

Executive Summary - Major Project EJP: East Claydon - Enderby - Patford Bridge 1 And 2 Overhead Line (OHL)

Background

The East Claydon - Enderby – Patford Bridge 1 and 2 Overhead Line (OHL) project, also referred to as EBRE, involves reconductoring. The routes span from East Claydon substation to Enderby and Patford Bridge substations. The objective is to address the thermal limitations of the existing OHL infrastructure, increasing its Winter post-fault capacity from 2010MVA to at least 3100MVA to handle higher electrical loads and ensure the ongoing reliability and security of the transmission network.

Investment Drivers

The primary driver for this investment is the need to increase the B8 boundary capability by 500MW and the B9 boundary capability by 250MW, as signalled by the NOA7 refresh and with a HND essential signal. Secondary drivers include emerging asset health considerations that can be bundled with the primary driver as part of this Investment for delivery efficiency.

Options

Several options were considered to address the investment drivers with key output being to achieve the Winter post-fault capacity from 2010MVA to at least 3100MVA and pre-emptively carry out asset health related works on this route.

Preferred Solution

The preferred option involves reconductoring the East Claydon - Enderby – Patford Bridge OHL. This will increase the OHL Winter post-fault capacity for a sections of the route. This solution aligns with strategic network goals to manage increased power flows and support renewable energy integration, enhancing the reliability and resilience of the transmission network.

Timeline

The proposed completion date for this project at this stage is December 2030 as per NOA signal. Key milestones include ecological surveys, Front-End Engineering Design (FEED) activities, detailed design and site mobilization ahead of the planned outage for these works.