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Submissions  
Electricity Authority  
PO Box 10041  
WELLINGTON 6143

Dear Sir/ Madam

**Re: Generation Fault Ride Through**

Transpower New Zealand Limited, in its roles as National Grid Owner and System Operator, makes the following submission on the Electricity Authority's February 2011 consultation document *Generation Fault Ride Through*.

We are very supportive of the technical work presented in this consultation paper and its application to New Zealand. However, since the System Operator carried out this work, the Grid Owner has brought to its attention issues related to certain known HVDC events (specifically bipole trips and events that cause a bipole 'block') and the need to consider the implications of these for areas in close proximity to the HVDC. This has highlighted that there may be regions of the network where a more onerous requirement is necessary for connection to achieve the same level of Common Quality. In these cases, these regions and their envelopes would need to be specified separately, or, alternatively, Common Quality requirements met in other ways, such as by purchasing greater reserves. We have already begun discussions with the Authority on this matter and expect to resolve this issue with the Authority at a later date.

In converting the technical work into Code, we have noticed that there are a few areas of the proposed Code changes where we would suggest minor wording changes for greater clarification. We have discussed these changes directly with the Authority.

One particular drafting change we have indicated to the Authority is that there is an omission from the proposed Code if the de-minimus of 30 MW is applied. Clause 8.38 sub-clause (1) of subpart 2 of Part 8 needs to be amended to include clause 8.20 as an exclusion. This would allow the System Operator to request the Authority to require, on a case by case basis, an excluded generating station to comply with the fault ride through obligation.

Yours sincerely

Richard Fletcher  
Regulatory Strategy Manager

## Appendix A

### Submission questions

Question No.	Question	Response
Q1	Do you agree with the System Operator's modelling assumptions and study methodology?	Yes.
Q2	Should the fault ride through standard apply to generating stations smaller than 30 MW?	No. However, there needs to be an ability for the System Operator to request the Authority, on a case by case basis, to require excluded generators to comply with the fault ride through requirements.
Q3	Should the fault ride through standard apply to existing synchronous generating plant?	Yes, it should apply to all synchronous generating plant.
Q4	Do you agree that a single composite standard for both the North and South Islands is likely to result in increased compliance costs?	Yes.
Q5	Do you agree that the WGIP wind generation scenarios are appropriate for the NPV analysis?	No comment.
Q6	Do you agree with the Authority's input assumptions for the NPV calculations? If not, please provide alternative input values.	No comment.
Q7	Do you agree that there is a moderate to high probability of scenario B wind penetration levels being reached in the next 10 years?	No comment.
Q8	Do you agree that there would be benefits in proceeding immediately with proposed fault ride through standards or should the effective date of the proposed standards be triggered at a future date by the level of wind generation penetration?	Yes, the proposed fault ride through standards should be effective immediately.
Q9	Do you agree with the Authority's overall assessment that the proposal best meets the objective of the proposal?	Yes.