



# **Aurora Energy Limited**

**Submission to the Commerce Commission**

on its

**Consultation Paper**

on

**Electricity Volume Projections**

**21 September 2011**

## 1 Introduction

On 15 September 2011, the Commerce Commission released a consultation paper on Electricity Volume Projections in relation to the default price quality path (DPP) that applies to non-exempt electricity distribution businesses (EDBs). The Commission had earlier used projections of electricity volumes developed by the Electricity Authority however some submitters expressed concern that these forecasts were out of date.

The Commission has now presented draft regional electricity volume forecasts prepared by Transpower and proposes to use the final version of these forecasts to develop electricity volume projections for individual electricity distribution businesses and seeks feedback from interested parties on the suitability of using Transpower data.

The Commission will then utilise the electricity volume projections in calculating the projected variable component of Aurora revenue for the period 2012-2105 in the starting price adjustment model.

## 2 Aurora's Feedback

### 2.1 Use of Transpower Regional Throughput Volumes

Aurora's comments relate only to the data supplied for the Otago / Southland area since that is the regional area that covers the Aurora network in Dunedin and Central Otago and is the region that Aurora is more familiar with.

It is noted that the Rio Tinto Tiwai smelter is included in the Transpower data for Otago / Southland and we assume that volumes for other large direct connects are also included in their relevant regional data. For the volume data now proposed to be used by the Commission, the percentage changes in the Otago / Southland data for the 2008/09 year (-7.6%), 2009/10 year (-2.3%) and the recovery in the 2010/11 year (11.7%) are predominantly as a result of the rectifier failure at Tiwai in Nov 08 and the subsequent recovery to normal output when a replacement rectifier was installed. As the growth for the years 2010/2011 to 2014/2015 is utilised in the reset model then the recovery at Tiwai for the year ending 2010/11 needs to be adjusted to remove the effects of the strong recovery at Tiwai following the reduced throughputs in 2008/09 and 2009/10.

Aurora submits that the use of the updated Transpower regional data is an improvement on using the previous outdated Electricity Authority data for the 2010-2015 Default Price Path. However Aurora also reminds the Commission that this is one area where more analysis of other options is required to be carried out prior to the 2015-2020 regulatory period.<sup>1</sup>

Aurora also reminds the Commission that it would be very concerned if **Transpower GXP throughput data** was utilised for each EDB for the 2010-2015 regulatory period

---

<sup>11</sup> Aurora submission to Commerce Commission on its Draft Decisions Paper dated 24 August 2011

because Aurora has a considerable amount of embedded generation. Consequently the GXP throughput data can vary considerably on a year to year basis depending on hydro inflows plus greater amounts of wind generation are being embedded each year.

Given the time available to finalise the Reset Decision for the 2010-2015 period Aurora is comfortable that the Transpower regional throughput data is a suitable proxy for the throughput changes likely on the Aurora network **but only if the effects of the Rio Tinto smelter at Tiwai on the Otago/Southland regional throughput data is removed**. It should be a relatively simple task to ask Transpower to remove the effects of Tiwai from the volume projections.

### 2.1.1 Match Regional Forecasts to EDB areas using weights calculated from the EA Centralised Datasets

Aurora understands that its network area is totally within the Otago / Southland region and therefore no weighting calculation is required.

### 2.1.2 View on Peak Demand – Volume Relationship

Aurora agrees with the Commission's view that the relationship between GXP peak demands and GXP throughput is NOT sufficiently stable to provide reliable forecasts for electricity volumes forecasts at a GXP level. Aurora has a high level of distributed generation connected to its network. There is a total capacity of 92MW<sup>2</sup> of distributed generation (DG) for a network peak demand of about 300MW. Thus Aurora's offtake demand at the GXP level could vary from 208MW to 300MW in any year depending on fuel availability for the generators.

A significant portion of this DG plant is incentivised to only operate at peak system loads and will operate for a relatively short time. Therefore changes in Transpower offtake demands (MW) will not necessarily be reflected in the same change to Transpower offtake electricity volumes (GWh). In addition hydro generators are affected by water availability (in low hydro scenarios - Transpower demands are likely to increase or in wet years - Transpower demands will reduce) and the wind generation will be affected by annual variations in wind patterns.

---

<sup>2</sup> Aurora Asset Management Plan 2011 page 15