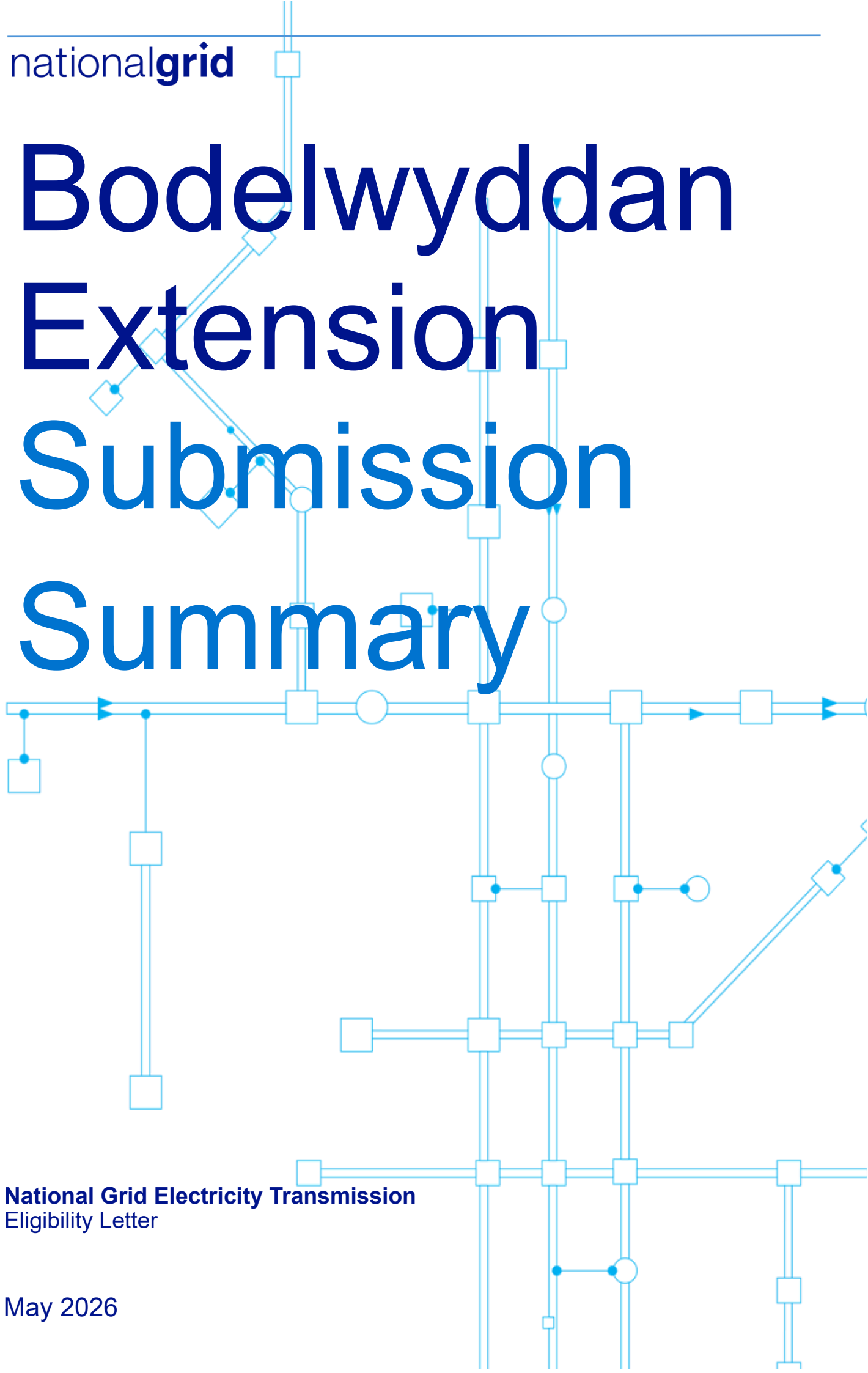


Bodelwyddan Extension Submission Summary

National Grid Electricity Transmission
Eligibility Letter

May 2026



Executive Summary

Background

This investment will reinforce the North Wales network by extending Bodelwyddan substation and delivering a new SF₆-free GIS hall and double turn-in of the existing tee'd 4ZB circuits, enabling the connection of customers.

This Eligibility Letter is being submitted as part of the RIIO-ET3 Load Reopener (LR) mechanism under Special Condition 3.18 (Load Re-opener and Price Control Deliverable) of the Electricity Transmission Licence Conditions. This submission is requesting Ofgem's approval of project eligibility against the Load Reopener criteria and seeks approval of the project's needs case and preferred solution for the Bodelwyddan Extension project. This submission further requests Ofgem's determination on the appropriate track for the project and seeks Pre-Construction Funding (PCF) under Special Condition 3.15 (Pre-Construction Funding Re-opener, Price Control Deliverable).

Investment Drivers

The primary driver is to meet the needs of customer connection requests at Bodelwyddan substation. The investment enables CP2030-critical generation capacity, directly supporting the UK Governments' Clean Power 2030 strategy. For this reason, the timely delivery of these connections has been considered critical in our optioneering.

Options

We undertook a structured, multi-factor optioneering process to identify a proportionate and deliverable solution in the interests of consumers. NESO's own CION and HND optioneering identified Bodelwyddan as the most economic connection point on the electricity transmission network for some of the connecting customers. Therefore, the use of the existing Bodelwyddan site was determined to be the preferred approach from a cost and technical perspective.

For the 13 longlisted options that we considered for delivering against the drivers, we undertook a high-level assessment against balanced scorecard criteria. From these, we shortlisted three options.

- **Option D-6:** Offline SF₆-free GIS hall adjacent to site
- **Option D-7:** Offline SF₆-free GIS hall and single-bay extension of existing GIS hall
- **Option E-1:** New AIS substation at Bodelwyddan

Preferred Solution

Based on a **qualitative and quantitative assessment of the shortlisted options**, **Option D-6 is the preferred option** because:

- The alternative GIS Option D-7 extends the existing SF₆ GIS hall, leading to an increased risk of **SF₆ emissions**. Preferred Option D-6 avoids building new SF₆ equipment.
- AIS Option E-1 would require approximately five times the land area of a GIS site, which would create significant **conflicts with other planned developments in the area**.
- AIS Option E-1 is associated with **substantial cost and programme risk**. Consequently, this option would not support CP2030 targets.