

Frequency Operating Standards for Tasmania



TRANSEND

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Transend Networks interest in the Tasmanian Operating Frequency Standards is that it is technically feasible to implement its systems within the standard that is set.

No Change -

No Issues

Change -

Modifications to
UFLSS, OFGSS &
FCSPS



Assumptions

- Any changes to the Operating Frequency Standard will only be to the extent required to support connection of new technologies.
- Operational Constraints
 - UFLSS & OFGSS only operates for non-credible contingencies
 - FCSPPS operation does not cause UFLSS or OFGSS to operate; and
 - OFGSS operation does not result in UFLSS operation
 - UFLSS operation does not result in generator shedding.

Under Frequency Load Shedding Scheme (UFLSS)

- Preliminary studies indicate
 - UFLSS design for 1Hz operating band achievable, however it will be challenging.
 - Further studies required to define the boundaries for the technical envelope identifying where discrimination cannot be achieved.

Coordination of generator tripping for over frequency events

- Preliminary studies indicate:
 - Discrimination between the FCSPS and Over Frequency Generator Shedding Scheme (OFGSS) can be achieved;
 - New thermal plants required to be tripped above 52 Hz will need to be carefully coordinated into the over frequency tripping schedule;
 - Coordinated tripping of multiple generating units requires sufficient margin between trip settings, either in terms of a frequency or time delay offset;
 - Further studies required to define the boundaries for the technical envelope identifying where discrimination cannot be achieved.

Frequency Control System Protection Scheme (FCSPS)

- Preliminary studies indicate
 - coordination can be achieved between the OFGSS, UFLSS and FCSPS
- Transend's is not responsible for sourcing additional generation or load to relieve constraints on Basslink flow
- Transend will attempt to maximise Basslink flows utilising the loads and generation made available to the FCSPS

Implementation

- Prior to any change to the Tasmanian Operating Frequency Standards the following activities will need to be completed:
 - Perform power system studies to determine new technical envelope
 - Determine settings for each of the control systems;
 - Due diligence and approval by NEMMCO; and
 - Physical application and transition of the settings in the field.

