meridian

21 November 2017

Submissions Electricity Authority

By email: submissions@ea.govt.nz

Draft determinations of the causers of the 2 March 2017 under-frequency events

Meridian welcomes this opportunity to comment on the Authority's draft determinations of

the causers of the 2 March 2017 under-frequency events.

The first under-frequency event

Meridian supports the Authority's draft determination that Transpower, as the grid owner

that owns the Clyde-Twizel 220 kV transmission circuits, was the causer of the first under-

frequency event at 11.21 am.

The second under-frequency event

As noted by the Authority, we accept that Meridian was the causer of the second under-

frequency event at 11.24 am.

Calculation of MW lost for each event

While the calculation of the MW lost in the first event is accurate, it is based on the MW

lost at the Haywards HVDC injection point into the North Island. One potential alternative

would be to characterise the MW lost based on the reduction in the part of the grid that

suffered the under-frequency event. Under this scenario, the MW lost would be equivalent

to the transfer into the upper South Island (i.e. on the Clyde-Twizel circuits) prior to the grid

reconfiguration into two separate electrical islands and the consequent drop in frequency

in the upper South Island. Significantly more than 185.8 MW was lost under this

alternative calculation.

Phone +64-4 381 1200 Fax +64-4 381 1272 www.meridianenergy.co.nz The calculation of MW lost in the second event is accurate.

Appendix A provides Meridian's answers to the specific consultation questions.

Although not part of the consultation we query whether the Code provisions in this area would benefit from a review. This is highlighted by the difference in interpretation between the Authority and the system operator. The relevant Code provisions need to ensure that any inquiry into who is the "causer" of an event proceeds in a common sense way to determine the real or effective causer of any event. The Authority points to case law which encourages a similar approach. If the current, detailed Code provisions are not assisting in this exercise then perhaps the better way forward would be a simpler set of definitions which allow the Authority to take a more common sense approach to determine the causer of any particular event. In Meridian's view, a "causer" need not be confined to generators or grid owners, although a broader range of causers may necessitate different approaches to liability for event charges.

Please contact me if you have any questions regarding this submission.

Yours sincerely

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A. Responses to consultation questions

	Question	Response
1	Do you agree with the Authority's draft determination that Transpower, as the grid owner that owns the Clyde-Twizel 200 kV transmission circuits, was the causer of the first UFE on 2 March 2017? If not, please state your alternative view on the causer and give your reasons.	Yes.
2.	Do you agree with the Authority's draft determination that Meridian, as a generator, was the causer of the second UFE on 2 March 2017? If not, please state your alternative view on the causer and give your reasons.	Yes.
3.	Do you agree with the system operator's calculation that, for the purposes of calculating the UFE charge, 185.8 MW was lost at the North Island HVDC injection point as a result of the first UFE on 2 March 2017? If not, please state your alternative view on the MW lost and give your reasons.	Yes. However, different characterisations are possible, which would result in significantly more MW lost.
4.	Do you agree with the system operator's calculation that, for the purposes of calculating the UFE charge, 60.4 MW was lost at the Aviemore grid injection point as a result of the second UFE on 2 March 2017? If not, please state your alternative view on the MW lost and give your reasons.	