

Electricity Supply Industry Planning Council

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28 September 2007

Mr Ian Woodward
Chairman, Reliability Panel
Australian Energy Market Commission
Level 5,
201 Elizabeth Street
SYDNEY NSW 2000
Submissions@aemc.gov.au

Dear Mr Woodward,

RE: COMPREHENSIVE RELIABILITY REVIEW

Following the public forum held in Melbourne in September 2007, the Planning Council would like to take the opportunity to provide a final summary of its position with respect to the Reliability Panel's Comprehensive Reliability Review.

The Planning Council fully supports a Comprehensive Reliability Review that considers the most efficient mechanisms for managing the reliability risks in the market and which provides appropriate protection for consumers in terms of reliability of supply.

The Planning Council analysis, as previously presented to the Panel, indicates that the current reliability settings in the market are unlikely to deliver sufficient new capacity to ensure that the level reliability, as described in the Reliability Standard, is achieved.

However, the shortfall in capacity identified by the Planning Council's modelling is only modest and the Planning Council recommends, therefore, that any adjustment to the current reliability mechanisms should be proportionate to this modest shortfall.

While the three reliability mechanisms: VoLL, the Cumulative Price Threshold (CPT) and the Reserve Trader represent market interventions, they act to effectively control high prices and the associated financial risk, providing protection to retailers and customers while still delivering signals for new investment.

The Planning Council contends that modest changes to the three existing mechanisms will be sufficient to balance the competing interests of managing risk and providing sufficient pricing incentive to encourage new entrants.

EXISTING MARKET MECHANISMS

VoLL

By limiting the highest possible price in the market, the price cap (or VoLL) manages the short term risk exposure of market participants. In doing so it enables the development of rational and economically efficient financial instruments in the associated financial market. However, the cap reduces the potential revenue that a generator can receive. Described by the Reliability Panel as “missing money”, this reduction in the peak price affects all market participants and reduces the effectiveness of the signal for new capacity. While there is considerable debate about the adequacy of VoLL as a trigger for new investment, a mechanism such as this without some method of indexation will inevitably become less effective over time.

The Planning Council supports the continued use of VoLL as a price cap that helps to manage market exposure, but contends that, in order to avoid limiting investment signals over time, VoLL should be indexed to escalate in line with increases in the cost of supply.

Cumulative Price Threshold

The CPT applies to minimise the aggregate risk to participants during a prolonged period of high prices and acts akin to a force majeure or market suspension provision in other places. The current level of the CPT has never been applied in practice, although the threshold has come close to being reached on several occasions. This would appear to indicate that the current setting for CPT is appropriate although it too should be escalated in line with VoLL to maintain those relativities.

Triggering the CPT results in the application of an Administered Price Cap (APC). The level of prices set by the APC must be commensurate with both the operating costs of the generators and the exposure of the retailers and warrants a careful review. Of greater concern is the operational uncertainty of its application: whether compensation would apply and how it is to be guaranteed and distributed is of particular concern as participants seek to quantify their risks.

The practical implementation of the APC may also be problematic. It is currently unclear what the behaviour of generators or demand side participants may be if the prices set under the cap are lower than their market offers. If the compensation arrangements are not clear, participants may withdraw from the market when the APC

is applied, worsening an already difficult situation, and wait to be directed by NEMMCO where their rights to compensation are more clearly defined.

The Planning Council encourages the Reliability Panel to consider clarifying the *Rules* in relation to the application and practical operation of the CPT and APC.

Reserve Trader

The Reserve Trader is also a market intervention that is clearly designed to assist in maintaining an electricity market that supplies energy to customers in accordance with the Reliability Standard.

The Reserve Trader provides a reasonable balancing response to the CPT/APC and VoLL mechanisms and ensures that where a price cap may reduce the incentive on participants to invest in new capacity the Reserve Trader provides a balancing signal by providing an advanced indication of a potential capacity shortfall and some compensation to any new capacity made available. However, the implementation of the Reserve Trader does warrant some review.

While the Reliability Panel appears to have accepted the need to modify the implementation of the Reserve Trader mechanism, the Planning Council does not believe the proposed changes as a result of the establishment of the RERM will prove to be an efficient solution.

To begin with, the Planning Council has several issues with the interpretation of the Reliability Standard into operational mechanisms on which the Reserve Trader / RERM will act. The 0.002% USE benchmark as defined in the Reliability Standard can only be viewed as a planning standard and must be converted into operational measures against which, over various assessment time frames, decisions to act can be made.

The appropriateness, consistency and transparency of the method of interpreting the USE benchmark into a Reserve Margin is absolutely critical. Since the start of the market this process has been performed by NEMMCO three times and a different methodology has been used on each occasion. Indeed not only has the methodology varied, but the interpretation of the USE benchmark and the application of the calculations to the establishment of a reserve margin in each region has also been different. For example, the current treatment of interconnectors in the calculation such that they are arbitrarily included in the reserve calculation of some regions and excluded in others creates understandable confusion and has the potential to have very real financial impacts in the way that reserve contracts are funded.

The Planning Council strongly recommends that the Reliability Panel place more emphasis on the consultative development of a more appropriate process for the interpretation, establishment and application of the Reliability Standard.

Since the start of the market requests have been made of NEMMCO by the Reliability Panel and others to provide interpretations of the Reliability Standard for all of the operational timeframes in which market notifications are provided. Operational

decisions by generators, retailers and customers can only be based on appropriate information from NEMMCO and the PASA information is a key element in those processes. To date, no reserve margins have been established that apply to the different time-based PASA periods. Rather, the market currently relies on the assumption that NEMMCO'S interpretation of the USE benchmark for the 10 year planning horizon is also appropriate for periods as short as eight days which is the start of MTPASA.

If we now ignore the deficiencies associated with the processes for the establishment of the reserve margins the Planning Council further notes that, when a reserve deficit occurs, sufficient capacity to balance that deficit is not always procured.

Not procuring sufficient capacity to balance the deficit, will immediately increase the risk of breaching the USE levels in the reliability standard and reduces the available incentive to deliver additional long term capacity. While this action may reduce the cost to customers of the Reserve Trader it may not be an appropriate compensation for the increased risk and lost market development incentives. Without compensation to these new sources of capacity under some sort of ongoing arrangement new sources are unlikely to be developed. The proposed changes to the Reserve Trader would provide little additional incentive to any participant considering expenditure. This is particularly true with respect to the development of an enhanced demand side response.

The regionality and cost allocation of the RERM is another area on which the Planning Council would like to register concern. Clearly one of the main objectives of the RERM and the Reserve Trader is to procure reserves at the lowest possible cost. However, the specification that these tools only operate regionally will significantly compromise the cost minimisation objective and reduce the overall market efficiency. Offers from outside a region must be considered in the analysis providing the network can deliver those reserves to the region. The cost allocation of the services should be considered separately. Having purchased the necessary levels of reserve, those reserves should be recognised as supplying a shared service, within the constraints of the network, to the market nationally. The cost of the provision of those reserves therefore should be recovered on that basis and this could theoretically also incentivise network investment. (The strong regional focus on the Reserve Trader and its cost recovery is not technically correct and needs to be seriously reviewed.)

The proposed new RERM extends the tendering process for additional capacity by three months over the six months already allowed in the Reserve Trader provisions. The Planning Council is of the opinion that an extension of this nature is unlikely to deliver any material improvement to the process. While the RERM is a non-continuous, intermittent process NEMMCO'S most appropriate action is to repeatedly encourage the market to deliver an appropriate response, leaving the contracting process to the last possible moment, making a six or nine month time allowance largely irrelevant.

The current arrangements do not provide adequate incentives for proponents to deliver long term competitive solutions. Potential suppliers have only a very limited time

available to them over which the expenditure required to provide the reserve capacity can be recovered. In order to make capacity available to the market, many proponents would require a modest level of investment in infrastructure and systems. With only a singly year's reserve contracts to cover the expense and inconvenience, many proponents would have no incentive to make such an investment.

Driven to a large extent by the current MTPASA process is the implicit assumption that the Reserve Trader / RERM will only be needed in the peak summer demand periods. However, the complexity of scheduling maintenance in off peak periods is increasingly testing this assumption. The Planning Council considers that there is a strong argument for the existence of a standing contract for reserve capacity. During periods where there is significant reserve capacity, the value of the standing contract would be low as a result of competition. Where a reserve shortfall is indicated all proponents have the incentive to examine their positions such that more capacity may be delivered. Such an ongoing competitive process should enhance the market response to a capacity shortfall by providing increased revenue certainty and reinforces market efficiency.

Participants considering making capacity available in response to a standing contract could reduce the arming charges for their services to a minimum and focus more on recovering their costs through their per MW standby charges and per MWh charges for energy curtailed. As such, the burden on customers for the reserve capacity could be minimised and the potential available capacity maximised. The costs to the participant could be more effectively distributed over a longer term providing investment certainty.

The market outcomes, in terms of price signals, as a result of using the capacity secured by the standing contract would be no different with NEMMCO offering this capacity in at VoLL. Potential investors in new generation capacity would be unaffected and the protection of customers as described by the reliability standard reinforced. Given the existing capacity signalling mechanisms with the market, contracts could be of a similar period to that of MTPASA.

There is an argument to be made that the market currently under utilises the potential of demand curtailment. Schemes for the curtailment of large loads under extreme conditions were a feature of pre-market arrangements in all states and can generally provide rarely used capacity at a lower cost than generation plant. In fact, the implementation of a price cap which is less than the value of the lost load for most customers could be said to contribute to the lack of available demand side response. As part of an overall approach to minimise the costs and impacts of the operation of the Reserve Trader, there may be value in developing specific arrangements to support the emergence of cost effective load curtailment. This would be aided by a standing Reserve Trader function and longer term contracting of demand response.

Protection mechanisms such as the Reserve Trader provide significant security to customers in all regions. It seems unnecessary to define a sunset for a mechanism that forms part of an essential balance between price caps and appropriate investment signals and the Planning Council argues that the current sunset clause be removed.

ENERGY ADEQUACY ASSESSMENT PROJECTION

Finally, The Planning Council would like to offer some comments on the proposed Energy Adequacy Assessment Projection (EAAP). The EAAP as it is currently proposed appears to be an attempt to improve the shortcomings in assessment of the available capacity from energy limited generators in the existing MTPASA process. While the results of such a process may be of some value, it is likely to be a project in which the complexities and uncertainties associates with its implementation appear prohibitive.

A competent implementation of the EAAP will be very complex. The EAAP is essentially trying to incorporate complex inter-temporal relationships for the availability of the generators into a system where the most difficult parameters to estimate include demand, weather/rainfall/snowfall, fuel costs and availability and the availability of other energy resources. The demand research performed by the Planning Council over the last four years has highlighted the significant challenges to the development of usable demand forecasts on which an assessment such as the EAAP will be more dependent than the existing MTPASA processes. Prediction of other significant input factors over the long term such as hydro inflows, drought conditions and other weather based parameters and the availability of fuel resources over a range of timeframes is orders of magnitude more complex and uncertain than the reliability of incumbent generators. For example, to understand the energy availability of a gas generator, one would have to understand the intricacies of its contract position including discretionary allocations based on the activities of other pipeline users, the availability of line-pack on a daily if not hourly basis, the capability of source fields and the balance between competing markets for the product. The effective inclusion of such complexities in the assessment process would, if it was to proceed, expand the project well beyond the scope of the information sources currently available to NEMMCO. Conversely, excluding these important externalities to simplify the process would reduce the results to largely pointless indicators.

The Planning Council suggests that a review of the methodology for the development of this indicator is necessary and a more appropriate mechanism for its determination be proposed. Perhaps a more targeted indicator addressing the source issue is to be preferred over a market-wide project that appears, on the face of it, to be more complex than any other existing market mechanism.

The Planning Council would welcome the opportunity to discuss any of the matters raised above with you or your staff.

Yours sincerely,

Craig Oakeshott
MANAGER MARKET ANALYSIS