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Date: 11 January 2019

Dear Company Secretary,

**Project Direction ref: Cadent Gas Limited / HyDeploy2 / 11 January 2019**

In August 2018, Cadent Gas Limited submitted an application for funding of the project HyDeploy2 (the Project) through the Gas Network Innovation Competition (NIC). In this year's decision<sup>1</sup>, we selected the Project<sup>2</sup> for funding.

This Project Direction contains the terms that must be complied with by Cadent Gas Limited as a condition of the Project receiving funding through the Gas NIC. These terms can be found in the Schedule to this Project Direction (the Schedule).

**Project direction**

Chapter 5 of the Gas NIC Governance Document<sup>3</sup> states that a Project Direction will:

- set out the Project-specific conditions that the Network Licensee (Cadent Gas Limited) 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<sup>4</sup>;
- 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

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<sup>1</sup> [https://www.ofgem.gov.uk/system/files/docs/2018/11/2018\\_nic\\_decision\\_document\\_final.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/11/2018_nic_decision_document_final.pdf)

<sup>2</sup> Unless otherwise specified, defined terms in this Project Direction have the meaning given to them in Appendix 1 of the Gas NIC Governance Document.

<sup>3</sup> <https://www.ofgem.gov.uk/publications-and-updates/version-30-network-innovation-competition-governance-documents>

<sup>4</sup> 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 mechanism for the Network Licensee's receiving the Approved Amount, as set out in section 4 of the Funding Direction.

These requirements are dealt with in the Schedule .

### **Decision**

Provided Cadent Gas Limited complies with the Gas NIC Governance Document and with the Schedule , the Project is deemed to be an Eligible NIC Project.<sup>5</sup>

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

Yours faithfully,



**Steven McMahon**  
**Deputy Director, Electricity Distribution and Cross Sector Policy**  
**For and on behalf of the Authority**

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<sup>5</sup> Eligible NIC Project has the meaning given in definitions of the Gas Transporter licence.

## Schedule

### 1. TITLE

Project Direction ref: Cadent Gas Limited / HyDeploy2 / 6<sup>th</sup> December 2018

### 2. PREAMBLE

This Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to Cadent Gas Limited (the "Funding Licensee") pursuant to the Gas NIC Governance Document issued pursuant to Special Condition 1I (Network Innovation Competition) of the Gas Transporter Licence (the "Licence"). It sets out the terms to be complied with in relation to HyDeploy2 (the "Project") as a condition of it's being funded under the NIC and the Funding Return Mechanisms.<sup>6</sup>

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

#### 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.

#### Table 1. Project Partners

Northern Gas Networks Limited Health and Safety Laboratory Progressive Energy ITM Power Keele University
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#### Condition 2

The Funding Licensee's access to funds will be staged.

- Prior to receipt of the first exemption referred to in the second bullet, it must not access more than **£8,495,000** for the purposes of the required stakeholder engagement, evidence gathering and enabling works preparatory to the first field trial, which is to be funded by the NIC.
- It must not access more than **£13,128,000** from the Project Bank Account after receiving the exemption from the Gas Safety (Management) Regulations (GS(M)R) from the Health and Safety Executive (HSE) for the first field trial but prior to receiving the exemption from the GS(M)R from the HSE for the second field trial, apportioned as follows (a) up to £11,035,500 for the purposes of the first field trial and (b) up to £13,128,000 for the purposes of the required stakeholder engagement, evidence gathering and enabling works preparatory to the second field trial, which is to be funded by the NIC.

<sup>6</sup> The Funding Return Mechanism is defined in Special Condition 1I (Network Innovation Competition).

- It must not access the balance of the Approved Amount prior to receiving the exemption from the GS(M)R from the HSE for the second field trial.

#### **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 Special Condition 1I) and with this Project Direction.

Any part of the Approved Amount 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, Disallowed Expenditure is revenue received (whether by the Funding Licensee or by 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 with those 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 on the completion of the Project.

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

The Approved Amount is **£13,282,000**

#### **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, in accordance with Chapter 8 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 and 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 with the terms of this Project Direction. These include (but are not limited to) the requirements to :

- (i) undertake the Project in accordance with the description set out in Section 2 (Project Description) of the Full Submission including a trial phase in each of Cadent and NGN's network areas;
  - (ii) provide a Network Licensee Compulsory Contribution of £1,497,000;
  - (iii) complete the Project on or before the Project completion date of March 2023;
- and

- (iv) disseminate the learning from the Project at least to the level described in Section 5 (Knowledge Dissemination).

## 8. REPORTING

Ofgem may issue guidance (as amended 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**

Ref:	Project Deliverable	Deadline	Evidence	NIC Funding Request (%)
1	Customer Engagement Plan	31/10/19	Confidential Project report including: <ul style="list-style-type: none"> <li>Demographic assessment of trial location;</li> <li>Results from UK customer market research workshops relating to future energy changes;</li> <li>Results from hydrogen perception assessment to inform engagement;</li> <li>Customer Engagement strategy;</li> <li>Data protection strategy; and</li> <li>Example engagement material.</li> </ul>	5%
2	Evidence base for first trial	30/06/20	Confidential Project Summary Report addressing: <ul style="list-style-type: none"> <li>Overview of key issues;</li> <li>Core materials findings;</li> <li>Key Appliance Laboratory testing findings;</li> <li>Key Appliance in-field testing findings;</li> </ul>	29%

			<ul style="list-style-type: none"> <li>• Gas Characteristics;</li> <li>• Gas Detection;</li> <li>• Summary of Procedures findings; and</li> <li>• Evidence gap for second trial.</li> </ul>	
<b>3</b>	First Exemption submission	31/09/20	Evidence of Exemption submission: <ul style="list-style-type: none"> <li>• Receipt of application by HSE</li> </ul>	3%
<b>4</b>	First trial commencement	31/01/21	Short form report demonstrating: <ul style="list-style-type: none"> <li>• Completion of installation including photographic evidence of the facility; and</li> <li>• Evidence of first injection into grid.</li> </ul>	9%
<b>5</b>	Evidence base for second trial	30/07/21	Confidential Project Summary Report addressing: <ul style="list-style-type: none"> <li>• Overview of key issues;</li> <li>• Core materials findings;</li> <li>• Key Appliance Laboratory testing findings;</li> <li>• Key Appliance in-field testing findings;</li> <li>• Gas Characteristics update;</li> <li>• Gas Detection update; and</li> <li>• Procedures update.</li> </ul>	12%
<b>6</b>	First trial completion	31/12/21	Confidential Project Summary Report addressing: <ul style="list-style-type: none"> <li>• Technical summary of trial phase;</li> <li>• Customer engagement findings including assessment of hydrogen perceptions and experience during trial; and</li> <li>• Key learning for second trial</li> </ul>	8%
<b>7</b>	Second Exemption submission	31/10/21	Evidence of Exemption submission: <ul style="list-style-type: none"> <li>• Receipt of application by HSE</li> </ul>	3%
<b>8</b>	Second trial commencement	30/04/22	Short form report demonstrating: <ul style="list-style-type: none"> <li>• Completion of installation including photographic evidence of the facility; and</li> <li>• Evidence of first injection into grid.</li> </ul>	7%
<b>9</b>	Second Trial completion	28/02/23	Confidential Project Summary Report addressing: <ul style="list-style-type: none"> <li>• Technical summary of trial phase;</li> <li>• Customer engagement findings including assessment of hydrogen perceptions and experience during trial; and</li> </ul>	8%

			<ul style="list-style-type: none"> <li>• Key learning for roll out.</li> </ul>	
<b>10</b>	Completion of wider network evidence base, roadmap & dissemination	31/03/23	<p>Project Report including:</p> <ul style="list-style-type: none"> <li>• Evidence base relating to the use of blended hydrogen for industrial users, encompassing burner laboratory testing and field-testing results for boiler and direct fire applications;</li> <li>• Roadmap findings including Network model assessment, Regulatory basis for deployment, commercial requirements and summary of engagement with BEIS, and summary of skills/training experience during trials and strategy for roll out; and</li> <li>• Summary of dissemination activities undertaken.</li> </ul>	16%

## 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 logo in any circumstances.

## 13. 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.

## 14. 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 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:

<sup>7</sup> As listed in Box 1.6 in Section 1 of the Full Submission pro-forma.

In accordance with the powers contained in the Gas NIC Governance Document issued pursuant to 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 (£k)</b>
<b>Labour</b>	
	6,047.74
<b>Equipment</b>	
	668.50
<b>Contractors</b>	
	6,675.50
<b>IT</b>	
	-
<b>IPR Costs</b>	
	-
<b>Travel &amp; Expenses</b>	
	58.00
<b>Payments to users</b>	
	392.00
<b>Contingency</b>	
	757.00
<b>Decommissioning</b>	
	-
<b>Other</b>	
	370.00
<b>Total</b>	<b>14,968.74</b>