



Mr Gary Henry
Director
Queensland Competition Authority
GPO Box 2257
BRISBANE QLD 4001

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Dear Gary

Benchmark Retail Cost Index for 2009/2010 – NEM Load methodology

I refer to the QCA's Consultation Paper released on 8 May 2009 and the accompanying document provided by ACIL which provides an outline of a proposed methodology for determining the NEM Load trace. AGL notes that ACIL has not provided its draft load trace for public consultation at the time of making this submission.

Summary

AGL is pleased to note that the QCA will publish the draft load traces developed by ACIL for comment. While the methodology outlined by ACIL appears to have merit, AGL needs to see the detail of the load trace developed by ACIL, including:

- The Total Queensland Load (**TQ Load**) trace, with detail as to how that was 'scaled' over the years;
- The aggregated Direct Connect load (**DC Load**) trace, with detail as to how that was 'scaled' over the years;
- Historical half hourly data on the TQ Load and historical half hourly data on the aggregated DC Load. The provision of this historical data is essential to facilitate a proper analysis of the NEM Load.

AGL notes that there is incontrovertible evidence which demonstrates that the NEM Load has become peakier over the relevant period, and further, that the Statement of Opportunities (**SOO**) and Powerlink Annual Performance Report (**APR**) have consistently forecast, by reasonable implication, such a degradation in load factor in the NEM Load. AGL would therefore expect to see such a trajectory reflected in the draft NEM Load trace released for comment by ACIL.

AGL notes that ACIL have suggested that the spot price trace needs to be re-done on the basis of the NEM Load. This is not the correct approach – as was discussed at some length in the recent Supreme Court hearings, the spot price is always derived from the entire Queensland load.

- > Being selected as a member of the Dow Jones Sustainability Index 2006/07
- > Gaining accreditation under the National GreenPower Accreditation Program for AGL Green Energy®, AGL Green Living® and AGL Green Spirit
- > Being selected as a constituent of the FTSE4Good Index Series

Trajectory of NEM Load across relevant period

ACIL have outlined the process in respect of the 2008/09 and the 2009/10 NEM Load trace. However, AGL now understands that this is the methodology that will be used to produce:

- the 2007/08 NEM Load and the 2008/09 NEM Load for the purpose of the 2008/09 BRCI. This means that it would be developing the:
 - 2007/08 NEM Load with reference to information it had at the time of making the 2007/08 Determination (23 May 2007); and
 - 2008/09 NEM Load with reference to information it would have had at the time of making the 2008/09 Determination (April/May 2008);
- the 2009/10 NEM Load, with reference to the most up to date information in forecasting that load (namely the 2008 SOO and APR). The 2008/09 NEM Load used in the 2008/09 BRCI will then be used for the purpose of the 2009/10 BRCI.

AGL notes in this respect that:

- In March/April 2007, the most recent SOO was the October 2006 SOO, and the most recent APR was the June 2006 APR (note that the information in the APR is the information NEMMCO use in the SOO). These are the documents that must form the basis of any forecasting of the 2007/08 NEM Load. These documents show the following:

2006 forecasts - form basis of 2007/08 NEM Load

Source: 2006 SOO and APR	2006/2007	2007/2008
TQL Max Demand	9168	9597
<i>Annual change</i>		4.68%
TQL Average	5638.0	5895.8
<i>Annual change</i>		4.57%
DC at Max	1146	1170
<i>Annual change</i>		2.09%
Load Factor - 2006 SOO forecast	61.50%	61.43%
		-0.06%

- In March/April 2008, the most recent SOO was the October 2007 SOO, and the most recent APR was the June 2007 APR. These are the documents that must form the basis of any forecasting of the 2008/09 NEM Load. These documents show the following:

2007 forecasts - form basis of 2008/09 NEM Load

Source: 2007 SOO and APR	2007/2008	2008/2009
TQL Max Demand	9461	9883
<i>Annual change</i>		4.46%
TQL Average	5813.1	6065.0
<i>Annual change</i>		4.33%
DC at Max	1244	1247
<i>Annual change</i>		0.24%
Load Factor - 2007 SOO forecast	61.44%	61.37%
		-0.07%

- At the present time, the most recent SOO is the October 2008 SOO, and the most recent APR is the June 2008 APR. These are the documents that must form the basis of the forecasting of the 2009/10 NEM Load. These documents show the following:

2008 forecasts - form basis of 2009/2010 NEM Load

Source: 2008 SOO and APR	2008/2009	2009/2010
TQL Max Demand	9652	10129
<i>Annual change</i>		4.94%
TQL Average	6078.5	6307.3
<i>Annual change</i>		3.76%
DC at Max	1239.46	1253.03
<i>Annual change</i>		1.09%
Load Factor - 2008 SOO forecast	62.98%	62.27%
		-0.71%

An analysis of these trajectories clearly indicates that:

- Powerlink and NEMMCO consistently, year after year, forecast the TQ Load to become peakier in subsequent years – with maximum demand growing at a consistently greater rate than the average demand;
- The DC load, at the time of system 50 POE maximum demand, remains almost stable across the years, and certainly grows much more slowly than any of the other parameters under consideration. Given this, and what we know of the nature of the DC load (ie comprised of customers such as smelters etc), AGL believes it must inferred that the same is true of both the DC maximum demand and the DC average demand.

It must therefore inferred from the APR that the DC maximum load and energy are growing at a much slower rate than the respective MDs and energies of the NEM Load or the TQ Load. This must mean that the NEM Load maximum demand will grow at more than the TQ Maximum Demand, and thus will become peakier across the relevant period.

Methodology suggested by ACIL

While AGL has some concerns with the methodology outlined by ACIL, it agrees that such an approach **may** be capable of producing an acceptable load trace **if applied correctly**, and in such a way as to ensure that the ‘manipulation’ of data (through the imposition of constraints and non-linear scaling methods) is performed with a view to achieving a ‘correct’ result, namely one which corresponds with the historical shape of the NEM Load and the relevant SOO and APR forecasts. AGL makes particular note of the following:

- ACIL stated that *‘the increase in large [TQ Load] demand should not be assumed to be the increase in the maximum demand for the small [NEM] load’*. However, as outlined above, it **must** be assumed that the NEM Load maximum demand is in fact growing at a **higher** rate than the TQ Load maximum demand, because the DC load is growing relatively slowly;

- AGL is very firmly of the view that the NEM Load that is developed by the method suggested by ACIL should be tested against the NEM Load 'shape' from the previous calendar year – ie derived by simply subtracting the actual half hourly DC load (from the previous years) from the actual half hourly TQ Load (from the previous years). A strong degree of correlation in the shape would clearly suggest ACIL had applied the method correctly, while any substantive deviations in the shape would evidence an incorrect modelling approach by ACIL.
- The ACIL paper appears to suggest that the spot price needs to be derived from the NEM Load. This is not the correct approach – as was discussed at some length in the recent Supreme Court hearings, the spot price should always be derived from the entire Queensland load. Therefore, AGL suggest that:
 - The spot price trace for 2007/08 must be developed using the TQ Load for 2007/08 and the data that was available at the time the 2007/08 decision was made;
 - The spot price trace for 2008/09 must be developed using the TQ Load for 2008/09 and the data that was available at the time the 2008/09 BRCI was determined;
 - The spot price trace for 2009/10 must be developed using the TQ Load for 2009/10 and most recent data – which should largely be the same as that most recently published by CRA for consultation in the Draft Determination.
- AGL assumes that the ACIL approach does in fact maintain the relationship between the TQ Load at a particular time and the DC load at that same time – ie that the 'subtraction' of the load to develop the NEM Load is not performed on the basis of a Load Duration Curve. This is essential, as there is no obvious reason to believe that the load shape for the TQ Load and the DC Load will be correlated – for example, reasons they are highly unlikely to correlate include
 - directly connected loads are temperature insensitive – eg smelters; and
 - some very large customers have the ability to reduce their consumption at times of high demand and high price.
- AGL is concerned to see that ACIL appear to be adjusting only the top 400 half-hours of demand for the 10 POE and 50 POE. This risks failure to appropriately adjust the winter demand peaks, and therefore risks a 'flattening out' of the winter shape.
- AGL suggests that care needs to be exerted when building into a model 'constraints' such as that proposed in respect of the minimum expected demand for the NEM Load. AGL would wish to see a very clear explanation of how this was managed, and again reiterate that any deviation from the shape of the actual NEM Load would indicate an incorrect application of such constraints.



Appropriate treatment of 'additional' TNI

The QCA has identified through the course of the 2009/10 BRCI process that the 2007/08 BRCI and 2008/09 BRCI incorrectly included in the NEM Load an additional TNI (thereby increasing the volume of the NEM Load).

In order to comply with the recent decision of the Supreme Court, the QCA must include this additional TNI in its re-calculation of the NEM Load for the purpose of the recalculation of the 2008/09 BRCI, and exclude it for the purposes of the 2009/10 BRCI.

AGL looks forward to discussing these matters with you further, and believes that an iterative process with the QCA, and even more importantly, its consultants, is essential to the resolution of these outstanding issues. I also note that there is the outstanding issue of the appropriate means of correction for the customer acquisition costs in the calculation of the 2008/09 BRCI.

I will be in contact with you shortly to discuss the approach from here.

Yours sincerely,

Beth Griggs
Head of Regulated Pricing