chapter 9 of the Gas NIC Governance Document. The Funding Licensee must therefore undertake the Project in accordance with the default IPR arrangements.

10. PROJECT DELIVERABLES

At the end of a Project, the Funding Licensee must commission a report from an independent third party that verifies whether the Project Deliverables set out in Table 2 below (which comply with Chapter 5 of the Gas NIC Governance Document) have been achieved.

After it has received the report, the Funding Licensee must send it to the Authority. Where a Project Deliverable has not been achieved we will consider whether funding should be returned to customers using the Funding Return Mechanism. If the Network Licensee is deemed by Ofgem to be at fault for the non-delivery of the Project Deliverable, it is the proportion of funding assigned to it within Table 2 below, which may be returned to customers.

Table 2. Project Deliverables

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
1	Confirmation of site identification for Phase 2b	1 October 2020	<ol style="list-style-type: none"> Final site decision by NGN. Submit notice to the Authority confirming identification of appropriate site on an existing, unused section of network for Phase 2b unoccupied network trials. Trial site contractually secured or signed agreement obtained. 	0%
2	Network Operations Procedure Review	1 December 2020	<ol style="list-style-type: none"> A series of detailed reports providing an assessment of the Basis of Safety (BoS) for hydrogen. Updated Master Test Plan (MTP). 	11%

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
3	Building Phase 2a micro-grid	10 September 2020	1. Construction of the extension of Spadeadam site completed as per design.	22%
4	Completion of Phase 2a testing	9 September 2021	Report detailing: 1. Tests identified in the MTP have been attempted and results documented in a technical note. Updated H21 QRA.	15%
5	Design of Phase 2b site	6 November 2020	Report detailing: 1. Approved detailed design for Phase 2b site.	3%
6	Pre-construction works for Phase 2b site	5 November 2020	Report detailing: 1. All legal and insurance contracts complete. 2. Site set-up, gas supply and security complete. 3. Pre-validation surveys complete including leakage surveys, internal CCTV surveys, trial excavations and pressure testing.	9%
7	Construction of Phase 2b site	28 January 2021	Report detailing: 1. Construction of control centre, measurement points and installation of any other assets as per the approved design.	20%

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
8	Testing of Network Operations for Phase 2b	7 October 2021	Report detailing: 1. MTP updated with technical notes from Phase 2b. 2. Report on the initial identification of training gaps for operatives. Updated H21 QRA.	15%
9	Phase 2c Combined QRA	22 October 2021	Report detailing: 1. A combined QRA accepted by both Hy4Heat and H21.	3%
10	Phase 2d Social Sciences	29 April 2021	Report detailing: 1. A glossary of terms to be used in future communications. 2. Results from online survey and statistical modelling of feedback for reaction of 100% hydrogen conversion. 3. Educational communication materials.	2%
Common Project Deliverable				

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
N/A	Comply with knowledge transfer requirements of the Governance Document.	End of Project	<ol style="list-style-type: none"> 1. Annual Project Progress Reports which comply with the requirements of the NIC Governance Document. 2. Completed Close Down Report which complies with the requirements of the NIC Governance Document. 3. Evidence of attendance and participation in the Annual Conference as described in the NIC Governance Document. 	N/A

11. USE OF LOGO

The Funding Licensee and the Project Partners, External Funders and Project Supporters⁸ may use the NIC logo for purposes associated with the Project but not use the Ofgem logo in any circumstances.

12. AMENDMENT OR REVOCATION

As set out in Chapter 8 of the Gas NIC Governance Document and this Project Direction, this Project Direction may be amended or revoked under the following circumstances:

- (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; or
- (ii) to reflect amendments made to the Licence.

⁸ As listed in Box 1.6 in Section 1 of the Full Submission pro-forma.

13. HALTING OF PROJECTS

This Project Direction is subject to the provisions contained in paragraphs Chapter 8 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 Part E of Special Condition 1I of the Licence.

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 Project 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

Cost Category	Cost
Labour	
	£1,709,334
Equipment	
	£3,623,233
Contractors	
	£2,289,775
IT	
	£30,040
IPR Costs	
	-
Travel & Expenses	
	-
Payments to users	
	-
Contingency	
	£186,465
Decommissioning	
	-
Other	
	-
Cost Category	7,838,847.60