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Date: 8th October 2026

Dear National Gas Transmission PLC,

National Gas Transmission PLC submitted Quantum Optimisation for Future Gas Network Design (the Project) to be considered for funding through the Alpha Phase of Cycle 6 of the Strategic Innovation Fund (SIF). In our (The terms 'we', 'us', 'our' refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority) SIF Funding Decision issued on 1 October 2026, we selected the Project for conditional funding for the Cycle 6 Alpha Phase and as a result we are now issuing this SIF Project Direction to implement that decision.

This Project Direction is issued pursuant to the Special Condition 5.7 of the Gas Transporter Licence and the SIF Governance Document and sets out the SIF Approved Amount and any Project-specific or Special Conditions applicable to the Project that National Gas Transmission PLC must comply with to receive funding.

Role of UK Research & Innovation (UKRI)

As per Chapter 1 of the [SIF Governance Document](#) UKRI administers the funding programme, monitor Projects, collate data from Projects, make recommendations to Ofgem on operational matters, support third-party innovators and, where possible, support successful Projects to become 'business as usual' activities. To support the success of the Projects and the SIF programme, we expect that the Funding Party and Project Partners collaborate with Ofgem and UKRI.

Decision

Provided the Funding Party complies with the SIF Governance Document and with the Schedule to this SIF Project Direction, the Project is deemed to be an Eligible SIF Project.

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

Marzia Zafar

Deputy Director, Strategy Energy Systems Management & Security

SRO for the Strategic Innovation Fund

For and on behalf of the Authority

Schedule to SIF Project Direction

1. PROJECT DETAILS

Application number: 10205506

Project title: Quantum Optimisation for Future Gas Network Design

Innovation Challenge/Cycle: Whole system optimisation/ Cycle 6

Project start date: 1 October 2026

Project end date: 31 May 2027

SIF Approved Amount for SIF Funding: £616,558

2. PREAMBLE

This SIF Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to National Gas Transmission PLC (the "Funding Party") pursuant to the SIF Governance Document issued pursuant to Special Condition 5.7 of the Gas Transporter Licence. It sets out the conditions to be complied with in relation to Quantum Optimisation for Future Gas Network Design (the "Project") as a condition of it being funded under the SIF Funding Mechanism.

Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in the Licence or Appendix 1 of the SIF Governance Document.

References to specific sections of the Funding Party's Application in this SIF Project Direction are, for ease of reference, made by referring to the section number in the Funding Party's Application.

3. PROJECT-SPECIFIC CONDITIONS

The Funding Party must comply with all requirements detailed in the SIF Governance Document and the relevant SIF Funding Direction. In accepting funding for the Project, the Funding Party is subject to the following Project-specific condition(s):

Condition 1

The Funding Party must not spend any SIF Funding until contracts are signed with the Project Partners named in Table 1 for the purpose of completing the Project.

Project Partners

- PA Consulting Services Limited
- National Grid Electricity Transmission Plc
- Scottish Hydro Electric Transmission Plc

Condition 2

At the kick-off meeting, the Project Partners must present the agreed ownership of IPR and clarify any licensing terms and commercial exploitation rights.

Condition 3

The Project should clarify the quantitative benefits of applying quantum optimisation methodologies across gas and electric networks including more precise estimates of the current costs of gas and electricity network operators cancelling or rescheduling planned maintenance outages and estimates of how much of these costs can be avoided by applying quantum optimisation methodologies. This should be presented at the End of Phase meeting.

Condition 4

At the Alpha kick-off meeting, the Project team should indicate how they aim to develop planning for incorporating a whole systems approach into a Beta application and present outline plans at the End of Phase meeting.

4. COMPLIANCE

The Funding Party must comply with Special Condition 5.7 of the Gas Transporter Licence, the SIF Governance Document and with this SIF Project Direction.

5. SIF APPROVED AMOUNT

The SIF Approved amount of £616,558 (as detailed under Section 1: Project details of this Project Direction) will be recovered by National Gas from GB customers and transferred to the Funding Party. The Funding Party is responsible for notifying National Gas of the bank account details to which transfers must be made, in addition to completing Annex 2 of this SIF Project Direction. If a Funding Party is required to return funding to National Gas, the reverse applies. The Funding Party must provide bank account details to National Gas within two weeks of accepting this SIF Project Direction.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 of this SIF Project Direction. The Funding Party must report on expenditure as set out in Table 3 in Chapter 8 of the SIF Governance Document.

7. PROJECT IMPLEMENTATION

The Funding Party must undertake the Project in accordance with the commitments it has made in the Application and with the conditions of this SIF Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with its Application,
- (ii) complete the Project on or before the Project completion date as detailed under section 1 of the schedule of this SIF Project Direction, and
- (iii) disseminate the learning from the Project at least to the level described in chapter 3 of the SIF Governance Document. Dissemination of learning must be carried out whether the Project was concluded successfully or otherwise.

8. REPORTING

As set out in Table 3 in Chapter 6 of the SIF Governance Document, the Funding Party, are required to report on various information at set points through the lifecycle of the Project. Ofgem and UKRI may issue guidance (and amend it from time to time) about the structure and content of the Project reporting required. The Funding Party must follow this guidance in preparing the reports.

9. MONITORING

The Funding Party must comply with any reasonable request for information by its Monitoring Officer at UKRI and with related deadlines. Ofgem, with the support of UKRI, will together monitor Project delivery, impacts and benefits. Throughout the term of the Project, progress is monitored by UKRI through a Monitoring Officer and Innovation Lead. The Monitoring Officer is the first point of contact for official notifications, queries and correspondence with UKRI and the Authority, unless otherwise required by this SIF Project Direction.

10. EVALUATION

The Funding Party has acknowledged when it submitted its Application for this Project, that reporting information and data gathered during the Project's timescales (as detailed in Section 1 of this SIF Project Direction) will be used to evaluate Project performance. In addition, the Funding Party may be required to provide requested information outside of the Project timescales and, in particular, for the period from the Project end date to the end of the SIF Programme. Further data and reporting information may be requested (frequency and method based on requirement) outside of standard monitoring and

reporting requirements as deemed necessary. Further data and information requirements must be complied with by the Funding Party and Project Partners.

11. DATA SHARING

As set out in Chapter 3 of the SIF Governance Document, the Funding Party must follow the Data Best Practice Guidance issued by Ofgem in regard to all data gathered or created in the course of a Project. We expect the Funding Party to document any reasons, such as commercial sensitivities, for desensitising data. As defined by, and in accordance with, the Data Best Practice Guidance, Funding Parties must have a data triage process. Where multiple Project Partners are collaborating on a Project, the consortium must adopt a consistent Open Triage Process for the data related to the Project. Ofgem may require that Project information and data is also shared with other specified parties, such as parties working on complementary innovation funding programmes (subject to redaction of sensitive data).

12. CYBER SECURITY

It is the responsibility of the Funding Party and all Project Partners to implement and maintain appropriate security measures to protect personal data in accordance with The [GDPR \(General Data Protection Regulation\)](#) and [DPA \(Data Protection Act\) 2018](#). Protection of computer systems from unauthorised access or being otherwise damaged or made inaccessible must be in place alongside effective working practices. These must be maintained in line with the Funding Party's IT management strategies and policies.

13. PROJECT MILESTONES

The Funding Party must provide an outline in its end of Project Phase meeting with its UKRI Monitoring Officer that verifies that the Project milestones have been achieved or explains why they have not.

Project milestones are outlined below in Table 2, based upon details contained within the Funding Party's Application.

Table 1. Project milestones

Reference	Project milestone	Deadline	SIF Funding Request
Milestone 1	Work package 1: Mobilisation	31 May 2027	£36,993.48
Milestone 2	Work package 2: System Benefit Study	31 May 2027	£123,311.60
Milestone 3	Work package 3: Solution Design and Specification	31 May 2027	£98,649.28
Milestone 4	Work package 4: Proof of Concept	31 May 2027	£98,649.28

Reference	Project milestone	Deadline	SIF Funding Request
Milestone 5	Work package 5: Prototype Development	31 May 2027	£160,305.08
Milestone 6	Work package 6: Beta Preparation	31 May 2027	£98,649.28

14. USE OF LOGO

The Funding Party and the Project Partners, External Funders and Project Supporters or subcontractors must not use the Innovate UK/UKRI and/or Ofgem logo for purposes associated with the Project in any circumstances. For additional guidance, refer to the SIF handbook.

15. SHARING OF LESSONS LEARNED

The Funding Party is required to ensure that the sharing of lessons learned and the facilitation of knowledge transfer is conducted as effectively as possible, to ensure that all parties, and therefore all consumers including future consumers, can benefit from Projects.

As outlined in Chapters 4 and 8 of the SIF Governance Document, we require the Funding Party to work collaboratively with other Networks and third-party innovators to disseminate the learnings and data from Projects and ensure that these are publicly available.

16. COLLABORATION

The Funding Party must collaborate with third-party innovators as Project Partners, as well as work closely with other parties in the energy supply chain, as set out in Chapter 4 of the SIF Governance Document.

The Funding Party must collaborate with other parties and with UKRI to organise an annual conference in a format appropriate to enabling the building of consortiums and disseminating learning widely. The conference may be a single event for gas and electricity, or more than one event, as appropriate.

17. AMENDMENT OR REVOCATION

As set out in Chapter 7 of the SIF Governance Document, this SIF Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Party considers that there has been a material change in circumstance that requires a change to the SIF Project Direction, and the Authority agrees; or
- (ii) to reflect amendments made to the Licence.

18. HALTING OF PROJECTS

This SIF Project Direction is subject to the provisions contained in Chapter 7 of the

SIF Governance Document relating to the halting of Projects. By extension, this SIF Project Direction is subject to any decision by the Authority to halt the Project to which this SIF Project Direction relates and to any subsequent relevant SIF Funding Direction issued by the Authority pursuant to Special Condition 5.7 of the Gas Transporter Licence

Further to the requirements in Chapter 7 of the SIF Governance Document, in the event the Authority decides to halt the Project to which this SIF Project Direction relates, the Authority may issue a statement to the Funding Party clarifying the effect of that halting decision as regards the status and legal force of the conditions contained in this SIF Project Direction.

NOW THEREFORE:

In accordance with the SIF Governance Document issued pursuant to Special Condition 5.7 of the Gas Transporter Licence of the Licence, the Authority hereby issues this SIF Project Direction to the Funding Party 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.

Failure to comply with the conditions of this SIF Project Direction means that Ofgem may treat all or part of the SIF Approved Amount received by the Funding Party as SIF Disallowed Expenditure.

ANNEX 1: PROJECT BUDGET

SIF Project Direction costs

Cost Category	Total Project costs (£)
Labour	£661,043
Materials	£0
Subcontracting	£8,000
Travel and subsistence	£2,000
Other costs	£14,108
Contingency	£0
Total	£685,151

Project Partner	Total project costs (£)	Project contribution (£)	Total SIF Funding requested (£)	Project contribution (%)
National Gas Transmission PLC	£99,266	£9,929	£89,337	
National Grid Electricity Transmission PLC	£24,653	£2,465	£22,188	
PA CONSULTING SERVICES LIMITED	£542,085	£54,285	£487,800	
SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC	£19,147	£1,914	£17,233	
Total	£685,151	£68,593	£616,558	10.01%

**ANNEX 2 TO SCHEDULE: TEMPLATE OF BANK ACCOUNT DETAILS TO BE PROVIDED
TO EITHER NGT (BOX.GSOSETTLEMENTS@NATIONALGRID.COM) OR NESO
(REVENUE.INVOICE@NESO.ENERGY)**

Company name:

Primary Contact Details (only one contact permitted)

First Name:

Last Name:

Email address:

Mobile phone number:

Work phone number:

Address details

Address name:

Street address:

City:

State / region:

Post code:

PO box: (if applicable)

PO box post code: (if applicable)

Banking details

These should be evidenced in non-editable format. The evidence provided must show company name and bank details and it should be dated within the last 6 months.

Any of the below documents will suffice:

- Bank statement (scanned document)
- Void cheque
- Paying in slip
- Screenshot of online banking (showing a logged-in account with bank account and sort code, with browser visible)