SO-TO Report Q3- Jan 2018

nationalgrid

21/12/17

Purpose:

To comply with the amended terms of the SO License Condition (4J), more specifically to provide Quarterly Report as stated in the **Parte E: Quarterly Report**, *Section 4J.25, 4J.26, 4J.27.*

Background:

The increasing interdependency between SO and TO has highlighted the need to introduce a mechanism through which the SO can fund the TO for carrying out works which lead to overall system cost savings. The SO receives a 10% share of any savings demonstrated up to a maximum of £1m. The following table provides a summary of SO-TO opportunities in Q2 of 2017/18. The initiatives identified did not go ahead because the costs were higher than the forecast overall savings, or it was not possible to resource the initiative within the timescales available.

Quarterly SO-TO Report:

Project	Opportunities	Blocker	Project Cost	Project Saving	Methodology	Project details
SHETL	Re-instating Foyers Intertrip	Beyond the 17/18 plan year network topology changes mean that the I/T will not be required. Based on historcial data arming costs of the I/T would likely outweigh any savings from the installation and the project was not progressed.	£150,000	£208,000	Re-instatement of the Foyers Operational Intertrip. Reduce system constraint costs during outage combinations on the MIS South of Fort Augustus causing potential instability at Foyers P/S. In the 17/18 plan year 61 days of outages were identified for utilization of the I/T, Identifying a forecast constraint saving of £208,000.	Re-instate scheme hardware and communications at existing substations and install new hardware and communications at Blackhillock substation. Line End Open functionality required on various 275/400kV circuits.
SPT	Eccles – Torness Cable Outage	SPT confirmed all available resource had been pledged to the project and there was no viability in reducing the duration any further.	N/A	£1.2m Per Day	NGET suggested increased resource, an increase in contractors and working hours in order to reduce the outage duration prior to release of the outage.	The circuit on outage significantly reduces the power transfer capability across the B6 boundary due to thermal limitations. Following commissioning of the 400kV cable an urgent, short notice outage was required on the circuit to investigate partial discharge issues associated with the GIS ducting.

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SHETL	Gordonbush - Douneray Outage	Discussion with SHETL to reduce Outage Duration on circuit from year ahead plan. Awaiting confirmation of TO costs/availability. DECEMBER UPDATE – By investigating alternative ways of working and tri-partite discussions with Wind Farms / TO certain outages have been significantly reduced in duration for the 2018 plan (Approx 20 days to 9 days). The majority of the saving is seen by a reduction in BCA curtailments and not constraint payments and thus not suitable for 11-4 payments.	TO Resource / Contractor Costs to be agreed	£21,000 Per Day	NGET suggested increased resource, an increase in contractors and working hours in order to reduce the outage duration during periods that key power transfer circuits are depleted.	The NW region of Scotland contains significant volumes of wind generation. Certain planned outage combinations on the MIS north of Beauly significantly reduces the export capability of the transmission system. These outage combinations are essential to provide the ongoing network reinforcements in the Caithness region.
SPT	Coylton - Kendoon - Maybole Outage	Discussion with SPT to reduce Outage Duration on circuit from year ahead plan. Awaiting confirmation of TO costs/availability. DECEMBER UPDATE – Contracts have been secured with Generators within the D+G group to manage constraints in the most cost effective manner. Discussions are ongoing with SPT to ensure outage durations are minimized but it is envisaged the TO will minimize outage durations without the need for SO/TO Incentive.	TO Resource / Contractor Costs to be agreed	£102,000 Per Day	NGET suggested increased resource, an increase in contractors and working hours in order to reduce the outage duration during periods that key power transfer circuits are depleted.	The Dumfries + Galloway region of Scotland contains significant voumes of transmission and distribution connected wind and hydro generation. Certain planned outage combinations on the MIS significantly reduce the export capability of the transmission system. These outage combinations are essential to provide the ongoing network reinforcements in 18/19 to allow more generation to connect.