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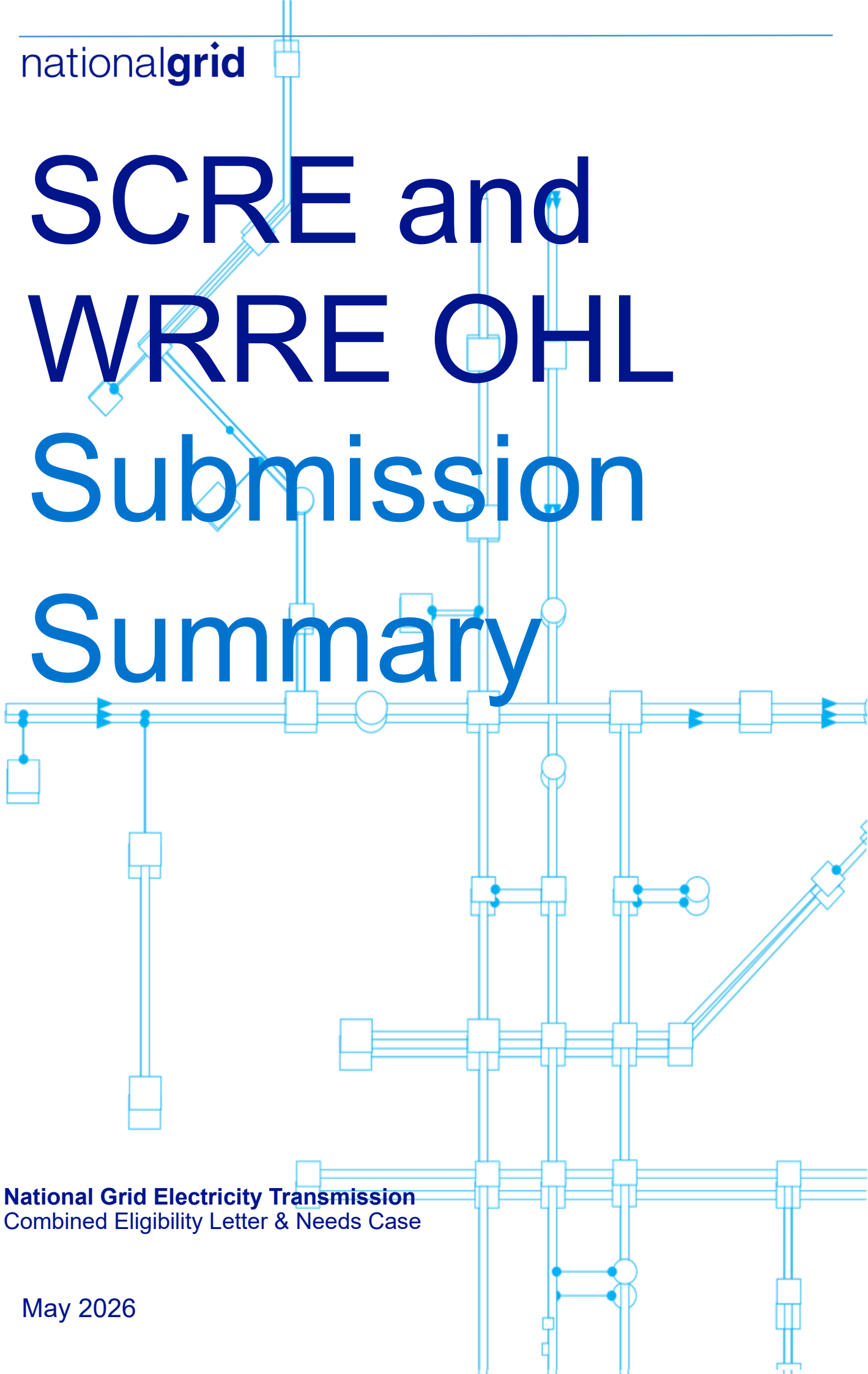
SCRE and WRRE OHL Submission Summary



National Grid Electricity Transmission
Combined Eligibility Letter & Needs Case

May 2026

T3 – SCRE (COTT4–STAY4) and WRRE (WBUR4–RATS4) OHL

Executive Summary

Background

SCRE (COTT4–STAY4) and WRRE (WBUR4–RATS4) are load-driven investments to uprate existing 400 kV overhead line (OHL) single circuits. The schemes increase power transfer capability across the B8 and B7a system boundaries and enable the EDEU (Brinsworth to High Marnham) ASTI project by providing additional power flow routes out of the High Marnham area.

This Track 3 Eligibility Letter and updated Needs Case refreshes the optioneering previously provided through the RIIO-ET Engineering Justification Process (EJP), following withdrawal of type registration for the previously preferred conductor. We are seeking Ofgem's confirmation that a combined Eligibility Letter and Needs Case submission is the appropriate route for this project, and approval for our optioneering, preferred solution and request for Pre-Construction Funding for WRRE & SCRE.

Investment Drivers

- **System need**: NESO recommendation that SCRE, WRRE and EDEU are delivered by 2028 to relieve forecast constraints driven by new generation; in combination with EDEU, SCRE and WRRE provide 1,075 MW uplift on B8, and WRRE provides 1,739 MW uplift on B7a.
- **Wider dependencies**: timely delivery supports EDEU and protects delivery of other related investments (including CGNC and EDN2) and associated ODI dates.
- **Customers**: SCRE/WRRE are treated as 'non-attributable' enabling works for a number of contracted customers; customer ACL dates are being re-tested through Connections Reform during 2026 and will be confirmed at Project Assessment stage.
- **Asset health**: works also address condition issues on the ZDA, ZDF and ZD routes by replacing/refurbishing conductors, fittings/insulation and targeted steelwork.

Options

Since the Final Determination, we have re-evaluated optioneering for SCRE and WRRE investment and removed reliance on conductors that lack Type Registration. Optioneering for SCRE and WRRE investment has been undertaken proportionately and in line with the maturity of the projects.

- Option A – Do nothing (does not meet the required 3,100 MVA winter post-fault rating / SQSS compliance).
- Option B – Hotwiring (insufficient rating).
- Option C – Power flow control devices (insufficient to resolve thermal limitation and introduces operability considerations).
- Option D – Reconductoring: longlist developed; only two options shortlisted for detailed assessment:
- Option D-1 to D- 4 options of Reconductor with different conductors.
- Option E – New 400 kV circuit (DCO / programme means it would not meet the 2028 need and has higher cost/impact).

- Option F – Dynamic line rating (not a permanent continuous rating solution and insufficient to meet the requirement).

Preferred Solution

Preferred option: Option D-1 – reconductoring with preferred option at 170°C, with full refurbishment of fittings and targeted steelwork interventions (and replacement of earthwire with OPGW where required). The preferred option meets the minimum 3,100 MVA winter post-fault requirement by 2028 using currently type-registered conductors. It is not PASE compliant (it does not select the highest rated conductor available for the existing tower type); however, NGET's qualitative and quantitative assessment identifies it as the best overall outcome when considering cost, transmission losses and network operability.

The WRRE and SCRE projects are currently planned for delivery across the 2026, 2027 and 2028 outage seasons, due to outage and supply chain availability. The commissioning date for SCRE is November 2027 and for WRRE it's August 2028. The design, surveys and procurement activities for 2026 works have already been undertaken. For 2027, these activities will progress in advance. Delivery remains dependent on system access, long-lead equipment procurement and supply chain readiness.