



TRANSPOWER



Customer Advice Notice

To: SO Notice NZ Participants

From: The System Operator

Sent: 31-aug-2026 12:59

Telephone: 0800 488 500

Ref: 800000350

Email: NMData@transpower.co.nz

Revision of:

Revised Upper North Island Voltage Stability Constraint

Transpower, as System Operator, advises that a revision to the Upper North Island voltage stability constraint will be implemented.

The Arapuni-Bombay-1 circuit has been decommissioned.

- The constraint's equation will be updated with the removal of this circuit.

The change will take effect on 1st September 2026.

UPPER_NORTH_ISLAND_STABILITY_P_1J

$$-1 * \text{HLY_OHV1.1} + -1 * \text{HLY_OHV2.1} + -1 * \text{HLY_SFD.1} + -1 * \text{HLY_TWH1.1} + 1 * \text{OHV_OTA1.1} + 1 * \text{OHV_OTA2.1} + 1 * \text{OTA_HTU_WKM1.1} + 1 * \text{OTA_HTU_WKM2.1} + -1 * \text{PAK_WKM1.2} + -1 * \text{PAK_WKM2.2} + -1 * \text{BOB_HAM1.1} \leq 2500\text{MW}$$

The effect of this constraint is to manage flows through all transmission lines into the upper North Island region, for a contingency of either the largest connected generator or a major 220kV circuit in the region, to maintain post-contingent voltage stability.

The revised constraint will replace the following constraint:

UPPER_NORTH_ISLAND_STABILITY_P_1H

$$-1 * \text{HLY_OHV1.1} + -1 * \text{HLY_OHV2.1} + -1 * \text{HLY_SFD.1} + -1 * \text{HLY_TWH1.1} + 1 * \text{OHV_OTA1.1} + 1 * \text{OHV_OTA2.1} + 1 * \text{OTA_HTU_WKM1.1} + 1 * \text{OTA_HTU_WKM2.1} + -1 * \text{PAK_WKM1.2} + -1 * \text{PAK_WKM2.2} + -1 * \text{BOB_HAM1.1} + 1 * \text{ARI_BOB1.1} \leq 2500\text{MW}$$

If you have any queries, please email OPS.Planner@transpower.co.nz For further information on existing constraints, go to:

<https://www.transpower.co.nz/system-operator/operational-information/security-constraints>