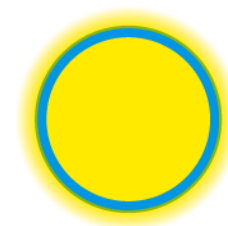


21 September 2011

Matthew Lewer  
Regulation Branch  
Commerce Commission  
PO Box 2351  
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[Sent by email to: [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz)]



Dear Matthew,

## **Submission on Consultation Paper on Electricity Volume Projections**

### ***Introduction***

1. The Commerce Commission (Commission) is seeking feedback on the suitability of Transpower's regional electricity volume forecasts for informing the 2010-2015 default price-quality path reset for electricity distribution businesses (EDBs).
2. The Commission is proposing that:
  - Transpower forecasts (once finalised) are used in the volume input to the real revenue growth projection. The main rationale is that they include more up to date inputs, therefore will address submitters concerns on this point.
  - Electricity Distribution Businesses regional forecasts are matched to regions using weights calculated from historic GXP level electricity volumes from the Electricity Authority centralised dataset.
3. The Commission is also seeking views on whether Transpower's forecasts for the peak at each GXP can be used to forecast volume at each GXP.

### ***One week is not adequate consultation***

4. The Commission has given parties one week to make submissions on its proposal. This is essentially five working days in which to review and evaluate the proposal, gather relevant evidence, and to write submissions. In Powerco's view, this timeframe is not adequate for parties to meaningfully participate in the consultation process. This is particularly so given that Transpower's forecast methodology is complex – a fact illustrated by Transpower having given industry respondents from May to 12 July to respond to the consultation document (and Transpower is still finalising the methodology and forecasts). A particular feature of the forecasts that we are trying to understand is the yearly volatility in volume growth. This is an aspect of real concern for us, and indicates that there is some part of the methodology that is unusual relative to other volume forecasts.
5. Volume forecasts have a substantial bearing on the revenue that Powerco will receive under a DPP. For such an important aspect of the DPP, it is not reasonable to expect that one week is sufficient for parties to fully form their views on the suitability of the

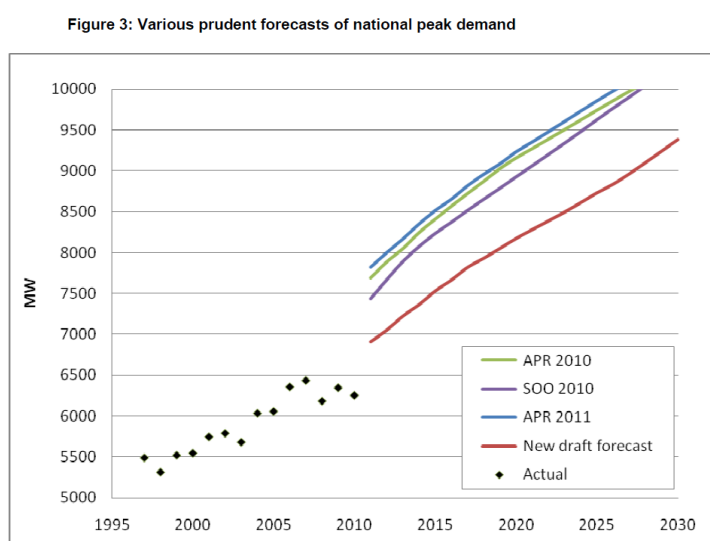
methodology and forecasts. In these circumstances, it is difficult to characterise this as a legitimate consultation process.

### **Summary of Powerco's concerns in Draft Decision**

6. On the 24 August and 5 September 2011 Powerco submitted the following concerns on the use of the Electricity Authority (Authority) volume forecasts in the real revenue growth projection<sup>1</sup>:
- the forecasts are an unjustified departure from historical rates, and this issue is caused by the use of out-dated Authority growth forecasts from 2009. Possible solutions are:
    - attempt to retrofit the Authority model by substituting the 2011 population and GDP forecasts into the Authority's 2009 throughput forecasts; or
    - use simple projections of historical trends based on actual throughput data. This is likely to be more accurate and better suited to the simple, low cost DPP process.
  - the forecasts use an inappropriate mapping of regional growth forecasts to EDB network areas; and
  - a margin for error must be included due to the inaccuracy of the smaller, regional forecasts, the historical inaccuracy of the forecast and the use of less up to date information.

### **Response to the Commission's Proposal**

7. Powerco had significant issues with the use of out-dated information in the Authority's forecast and supports using a forecast with the latest available data. This is particularly important given the variation in GDP forecasts recently due to the Christchurch earthquake and global financial uncertainty.
8. The Transpower forecast is therefore superior to the Authority forecast in this regard. Figure 3 in Transpower's consultation document demonstrates the degree of error in the Authority's forecast ("SOO 2010"), and how more realistic the Transpower draft forecast is ("New draft forecast").<sup>2</sup>



<sup>1</sup> Powerco, Submission and Cross submission on Draft Decision on Reset of 2010-2015 Default Price-Quality Path for Electricity Distribution Businesses, 24 August 2011 and 5 September 2011.

<sup>2</sup> Transpower, Draft Demand Forecast, May 2011, p14.

9. However, we have a number of concerns with the Transpower forecast. For example, it was developed by Transpower for projecting national and regional peaks over a 5-10 year time span, rather than volume growth for a more immediate time period. Mr Bull from Transpower himself noting that<sup>3</sup>:

*We should emphasize that our forecasting process is mainly aimed at projecting national and regional peak over a 5-10 year time span. It was not originally intended to provide accurate forecasts of regional demand growth over a horizon of 1-2 years (if this was our objective, we'd do things differently, including making more use of volume data from the 2011 year-to-date). In some areas the projected percentage changes from 2010 to 2011 are quite substantial, as demand moves from actuals to the beginning of a long-term trend – in practice, the transition might be slower/smoother.*

10. The forecast methodology is very complex and the limited consultation time is not adequate to unpack these concerns and fully understand the methodology. Therefore Powerco recommends that:
- a. volume in real revenue growth is based on simple projections of historical trends; and
  - b. a margin of error is included to allow for inaccuracy in the forecast.

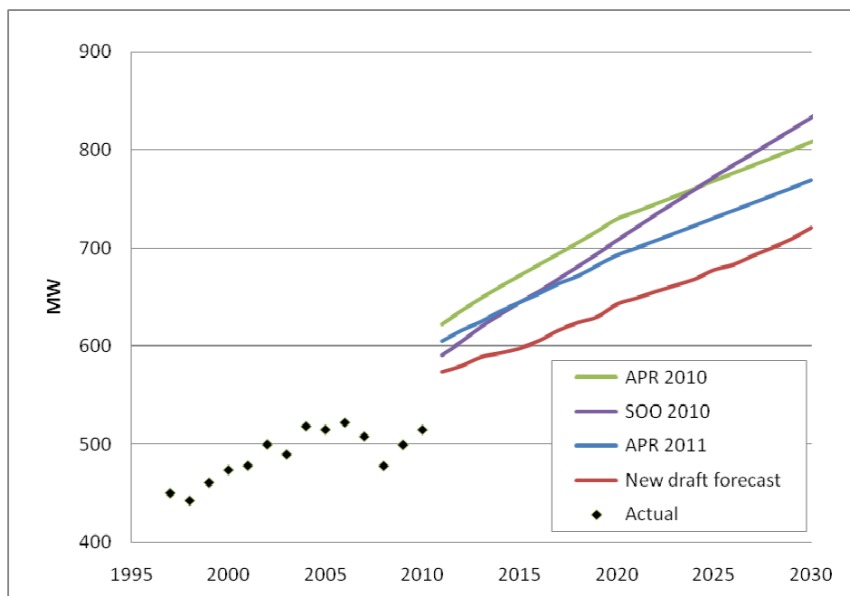
***As there has not been time to fully understand the Transpower methodology, we can not, at this stage, support its long term adoption***

11. Due to the limited time, Powerco has not been able to fully understand the complex Transpower methodology and so cannot comment on its long term suitability. Our initial observations are that:
- This is the first time Transpower has developed a comprehensive methodology for volume forecasts, so the accuracy of it is not tested.
  - Given Transpower is a regulated business and an asset manager, the modelling is likely to include inherent biases that are currently unknown. Given that Transpower uses the forecast to justify the construction of assets and it has no connection with its unit charging it would not be surprising if the forecast had an inherent bias toward over-stating future growth.
  - Transpower informs us that it is likely to change the volume forecast to use more up to date information on the impact of the Christchurch earthquakes. This may lead to allocation differences for other regions.
  - There is much variability in the regional forecasts which is concerning. For example, in 2012 volume growth in Taranaki increases by 9.6% and in Central Districts it increases by 10.1%. This may be due to Transpower adopting longer term projections and including the step changes of customers who are directly connected to the grid.
  - Transpower has used the forecast to project national and regional peaks over a 5-10 year time span. It was not originally intended to provide accurate forecasts of regional demand growth over a horizon of 1-2 years. Transpower states that if this was its objective, it would do things differently, including making more use of volume data from the 2011 year-to-date. In some areas the projected percentage changes from 2010 to 2011 are quite substantial, as demand moves from actuals to the beginning of a long-term trend – in practice, the transition might be slower/smoother.
  - This is demonstrated by Figure 10 in Transpower's consultation document that shows the very large step change expected in 2011 in the Bay of Plenty region.

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<sup>3</sup> E-Mail from Mr Bull, Transpower, to Mr Tobias Maugg, Commerce Commission, dated 19 September 2011.

Figure 10: Various forecasts of Bay of Plenty peak demand



12. Transpower's forecasts also include changes in forecast demand stemming from direct connection customers. For instance in the Taranaki region Transpower have identified the Kupe Gas processing plant as adding 12 MW of load from 2011<sup>4</sup>. This is reflected in Transpower's forecast demand and volume for the Taranaki region. The Kupe Gas Processing Plant is not connected to Powerco's distribution network and this growth in demand and volume will not flow through to Powerco's real revenue growth in this area.
13. When the Commission resets the DPP in 2014, there will be more information to better understand the accuracy of the Transpower regional forecasts.

### **Forecasting volume by GXP peak projections**

14. Powerco would support volume projections at the GXP, rather than regional, level; but only if a robust, credible and stable methodology can be developed. Given the time, we are certainly not able to comment on whether the Transpower GXP peak forecasts will hold a suitable relationship to GXP volume growth.

### **Weighting by GXP volume**

15. Powerco supports weighting by GXP volume as this is more reflective of actual revenue growth. It is important the Commission ensures that it uses the correct list of GXPs for each EDBs, and does not allocate customers who are directly connected to the grid to distributors.

### **Actual Results for 2011**

16. It appears that the Commission is considering using the Electricity Authority data adjusted for an arbitrary 25:75 split as the basis of calculating 2011 real revenue growth. It is unclear why this is being used when the Commission has now received the actual real revenue growth for each EDB as part of the 2010/2011 Electricity Information Disclosure package.

<sup>4</sup> IBID 2, page 21.

17. Using the actual 2010/2011 inputs (demand, volume and ICPs) will allow the Commission to assess whether the forecast growth from the Transpower methodology is appropriate.

### **Conclusion**

18. The forecasting of local volume and demand is a complicated and fraught process. Transpower has spent a significant amount of time and effort developing a forecasting methodology that is appropriate for their purposes. The last minute adoption of the draft Transpower methodology and the use of it for a different purpose is of some concern. Particularly when that adoption leads to significant swings in real revenue growth which are then explained away as “not unexpected” without any consideration of historic movements.
19. If there were no other choice Powerco would support the Commission using the Transpower forecasts as the inputs are more up to date and figures appear more consistent with historical trends. We also support weighting by GXP volume.
20. However, the approach still does not address the uncertainty in the forecasting. Powerco submits that the only way to address this is by a band.

Yours sincerely

A handwritten signature in blue ink that reads "Goodeve". The signature is written in a cursive style with a large, stylized initial 'G'.

Paul Goodeve  
Regulatory and Business Manager