

Security Policy Review: Credible Event Management Frequently Asked Questions

1. *What are the key changes proposed to the credible event management policy as a result of this review?*

- The principles applied for Extended Contingent Events are amended to specify planned post event load shedding as a key mitigation measure;
- The loss of a 220kV interconnecting transformer is classified as an Extended Contingent Event;
- The loss of a 220kV or 110kV or 66kV (connected to a core grid asset) busbar section is classified as an Extended Contingent Event;
- The loss of reactive support/SVC device is classified as a Contingent Event;
- The loss of two transmission circuits on the same tower is classified as an Other Event.

2. *What impact (if any) will there be on the purchase of reserves as a result of the above changes?*

- The loss of a 220kV interconnecting transformer being classified as an Extended Contingent Event

The management of the loss of an interconnecting transformer as an Extended Contingent Event should have no impact on the amount of reserves procured.

- The loss of a 220kV or 110kV or 66kV busbar section being classified as an Extended Contingent Event;

The management of the loss of a busbar section as an Extended Contingent Event should have no impact on the amount of reserves procured.

For the majority of busbar events the existing approach of procuring reserves to manage the largest CE risk will inadvertently cover the loss of generation associated with the loss of a busbar section. There are a few notable exceptions, for example at Manapouri where the loss of a busbar section and 3 units (360MW) is likely to result in an under-frequency event that initiates AUFLS. It is anticipated that such an event at Manapouri will lead to the tripping of a 16% AUFLS block on the South Island.



- The loss of reactive support/SVC device being classified as a Contingent Event;

The management of the loss of reactive support/SVC device as an Extended Contingent Event should have no impact on the amount of reserves procured.

- The loss of two transmission circuits on the same tower is classified as an Other Event.

The management of the loss of two transmission circuits as an Other Event should have no impact on the amount of reserves procured.

3. *Should the loss of a single HVDC pole be classified as an Extended Contingent Event?*

Due to the number of single pole events recorded over the 5 year historical data set the System Operator regards that it is reasonable and prudent to consider the loss of a single HVDC pole as a Contingent Event and to procure the required reserve to manage the event.

4. *Should there be exceptions for covering all generators as a Contingent Event?*

Due to the number of generator events recorded over the 5 year historical data the System Operator regards that it is reasonable and prudent to consider the loss of a any single generator unit as a Contingent Event and to procure the required reserve.

5. *Why does the review exclude 110kV interconnecting transformers and the majority of 66kV busbar sections from further study?*

Due to the connectivity associated with 110kV interconnecting transformers and the inherent lack of security associated with the 66kV and 50kV power networks the loss of such components are likely to lead to unavoidable loss of supply. The System Operator is unable to employ operational measures to improve or maintain security of supply post event.

6. *Why does the review exclude supply transformers from further study?*

For the majority of supply transformers the System Operator is unable to employ operational measures to improve or maintain security of supply post event. The loss of the power system component is likely to lead to unavoidable loss of supply.



7. *Why does the review exclude lower voltage ($\leq 50\text{kV}$) assets from further study?*

For the majority of Transpower owned lower voltage assets the System Operator is unable to employ operational measures to improve or maintain security of supply post event.

8. *What is the process from here?*

Following the receipt of submissions, the System Operator will analyse the submissions and make any changes to its findings that it considers are required.

The System Operator will then finalise the proposed changes to the credible event management policy and include these in the annual policy statement review. The System Operator will again consult with participants on the proposed credible event policy as part of its consultation on its wider policy statement review in January/early February 2010.

The final proposed changes will be submitted to the Electricity Commission by 31 March 2010. The Electricity Commission will then consult separately on the proposed changes before making a recommendation to the Minister.

9. *When will any changes to the credible event policy come into effect?*

Any changes to the credible event policy will take effect from 1 September 2009 (which is the same time that other policy statement changes will take effect).

10. *When will the System Operator undertake its next credible event review?*

The next credible event management review is scheduled for delivery on or before December 2014.

