

The National HVDC Centre

Flexible Research Grant – 2026

1. Overview and Eligibility

The National HVDC Centre is seeking research and development proposals to support its objective of de-risking the deployment of HVDC on the GB network within a prioritized scope.

All applications will be assessed against the eligibility criteria below. Only proposals that meet all eligibility requirements will proceed to quality assessment. The criteria are aligned, in principle, with Network Innovation Allowance (NIA) governance principles, while remaining proportionate to the flexible and exploratory nature of the scheme.

1.1 Alignment with National HVDC Centre Objectives and Call Scope

The proposed project must:

- Address a technical, operational, or commercial challenge relevant to the National HVDC Centre and GB electricity transmission systems and/or HVDC technologies;
- Fall explicitly within the scope of technical challenge areas listed in the call, as defined in “Prioritized Topics of Flexible Research Grant 2026”:
 - (1) Control Architecture of Wide-area AC/DC Power System
 - (2) Solving frequency-domain specifications to de-risk control interactions (of HVDC grid)
 - (3) Specify HVDC converter for predictable large-signal stability of HVDC grid
 - (4) Modelling of HVDC Cables
 - (5) Modelling and de-risking data centres in weak grids
 - (6) Technology agnostic specifications of converters for AC grid integration
- Clearly identify which listed topic(s) are being addressed and explain how the proposed work contributes to advancing capability, understanding, or risk reduction within that scope;
- Have clear potential benefit to network operation, consumers, or the wider GB energy system;
- Be distinct from business-as-usual (BaU) activities or routine engineering or consultancy work.

Proposals that do not clearly align with the published scope of topics will be considered out of scope and ineligible.

1.2 Innovation Scope, Technology Readiness, and Project Duration

Projects should typically target low to medium Technology Readiness Levels (TRLs), approximately TRL 3–7.

Reference definition:

UKRI – Eligibility of Technology Readiness Levels (TRL):

<https://www.ukri.org/councils/stfc/guidance-for-applicants/check-if-youre-eligible-for-funding/eligibility-of-technology-readiness-levels-trl/>

The innovative element of the proposal must be clearly articulated within the context of the scoped topics, with a credible pathway toward higher TRLs.

Project Duration:

The duration of projects funded under the Flexible Academic Grant is limited to a maximum of one (1) year starting in 2026.

The delivery of the project may be supplemented by dedicated PhD/EngD projects to reinforce the research capacity, bring up TRL, and build follow-up engineering capacity. Such PhD/EngD projects may extend beyond the one-year duration but must not be used to undertake or substitute the primary technical delivery of the funded project. All core objectives and deliverables must be achievable within one year.

Topic-specific requirement:

Within the scope of “Prioritized Topics of Flexible Research Grant 2026”:

- For Topic 1 (Control Architecture of Wide-area AC/DC Power Systems), Topic 4 (Modelling of HVDC Cable), and Topic 5 (Modelling and De-risking of Data Centres in Weak Grids), proposals must include an explicit statement of pathway toward higher TRLs.
- For other topics, this is desirable but may be omitted.

1.3 Applicant Eligibility, Collaboration, and Capability

Applications may be submitted by academic institutions, recognised research organisations, or industrial organisations.

Projects are encouraged to promote collaboration through the following activities undertaken by the application team:

- A “National HVDC Centre fellowship” that funds workload buy-out so a named researcher can dedicate agreed time to the project, with teaching/administrative duties reduced accordingly for the project duration;
- Consultancy or secondment-style engagements to the HVDC Centre; and/or
- Supplementary PhD or EngD studentships.

2. Quality Assessment Framework

Assessment will prioritise:

- Insights into the research question;
- Technical quality and feasibility of the proposed methodology;
- Relevance and potential benefit to the National HVDC Centre, GB electricity transmission licensees, and the National Energy System Operator; and

- Participation of experienced researchers.

3. Assessment Process

Stage 0: Applicant Webinar

The National HVDC Centre will host a webinar prior to the submission closing date to explain the research themes, scope, and assessment expectations.

Stage 1: Shortlisting

Assessment will focus on:

- Topic priority;
- Insight;
- Feasibility;
- Methodology quality;
- Relevance to GB licensees; and
- Confidence of TRL progression.

Other criteria will be deemed as non-prioritized and considered concisely.

Stage 2: Interview

Shortlisted proposals will be assessed against the full set of criteria, including:

- Innovation level;
- Pathway to deployment;
- Appropriateness of project management;
- Value for money;
- Research capacity; and
- Desirable plus factors:
 - (1) Match funding (e.g. university or research council)
 - (2) PhD or EngD training
 - (3) Promotion of education and skills development

4. Important Assessment and Capability Disclaimer

As the plan is intending to fund 1-2 projects for Round 2026, most proposals are not expected to be funded.

In assessing benefit, the HVDC Centre will make a reasonable and proportionate judgement based on the capacity of its in-house expertise and established partnerships.

For information, the HVDC Centre has strong in-house technical expertise in the following areas:

- Power system, modelling, simulation, analysis, and operation;
- HVDC systems and integration;
- Power electronics, including converter control, protection, and device-level considerations;

- Reasonable access to knowledge and resources held by Great Britain electricity transmission owners and the National Energy System Operator, through established working relationships and partnerships.

Where a proposal implies benefits dependent on knowledge or capability outside the Centre's listed expertise or partnerships, these dependencies must be explicitly stated and justified. Proposals relying on unarticulated external expertise may be considered less credible.

Unfunded but relevant proposals may be revisited later for alternative or partial funding routes, including NIA projects, independent co-funded PhD / EngD studentships, or co-funded project with the core partners of HVDC Centre, etc.

5. Reference to Network Innovation Allowance (NIA)

Where any aspect of eligibility, assessment, governance, or delivery is not explicitly covered in this document, Network Innovation Allowance (NIA) principles and governance apply by default.

Ofgem – Network Innovation Allowance overview:

<https://www.ofgem.gov.uk/energy-regulation/how-we-regulate/energy-network-price-controls/network-innovation-allowance>

6. Final Funding Decision and Feedback

Final funding decisions will be based on the combined outcomes of Stage 1 and Stage 2, prioritising feasibility, relevance, and confidence of progression toward higher TRLs.

Due to limited capacity and the potentially high volume of submissions, we are unable to guarantee feedback for all proposals. It is our intention to provide feedback to applicants whose proposals are shortlisted.

7. Timeline

The indicative timeline for the Flexible Academic Grant call is set out below.

- Call issued: 23 March 2026
- Applicant webinar: early to mid of April 2026
(*Webinar to explain research themes, scope, and assessment expectations*)
- **Closing date for submissions: 12 May 2026**
- Shortlisting notification: mid of June 2026
- Interview date(s): end of June 2026

- Project start date: September 2026
- Project completion: within 1 year after the start date

The National HVDC Centre reserves the right to make adjustments to the above dates where necessary. Any changes will be communicated to applicants in a timely manner.

8. Proposal

A single MS Word or PDF document per institution must be submitted to info@hvdccentre.com by the stated deadline.

The document may contain one Full Proposal with font size no less than 11. Each Full Proposal shall be structured in two parts, as outlined below.

Part I – Prioritised Criteria (Maximum 2 Pages)

Part I is limited to two pages and must provide sufficient information to clearly demonstrate how the proposal addresses the prioritised assessment criteria set out in Section 2. This part will form the primary basis for shortlisting.

Part II – Non-Prioritised Criteria (No Page Limit)

Part II has no page limit and should include information relating to the non-prioritised assessment criteria, including but not limited to:

- Title
- Contact details
- Outputs and deliverables
- Project management approach
- Payment schedule (linked to milestones and/or deliverables)
- References, if any
- Any other relevant supporting information

Both single-institution and consortium bids will be considered.

9. Contact Details

For enquiries, please contact:

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