Port Dundas GSP Fault Level Mitigation



Reinforce without flexibility



The Port Dundas demand groups supply ca. 27,000 customers and is geographically located in the Glasgow region of SP Distribution (SPD) licence area. The GSP supplies five 11kV primary substations; Charles St, Denmark St, Flemington St, Grant St and Petershill Rd.

	Constraint	FAULT LEVEL The peak make and RMS Break fault level at the Port Dundas GSP 33kV switchboard exceeds the network design limit. During RIIO-T2 preparation we worked collaboratively with SP Transmission to undertake a whole system approach to identify the most economic and efficient solution. It was identified that a reduction in fault levels to a value less than the network design rating can only be achieved with transmission works.				
	Decision	Reinforce without flexibility SPT will replace the 120MVA SGT2 transformer with a 90MVA 275/33kV unit. The new higher impedance transformer, when in parallel with SGT1, will lower the fault infeed from the transmission system to a value less than the system design limit				
	Justification for decision	Due to the predicted increase in fault levels, operational management is not an enduring solution. Flexibility would not relieve fault level constraints.				
	Flexibility product	N/A				
	Constraint season(s)	Year round				
	Guide price	Competition closed Flexibility				
	Reinforcement timescale	2024/25 not required				

Flexibility position at March 2024	2023/24	2024/25	2025/26	2026/27	2027/28
Risk duration (hrs)					
Flexibility required (MW)					
Flexibility procured (MW)					
Flexible MW capacity met (%)					

Flexibility Tendering

Closed

We are not currently tendering for flexibility services at this location.

Technical Appraisal

More detailed technical information on the nature of the constraint, network impacts, solutions considered and selected intervention are available in this scheme's

Engineering Justification Paper

To ensure that our plans and publications cover the needs of our stakeholders, customers, and the communities we serve, we welcome ongoing feedback.

Feedback can be emailed to: systemdesignteam@spenergynetworks.co.uk