Rationalisation Working Group

Minority View Paper

Demand Bids

For EGEC Consideration

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Introduction

This paper has been prepared by Jason Franklin and Ralph Matthes. It is a minority view paper regarding the Rationalisation Working Group decision made on 5 April 2001 in relation to the requirement of demand bids under the new combined, mandatory rulebook.

The majority decision of the RWG on 5 April 2001 was to retain the mandatory requirement for demand participants to provide demand bids. The only change to the current NZEM requirement was that pricing of the bid quantities would be optional. If no price was specified, then a default number, most likely 'positive infinity', would be allocated to that particular demand bid tranche. This recommendation will be made to the Electricity Governance Establishment Committee (EGEC).

Both Jason Franklin and Ralph Matthes firmly oppose this recommendation. An alternate set of recommendations for EGEC to consider is set out below. Also below is a background of this issue, which the authors believe supports the minority view recommendations.

Minority View Recommendations

1. There is to be no requirement for demand participants under the combined, mandatory rulebook to provide demand bid information. The single exception will be a requirement to advise the CQC of any anticipated demand deviations of greater than +/– 70 MW, for grid security purposes only.
2. Aggregate demand forecast information to be provided by a Service Provider[1] to the EGB.
3. Cost allocation to align to that agreed to for Common Quality Dispatch.
4. Aggregate demand forecast period range to match the existing Pre Dispatch Schedule period range.
5. A residual requirement to remain on demand participants.

Executive Summary

Requiring demand bids, as part of the combined mandatory rulebook, is less accurate and efficient than a central demand forecast. It will not facilitate demand side management, but will instead continue to inhibit demand participating in the electricity market.

The legal implications of mandating this onerous requirement, with no identifiable benefit to the submitter, are very different to that under a voluntary trading arrangement such as the NZEM.

There is, and will continue to be, inconsistent treatment regarding demand bid requirements between large consumer demand and distribution companies. This questions its legitimacy and seriously undermines the argument for mandating demand bids.

The minority view recommendations above will lead to a more favourable outcome and can be implemented as part of the new arrangements. A service provider, correctly incentivised, will assist in significantly improving this aspect of the new arrangements.

[1] Not necessarily the CQC – should be contestable.

<u>Arguments for the retention of demand bids: -</u>

The members of the Rationalisation Working Group who proposed the retention of the demand bid requirement set out five basic arguments. They are detailed below with a rebuttal of each set out in the next section.

1. Facilitation of Demand Side Management

Removing the requirement on demand participants to provide demand bid information would send a dangerous signal to political masters. The Government Policy Statement requires the development of demand side participation in the industry, and the removal of demand bids could be seen as taking away the one participation tool available to them. Politically, removing demand bid requirements is too dangerous.

2. The Pre Dispatch Schedule (PDS) information is useful

The PDS information is used by generators to optimise the use of their resources. It gives an indication of the likely quantities a generator will be dispatched for, up to the end of the following day. Each generator receives from the dispatcher their own PDS, plus the aggregate PDS. A reasonable assessment of likely dispatch levels can be identified if they do not anticipate being the marginal generator for prolonged periods. This is especially important for the hydrology management, where water may need to be released from upstream control gates in order to meet future generation requirements.

From a national benefit viewpoint, there is hidden value to demand participants / consumers in providing this information for generators to better optimise their resources. If information was not available, the generators may have to factor into their generation offers the cost of inefficient resource usage. This would increase the marginal cost of electricity to consumers.

3. Removing Demand Bids – beyond RWG Terms of Reference

Removing demand side bids would be outside the terms of reference of the RWG. The RWG has to take a baseline approach, merge the rulebooks with minimal change. This issue can instead be put into the development plan for the incoming EGB.

4. Correct Accountabilities

By putting this requirement on the demand participants, the people closest to the information are incentivised to provide the data. Prior to this accountability being put on demand participants (pre NZEM), Transpower provided demand forecasts and the results were poor. They took no responsibility for demand forecast accuracy. Giving this back to Transpower or a service provider would be a major step backwards for the industry.

The industry has to also take a long term view – with the correct accountabilities in place, this may lead to improvements, e.g. it may incentivise retailer to install new technology meters in order to be able to better predict their retail demand.

5. Accuracy

Aggregation of demand bids from each grid exit point is more accurate and reliable than Transpower's centralised forecast. The main reason for this is that the Transpower centralised forecast relies on a seasonal re-allocation to push the centralised forecast to grid exit points.

Arguments for abolishing the requirement for demand bids: -

Firstly, we will address the five points above, and then outline further reasons why demand bids should not be required in the combined, mandatory rulebook.

1. Facilitation of Demand Side Management

Demand bids do not facilitate demand participation nor demand management. After consulting all major users with current NZEM arrangements[2] (predominately purchase via an agent) the unanimous verdict is demand bids are counterproductive, do not facilitate demand side management, and they should be abolished under the combined, mandatory rulebook.

Having to provide demand bids inhibits demand side management. Unlike some of the other parties who have this demand bid requirement (e.g. vertically integrated generators), demand consumers do not have numerous spot market traders/administrators within their organisations. Electricity is one cost input. In some cases it may represent a significant proportion of costs, however it is not their core business. Therefore, large demand consumers believe the amount of resource required to meet the current and proposed requirements for demand bids, including the compliance regime around it, diverts resource which would be better focused to actually participate and better manage electricity consumption and costs. Clearly, the demand bid requirements are counterproductive to demand side management.

We believe that by incorporating the existing NZEM requirements into the single, mandatory rulebook, there will be an increase in compliance cost for the demand side.

While some proposing the retention of demand bids are concerned at the political signals associated with scrapping the requirement, we believe there are more serious political signals that will be sent should the requirement remain. It is certain that this would become a major issue at a Commerce Commission conference.

No justification within the RWG has been mounted for retaining mandatory demand bids on the basis that they will/do facilitate demand side management.

2. The Pre Dispatch Schedule (PDS) information is useful

While generators derive benefits from the information in the PDS, after consulting all major users with current NZEM arrangements, the unanimous verdict was the PDS provides them with no useful information. This also extends to the NZEM Forecast Prices, which are also derived from demand bid information. The NZEM Forecast Prices are now completely ignored in favour of Dispatch Prices, which are provided from Transpower's central forecast of demand.

As part of the recommendations proposed above, demand quantity data would continue to be forecast and provided. We believe it would be more accurate to forecast this centrally, as opposed to building up individual demand bids (see Accuracy below). As a result, generators would receive more accurate demand forecast information and be able to improve their resource optimisation.

The primary beneficiaries of demand forecast information are generators. The hidden benefit argument (see above) would need to be better quantified and clearly

[2] BHP NZ Steel, Comalco, Carter Holt Harvey, Norske-Skogg, Pan Pac Industries

demonstrated, probably to the Commerce Commission, before it can be argued that demand participants are the primary beneficiaries.

3. Removing Demand Bids – beyond RWG Terms of Reference

The RWG terms of reference do not mandate a baseline only approach. It is clear that there are clear benefits in adopting a more efficient approach to demand forecasting. There is also the possibility that the onerous requirements placed on demand participants will not meet the public benefit test under the Commerce Act (see below).

The 'baseline only' approach adopted for this issue contradicts other major, material changes made by the RWG (by significant majority) in combining and rationalising the existing three rulebooks into one combined, mandatory rulebook. Some examples of this are: -

- decision to move to a mandatory gross pool for reconciliation and settlement
- decision to remove the ability to de-energise for default of prudentials
- exemptions and a transition period for generation offers, driven from a need to satisfy concerns regarding embedded generation.

4. Correct Accountabilities

We do not agree with the accountability argument (above). It is not appropriate to put the accountability on demand participants, as: -

- the prime beneficiaries of demand forecast information are generators
- it will be more economically efficient for one party to centrally forecast demand, as opposed to numerous parties attempting to do so.

More efficient accountabilities could be place on a Service Provider to provide an accurate forecast of demand.

5. Accuracy

A test of the accuracy of demand bid aggregate information verses centralised demand forecast information is obtained by comparing NZEM Forecast Prices to Dispatch Prices. Demand actions taken by major users rely on Dispatch Prices, not NZEM Forecast Prices. Historical experience has led to Dispatch Prices becoming the main price predictive tool, with NZEM Forecast Prices being wholly ignored.

A Service Provider, with the correct accountabilities within their contract, will have the potential to forecast demand better than both the existing demand bid aggregate and the Transpower central forecast. They will be incentivised to develop accurate modelling tools, and ensure their forecast deviations are minimised through close monitoring and refinement.

<u>Further justification for abolishing the requirement for demand bids</u>

6. Commerce Commission authorisation

It is questionable whether the mandatory requirement for demand bids will meet the public benefit test before the Commerce Commission. While this issue was discussed at the RWG meeting, the assessment has not been made by the RWG or the Project Team. While the onerous requirements on demand participants, for which they derive no clear benefit, may be present within the NZEM voluntary trading arrangement, the combined rulebook will be mandatory and will be subject to the Commerce Act

There may also be an issue about whether publication prior to dispatch prices being settled, for the pre-dispatch schedule, is pro-competitive (or a price discovery mechanism without any effect on price) or whether it assists generators to devise strategies to increase prices.

7. Grid Security requirement

The decision by the RWG for mandatory demand bids was not justified on the basis of being required in order to maintain grid security. Also, as part of the NZEM Demand Side Participation sub-group considerations, Transpower raised the issue that the dispatcher may require demand information, or anticipated demand response to prices, in order to maintain grid security. Neither the NZEM sub-group nor the RWG have been presented with information or justification from Transpower. If this is a potential problem, the dispatcher should provide the justification. In the absence of this information, we have provided in the recommendations above a +/- 70 MW deviation. This is consistent with the NZEM Demand Side Participation sub-group recommendation.

8. NZEM Demand Side Participation sub-group

As mentioned above, a subgroup of the Market Price Working Group investigated the issue of demand bids during 2000. A major electricity user was represented on that subgroup. We believe the recommendations in this minority view paper to EGEC are completely consistent with the recommendations of that sub-group. The NZEM Rules Committee has not approved the sub group recommendations.

9. Retail Competition – Line/Energy Split

An additional complexity in deriving demand bids has been added in recent times. With the requirement for line and energy retailer to split, and the advent of retail competition, the forecasting per grid exit point has become more difficult. For example, an incumbent retailer has to bid the net position, that is, only their consumer demand. The accuracy of that grid exit point demand forecast is now reliant on the estimates being made by other retailers at that grid exit point. One retailer may provide a best estimate of demand, where the balance may take little care, leading to a total demand forecast for that grid exit point probably less accurate then what was the case before the line / energy split.

10. Distribution Company treatment

Many distribution companies control interruptible load within their network. Under the current and proposed mandatory arrangements, it appears they are/will not be required to provide demand bids to the dispatcher. Legislation forbids distribution companies trading in electricity, so offering of demand bids seems to imply a trading arrangement. Having a rule for one type of party and being unable to require compliance by another significant type of party further illustrates the inappropriateness of the demand bids regime.

The legitimacy of the requirement for demand bids is seriously undermined with the significant inconsistent treatment.