

From: Brian Bull [Brian.Bull@transpower.co.nz]
Sent: Monday, 19 September 2011 3:10 p.m.
To: Tobias Maugg
Cc: Nick Russ; 'Paul.Goodeve@powerco.co.nz'; Charlotte Littlewood; Ian Ferguson
Subject: Volumes

Dear Tobias (cc Nick)

Just a note to let you know that we have been approached by Vector and Powerco (also cc'd) who had concerns about the ComCom's use of Transpower's regional volume forecasts in the 2012-13 price reset. We thought some good points were made, and felt we should drop you a line to comment.

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/smoothed.

More broadly, I think we all agree that the use of regional forecasts is a fairly approximate way of projecting network volumes. In some cases it can lead to problems. For instance, it may happen that the projected growth in a region is mainly driven by expected changes at one or more industrial sites, which are not actually connected to the distributor's network at all. It would then be misleading to assume that the growth rate for the distributor's network would be the same as (or even similar to) the regional growth. A similar problem can arise where new embedded generation is connected in a region, but does not go through the distributor network.

It may be possible to work around this problem, by removing known step changes from the regional forecast before calculating growth rates. But another possible approach, which I think would be preferable, would be to work from individual-GXP peak forecasts - for example Transpower's, which we'll publish in the first week of October. As discussed, you could select GXPs representing the distributor network, and use the peak forecasts for these GXPs to produce a network volume forecast (i.e. by summing the product of the peak forecast for the GXP and the historical load duration curve). This would be rather more work, but I think (without having tried it) that it could produce more accurate results for some areas.

We hope this is helpful, and remain available to talk through any queries about how the Transpower forecasts are produced.

Best regards
Brian