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Date: 1st February 2026

Dear SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC,

SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC submitted HVDC Wind Connect (the Project) to be considered for funding through the Alpha Phase of Round 5 of the Strategic Innovation Fund (SIF). In our SIF Funding Decision issued on 1st February 2026, we selected the Project for conditional funding for the Round 5 Alpha Phase and as a result we are now issuing this SIF Project Direction to implement that decision.

SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC must comply with the conditions contained in this SIF Project Direction as a condition of the Project receiving funding through the SIF. These conditions can be found in the Schedule to this document.

Progression through SIF Phases

The SIF consists of a multi-phase approach for Projects in order to mitigate the risk associated with innovations. The Discovery Phase focuses on feasibility, the Alpha Phase on experimental development, and the Beta Phase on deployment and demonstration. The Innovation Challenge issued for each Round will state if a Project can apply directly to Alpha or Beta, without the requirement to have progressed through Discovery and Alpha.

Role of UK Research & Innovation (UKRI)

As per Chapter 1 of the [SIF Governance Document](#) the role of UKRI is to deliver the SIF in line with the SIF Governance Document - administering the funding programme, monitoring the delivery of Projects, collating data from Projects on benefits, making recommendations to Ofgem on operational matters, supporting third-party innovators and, where possible, 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.

SIF Project Direction

Paragraph 5.14 of the SIF Governance Document states that a SIF Project Direction will:

- Set out the Project-specific conditions, to which the Funding Party is committing in accepting SIF Funding.
- Require the Funding Party to undertake the Project in accordance with the commitments made in the Application. Where appropriate, the SIF Project Direction may therefore include extracts from the Application or refer to specific sections of the Application.
- Where applicable, set out conditions (such as Project stage gates) linked to milestones and deliverables, which Projects must meet.
- Set out the SIF Approved Amount for the Project, that will form part of the calculation contained in the SIF Funding Direction issued by the Authority under chapter 7 of the SIF Governance Document.
- Set out the Project budget that the Funding Party must report against and how variations in the Project budget will be reported.
- Where applicable, set out special information sharing requirements applicable to the Project.
- Set out the mechanism for the Funding Party receiving the SIF Approved Amount as set out in the SIF Funding Direction.

All SIF Project Direction requirements are detailed in the Schedule to this SIF Project Direction.

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 49A (Reasons for decisions) of the Electricity Act 1990.

Marzia Zafar

Deputy Director, Decentralisation & Digitalisation

SRO for the Strategic Innovation Fund

For and on behalf of the Authority

Schedule to SIF Project Direction

1. PROJECT DETAILS

Application number: 10179104

Project title: HVDC Wind Connect

Innovation Challenge/Project Phase: Consumer-Centric Grid Expansion/ Round 5 Alpha Phase

Project start date: 1st February 2026

Project end date: 30th September 2026

SIF Approved Amount for SIF Funding: £449,961

2. PREAMBLE

This SIF Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC (the "Funding Party") pursuant to the SIF Governance Document issued pursuant to Special Condition 9.19 of the Electricity Transmission Licence. It sets out the conditions to be complied with in relation to HVDC Wind Connect (the "Project") as a condition of it being funded under the SIF Funding Mechanism, as defined in the SIF Governance.

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

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.

Table 1. Project Partners

CARBON TRUST ADVISORY LIMITED WindGrid NV
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Condition 2

The Funding Party must report on the financial contributions made to the Project as set out in its Application. Any financial contributions made over and above that stated in its Application should also be reported and included on the Innovation Funding Service (IFS).

Condition 3

The Funding Party must make reasonable endeavours to participate in all meetings related to the Project that they are invited to by Ofgem, UKRI and Department for Energy Security and Net Zero during the Alpha Phase.

Condition 4

The Project will be allowed a flexible start date and duration within the 8-month period from the date the Project Direction is issued. The Project must tell the monitoring officer the start date and end date of the Project.

4. COMPLIANCE

The Funding Party must comply with Special Condition 9.19 of the Electricity Transmission Licence, the SIF Governance Document and with this SIF Project Direction.

5. SIF APPROVED AMOUNT

The SIF Approved amount of £449,961 (as detailed under Section 1: Project details of this Project Direction) will be recovered by National Energy System Operator from GB customers and transferred to the Funding Party. The Funding Party is responsible for notifying National Energy System Operator 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 Energy System Operator, the reverse applies. The Funding Party must provide bank account details to National Energy System Operator 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 against each line under the category total in the Project Budget and explain any projected variance against each line as part of its

detailed report which is to be provided, in accordance with Chapter 7 of the SIF Governance Document. The Funding Party must report variations in the Project budget as outlined in Chapter 6 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) complete the Project on or before the Project completion date as detailed under Section 1 of the Schedule of this SIF Project Direction, and
- (ii) 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

Ofgem and UKRI may issue guidance (and amend it from time to time) about the structure and content of the Project reporting required by Chapter 6 of the SIF Governance Document. The Funding Party must follow this guidance in preparing the reports.

As set out in Chapter 6 of the SIF Governance Document, the Funding Party may be required to submit an end of Phase report to the UKRI monitoring officer within six months of the Project ending, if the Project is not planning on submitting an Application to Beta Phase and, if the Funding Party submits an Application for the Project for Beta Phase but is not successful. Within this report, the Funding Party must submit information related to questions on Project delivery as detailed in Chapter 6, table 5 of the SIF Governance Document.

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. 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.

As detailed in Chapter 6 of the SIF Governance Document, meetings with the monitoring officer will take place at regular intervals, as advised by Ofgem or the monitoring officer during the delivery of the Project, and at the end of each Project Phase.

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 with 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, 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 WORK PACKAGES

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

Project Work Packages are outlined below in Table 2, based upon details contained within Question 7 and Appendix Question 9 in the Funding Party's Application.

Table 2. Project Work Packages¹

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
WP1	Project Management	31/07/2026	<p>Describe overall Work Package Objectives</p> <p>1. The successful delivery of the HVDC Wind Connect project to budget, time, and quality, in compliance with the SIF governing documentation.</p> <p>Describe the high level tasks to achieve the work package objectives.</p> <p>1.1. Maintain and track project schedule, action register, deliverables & actual expenditure against forecast.</p> <p>1.2. Monitor and manage the project risk register with regular reviews to track & maintain their mitigation.</p> <p>1.3. Organise regular (at least fortnightly) review meetings with all partners.</p> <p>1.4. Presentation of HVDC Wind Connect as required by Ofgem/UKRI and wider dissemination activities (workshops, webinars, events, presentations).</p> <p>1.5. Produce a conclusion report for the UKRI monitoring officer and any other specific documentation required or requested.</p> <p>1.6. Beta Phase Planning Assessment</p>	£11,561.09
WP2	Control and protection of multiterminal	04/05/2026	<p>Describe overall Work Package Objectives</p> <p>1. Evaluate HVDC system performance from a control and protection (C&P) perspective.</p>	£59,799.29

¹ As outlined in in the Application or Project Plan appendix.

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
	HVDC rigid and hybrid bipole with offshore wind farms		<p>2. Identify pros and cons of the multiterminal HVDC rigid bipole setup. Investigate advanced features like:</p> <ul style="list-style-type: none"> - Grid-forming capability - Black start functionality <p>3. Explore ways to manage these features through:</p> <ul style="list-style-type: none"> - Control strategy adjustments - Adding equipment (e.g., energy storage, hybrid converter configurations) <p>4. Analyse failure impacts on HVDC protection systems.</p> <p>5. Develop mitigation strategies to improve system reliability and resilience.</p> <p>6. Assess the hybrid arrangement as a variation of the above</p> <p>7. Support Beta Phase Planning</p> <p>Describe the high level tasks to achieve the work package objectives.</p> <p>2.1. Performance Evaluation of HVDC System</p> <ul style="list-style-type: none"> - Assess the performance of the HVDC system from the Control and Protection (C&P) perspective. - Identify and evaluate the advantages and disadvantages of the HVDC system. <p>2.2. Feature Investigation and Handling</p> <ul style="list-style-type: none"> - Investigate key features such as grid-forming capability and black start. - Determine how these features can be managed through (Adjustments to the control strategy, Addition of supplementary equipment) 	

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
			<p>2.3. Impact Analysis on HVDC System Protection</p> <ul style="list-style-type: none"> - Analyse the impact of various failures on the protection mechanisms of the HVDC system. - Develop strategies to mitigate potential failures and enhance system reliability. 	
WP3	Grid integration (Grid code)	29/06/2026	<p>Describe overall Work Package Objectives</p> <ol style="list-style-type: none"> 1. Assess how multiterminal HVDC affects the AC grid at the Point of Interconnection (POI) / Point of Common Coupling (PCC). 2. Evaluate the impact of multiple converters operating in close proximity. 3. Identify and address potential interaction issues between converters. 4. Develop strategies to stabilise the AC network and coordinate converter operations. 5. Support Beta Phase Planning <p>Describe the high level tasks to achieve the work package objectives.</p> <ol style="list-style-type: none"> 3.1. Impact Analysis on AC System at POI/PCC. <ul style="list-style-type: none"> - Simulate grid response at POI/PCC. - Identify voltage, frequency, and stability impacts. 3.2. Converter Impact Evaluation <ul style="list-style-type: none"> - Model multiple converters at POI/PCC. - Analyse control overlap and dynamic interactions. 3.3. AC Network Stabilisation and Converter Coordination <ul style="list-style-type: none"> - Propose control adjustments and coordination approaches. - Recommend mitigation techniques. 	£12,128.62

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
WP4	Offshore wind farms connecting to the Rigid bipole	29/06/2026	<p>Describe overall Work Package Objectives</p> <ol style="list-style-type: none"> 1. Optimise offshore wind farm connection layouts for efficient HVDC and wind farm operation. 2. Assess the mutual impact of failures in HVDC systems and offshore wind farms. 3. Investigate generation imbalance effects and develop mitigation strategies to maintain system stability. 4. Support Beta Phase Planning <p>Describe the high level tasks to achieve the work package objectives.</p> <ol style="list-style-type: none"> 4.1. Connection Layout Optimisation <ul style="list-style-type: none"> - Analyse various offshore wind farm connection layouts to optimise both HVDC and offshore wind farm operations. 4.2. Impact Analysis of HVDC and Offshore Wind Farm Failures <ul style="list-style-type: none"> - Assess the impact of HVDC system failures on offshore wind farm operations. - Evaluate the impact of offshore wind farm failures on HVDC system performance. 4.3. Generation Imbalance Investigation <ul style="list-style-type: none"> - Investigate the effects of generation imbalance on the operation of the HVDC rigid bipole. - Develop strategies to mitigate the impact of generation imbalances on system stability and performance. 	£28,416.57

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
WP5	Platform optimisation (Offshore Grid Substation)	29/06/2026	<p>Describe overall Work Package Objectives</p> <ol style="list-style-type: none"> 1. Assess early-stage design elements to reduce risk before commissioning. 2. Optimise topside platform layout, access, and installation methods. 3. Develop concept design options for offshore grid substations. 4. Investigate retrofit potential for existing interconnector projects (e.g., Eastern Green Link). 5. Support future offshore wind farm connections through shared asset designs. 6. Support Beta Phase Planning <p>Describe the high level tasks to achieve the work package objectives.</p> <ol style="list-style-type: none"> 5.1. Early-Stage Design Considerations <ul style="list-style-type: none"> - Assess key design aspects to de-risk the concept before commissioning new projects. 5.2. Pre-Concept Design and Options Development <ul style="list-style-type: none"> - Develop topside platform design options: <ul style="list-style-type: none"> - Option 1: Connect directly to the windfarm's offshore substation. - Option 2: Connect directly to the inter-array cables of the windfarm, eliminating the need for the windfarm to build its own offshore substation. 5.3. Retrospective Installation Investigation <ul style="list-style-type: none"> - Investigate project requirements for retrospectively installing an offshore grid substation onto an existing interconnector or Eastern Green Link (EGL) project. 	£174,741.11

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
			- Explore the potential for providing a new offshore connection point to future windfarms.	
WP6	Cable design and tooling	06/07/2026	<p>Describe overall Work Package Objectives</p> <ol style="list-style-type: none"> 1. Develop methodology for performing preliminary cable design assesment based on dynamic loading across various cable lengths and operational profiles. 2. Analyse the impact of electrical and mechanical parameters (e.g., power levels, burial depth, water temperature) on cable performance. 3. Investigate the correlation between interconnector and wind power generation and its effect on cable design and reliability. 4. Support Beta Phase Planning <p>Describe the high level tasks to achieve the work package objectives.</p> <p>6.1. Dynamic Cable Design (Dynamic loading) Tool Creation</p> <ul style="list-style-type: none"> - Collate cable design datasheets, and design parameters, dynamic rating methods and tools - Identify realistic installation and environmental parameters that are reflective of real-life scenarios - Develop methodology for tool application for dynamic (time varying i.e. dynamic) cable design for different load profiles/currents - Ensure the methodology provides initial estimations of the potential impact of different power/current levels and mechanical parameters (e.g., burial depth, pole distances, water temperatures). <p>6.2. Impact Analysis of Power and Mechanical Parameters</p>	£41,705.10

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
			<ul style="list-style-type: none"> - Analyse the correlation between interconnector and wind power. - Investigate the potential impact of different power/current levels and mechanical parameters on cable design. <p>6.3. Correlation and Impact Investigation</p> <ul style="list-style-type: none"> - Examine the relationship between interconnector and wind power. - Assess the possible impact of this correlation on cable design and performance. 	
WP7	Techno economic estimation	31/07/2026	<p>Describe overall Work Package Objectives</p> <ol style="list-style-type: none"> 1. Analyse the economic impact of selected design and operational strategies, to understand the potential cost savings and efficiency improvements from optimised connection layouts and cable design. This should be from the perspective of the GB consumer. It should be based mainly on quantitative cost-benefit-analysis; but also include qualitative social, environmental and wider economic considerations. 2. Support Beta Phase Planning <p>Describe the high level tasks to achieve the work package objectives.</p> <ol style="list-style-type: none"> 7.1.1 Develop and select the design and operational strategy to be studied. 7.1.2 Develop the counterfactual. 7.1.3 Stakeholder engagement. 7.1.4 Gather input cost and benefit data (including from WPs 2-5), and identify and quantify uncertainties. 7.1.5 Develop CBA model. 	£121,643.30

Reference	Project Work Packages	Deadline	Overall objectives and key tasks	SIF Funding Request
			<p>7.1.6 Conduct CBA.</p> <p>7.1.7 Test outputs and iterate.</p> <p>7.1.8 Social, environmental and wider economic qualitative assessment.</p> <p>7.1.9 Write report D7.2.</p> <p>7.2.1 Understand the Innovation Solution to be further developed in Beta.</p> <p>7.2.2 Produce D7.3.</p>	

14. USE OF LOGO

The Funding Party and the Project Partners, External Funders and Project Supporters or subcontractors, as detailed in the Application, must not use the Innovate UK/UKRI and/or Ofgem logo for purposes associated with the Project in any circumstances.

As an alternative for use of both Ofgem and UKRI logos, all external Project communications must include the following standard form of wording:

- (i) "this project is funded by network users and consumers under the Strategic Innovation Fund, an Ofgem programme managed in partnership with UKRI."

For additional guidance, refer to the communications and media guidelines for competition winners, detailed as part of your delivery pack. These guidelines are designed to help with some suggestions and encourage you to take a proactive approach to communicating about your Project.

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 3 and 6 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. This includes taking part in annual events.

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 3 of the SIF Governance Document.

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 9.19 of the Electricity Transmission 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 9.19 of the Electricity Transmission 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 49A (Reasons for decisions) of the Electricity Act 1990.

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	£309,812
Materials	£-
Subcontracting	£170,000
Travel and subsistence	£7,780
Other costs	£12,365
Total	£499,957

Project Partner	Total project costs (£)	Project contribution (£)	Total SIF Funding requested (£)	Project contribution (%)
SCOTTISH HYDRO ELECTRIC TRANSMISSION PLC	£245,692	£31,033	£214,659	
CARBON TRUST ADVISORY LIMITED	£129,265	£0	£129,265	
WindGrid NV	£125,000	£18,963	£106,037	
Total	£499,957	£49,996	£449,961	11%

**ANNEX 2 TO SCHEDULE: TEMPLATE OF BANK ACCOUNT DETAILS TO BE PROVIDED
TO EITHER NGT (BOX.GSOSETTLEMENTS@NATIONALGRID.COM) OR NESO
(revenue.invoice@nationalgrideso.com)**

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)