



TRANSPOWER

Keeping the energy flowing

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Cross-submission on draft Electricity Demand and Generation Scenarios

This document comprises our cross-submission on the draft Electricity Demand and Generation Scenarios (EDGS) published by the Ministry of Business, Innovation & Employment (MBIE) in April 2015.

In response to other submissions we make the following comments:

1. We reiterate that the primary purpose of the EDGS is for use in evaluating new transmission investment.

Several submitters noted that the EDGS will likely be used for other purposes. We can understand that they could be used in other contexts but we do not think MBIE should attempt to confuse the EDGS by attempting to cater for these other uses.

As we explained in our submission, we believe a better format for the EDGS is to publish a set of input assumptions that we could use to construct scenarios to “stress test” our investment proposals. This has the advantage that it allows Transpower to develop scenarios that consider regional uncertainties that may be significant for an investment proposal.

If such an approach was used then MBIE could publish some illustrative scenarios that could be better tailored for use in a broader variety of situations.

2. We encourage MBIE to continue its work on the EDGS.

Several submitters have suggested that there is no urgent need for final EDGS and that no new major capex investments are imminent. We will be investigating a number of “listed projects” over the next 6-12 months. These are large reconductoring projects required due to the condition of the existing line. These projects are significant and we are required, under the Transpower Capital Expenditure Input Methodology, to consider scenarios, in analysing these projects. Hence, it would be incorrect to view the EDGS as not having a near-term need.

The existing Statement of Opportunities, published in 2010, is now quite dated and is in need of a formal update.

3. We support MBIE taking a role in reviewing our peak forecasts and incorporating them into the EDGS.

We note that many submitters have commented about the need for regional peak forecasts to be part of the EDGS. We support MBIE reviewing our forecasts and our peak forecasts forming part of the EDGS.

A range of views are held about future levels of demand growth as expressed in submissions. Future growth is uncertain. For this reason we have adopted an approach that does not focus on solely producing a single forecast but a “plausible range” for future demand growth. By construction it considers a variety of views and approaches to forecasting demand. We consider there is merit in this approach, as there is no “ideal” or “perfect” model for forecasting demand. We hope this point is not lost in MBIE’s review process.

At GXP level disruptive technologies such as: photo-voltaic panels, batteries, and electric vehicles are likely to significantly affect GXP demand. Given the uptake of these technologies are considerably uncertain we consider that these are better considered through scenario analysis. Underlying forecasts of GXP level demand could be altered to reflect the uptake of these technologies in each scenario.

We reiterate our support of the use of sensitivity analysis and using a variety of assumptions about future levels of demand growth to test our investment conclusions.

As mentioned in our submission we intend to annually review our forecasts.

4. We support the calibration of the GEM modelling.

Meridian has suggested that there is value in calibrating the GEM modelling results against a reservoir optimisation model. We agree that there would be value in cross checking the GEM results against such a model.

Thank you for this opportunity to comment. We would be happy to discuss any part of this submission with MBIE staff.

Yours sincerely



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