21 June 2013

Reliability Panel
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235
Ref: REL0051

Dear Reliability Panel members,

The NGF appreciates this opportunity to comment on the *Issues Paper: Reliability Standards and Settings Review 2014*[1].

The NGF has participated extensively on consultations into the market design and reliability of the NEM. The NEM, as an energy-only market design, with no payments for generating capacity and short-term reserves[2] aims to ensure reliability through the reliability standard and settings. The NEM to date has proven to be highly reliable with no breaches in any region of the 0.002% USE standard over the Long Term (10 year average) and only a minor breach of the standard in any given year in 2008/09 in Victoria and South Australia due extreme (1% POE) weather conditions.

Previous reviews have considered the level of the settings needed to provide the standard, using the theory that the price cap has to be high enough so that when there is a period of acceptable lost load the marginal generator providing capacity up to the standard is compensated with an acceptable return[3]. This theory was applied by ROAM consulting in previous reviews and indicated that prices of the order of $16,000/MWh to $40,000/MWh should ensure a standard of about 0.002% unserved energy (USE)[4]. The ROAM report also clearly demonstrated that increasing the MPC above $40,000/MWh would provide diminishing returns[5].

The Panel and Commission decided not to increase the MPC to $16,000 in 2010 in accordance with the recommendations contained within the ROAM report, instead deciding to preserve the real value of the then current MPC. One of the reasons advanced by the Panel was that there appeared to be adequate provision of capacity in spite of a theoretically insufficient market price cap.

[1] From here in we shall refer to this review as "RSSR"
[2] Excepting contingency frequency response capability
[3] Reliability Standard and Settings Review and Review of NEM in Extreme Weather Events (EWE) – 2009-10
[4] Notwithstanding the affect of the Cumulative Price Threshold which was not modelled by ROAM
[5] A $55,000/MWh MPC did not provide significantly better USE results

Neither the Panel nor the Commission explained why this was the case. The NGF believes that the reason this is the case is because there are other incentives in play that have encouraged new capacity to be provided, to the extent that there is oversupply in the present market. The NGF is concerned that subsidised generation has been forced into the NEM via the Renewable Energy (Electricity) Act, Queensland Gas Scheme[6], Solar FiTs and possibly the NSW GGAS scheme which may be resulting in a false sense of security that the existing Reliability Settings are adequate. Also it is highly likely that regulatory pricing determinations using long-run marginal costing approaches, rather than market prices in setting retailer wholesale energy costs, may have also encouraged new unrequired capacity by these participants. We note the disposition of capacity between participants, such as with retailers and merchant generators and the illiquid nature of the transfer of assets between these participants, (physically through asset sales or financially through PPAs and derivatives), may have encouraged the investment in capacity, such as peaking capacity to transfer wealth between competitors in the wholesale market.

The NGF recommends that the Panel should investigate if the Settings are in fact redundant due to the arrival in the NEM of large amount of subsidised non-commercial generation.

That distortions or imperfect competition in the NEM may have encouraged new capacity rather than the settings themselves does not mean the settings are unimportant. We say this because the NEM may be entering a withdrawal stage where cumulative losses are forcing a reduction in generation capacity.

The NGF recommends that the Panel investigate whether the Settings are unimportant during a withdrawal stage.

The above being said, the NGF does not have a firm position on the settings. Members have not expressed the view the MPC should be raised or lowered. Part of the reason why it is difficult for members to come to a view is because members do not believe the settings are doing what they are intended to do. For example, if there were reasonable forecasts of reserve deficits then members would presume the price cap should increase. The corollary would be, with excessive capacity, the cap is too high[7]: yet analysis previously presented by the Panel and the Commission has shown the $12,900/MWh is too low to encourage new generation that is not subsidised.

In any case, in the present over-supplied market the concept of the price cap is largely irrelevant to members' operations, but there remains a concern that increasing the MPC significantly could provide the wrong signal to investors[8] of the need for additional capacity.

As a result of these deliberations, the members of the NGF have concentrated their view on the effect of changing the settings and this meant that members largely concentrated on the floor, rather than the cap.

[6] In this case a stronger reference may be made to the burgeoning gas industry in Queensland, as evidenced by the falling GEC prices in recent years

[7] This is purely theoretical: we note setting the cap "too high" would not represent a problem in ensuring the Reliability Standard is met.

[8] In a similar manner to how AEMO's electricity statement of opportunities (ESOO) has erroneously forecast a reserve deficit in near years over the last five years

Standard

- Should an alternative form of the standard be used?
- Is 0.002 per cent USE appropriate?
- What factors should be considered?

The NGF notes that the unserved energy Standard of 0.002% has only been breached in any given year once in the last 10 years. This breach occurred in Victoria and South Australia in 2008/09 at times of extreme weather events. Other than this breach there has been sufficient generation investment in the NEM to meet this reliability standard. Over the Long Term (10 year average) the Standard has not been breached in any region of the NEM.

This supports the NGF view that the current form and level of the standard at 0.002% is appropriate. In support of this view, no data has been supplied by the Panel, other market bodies or consumer groups to recommend or justify a change to this Standard.

The unserved energy standard of 0.002% and the Maximum Price Cap are closely inter-related. Tightening the unserved energy standard to be level lower than 0.002% would require an increase in the MPC to signal that more generation investment is needed. Conversely, loosening the standard to a level above 0.002% can result in a lowering of the MPC.

As highlighted earlier in this submission, modelling conducted by ROAM Consulting in 2009 suggests a higher MPC is required to meet the standard. However the current over supply of generation and decrease in demand growth may not support the need to increase the MPC. Conversely, the NGF does not support a decrease in the MPC. Hence the NGF supports the current form and level of the standard with the current MPC that is indexed annually.

Settings – Market Price Cap (MPC)

- Will the MPC meet the Standard?

The modelling provided by ROAM in the 2010 Review of the NEM in Extreme Weather Events indicated that the MPC is not high enough to meet the Standard. By deduction, other incentives must be resulting in the Standard being met. The Panel should question what these incentives are and whether there are any problems associated with these incentives meeting the Standard, rather than the Settings themselves.

- If no, what should be the value of the MPC?

Should we assume there to be no other incentives for participants to provide capacity, the value of the MPC should be greater than $16,000/MWh but less than $40,000/MWh. But clearly this is not the case, so one may argue these values provide little insight.

- Should the MPC continue to be indexed?

The NGF supported preserving the real value of the MPC when the Rule change was considered by the Commission and continues to support this position.

- What factors should be considered?

Settings – Market Floor Price (MFP)

- Given recent market developments and pricing outcomes, is the current MFP appropriate?

- What factors should be considered

Members have discussed the effect of the asymmetric floor and cap prices in the NEM. The NEM has regional approximations for pricing to allow a homogenous set of buyers and sellers to trade. This has encouraged the development of markets for derivatives struck against a single regional price. The NGF has supported this feature of the NEM design in the Transmission Frameworks Review.

A feature of a market design with a regional price is that generators, when constrained, are often encouraged to price to either the floor or the cap to either ensure they are dispatched at a price they wish to receive or ensure they are not dispatched at a price they do not wish to receive. The way a generator can ensure it is either dispatched or not dispatched is to offer prices above or below a local nodal price, which is calculated by the marginal value of the constraint equation (the change in dispatch cost by relieving the constraint by 1MW) multiplied by the effect (ratio).
The asymmetry between the floor and the cap (a ratio of 12.9) means that in most instances the generator constrained on can avoid being dispatched at prices lower than it is willing to receive.

The effect on generators pricing at the floor is that the asymmetry between the two Reliability Settings, Floor and Cap, means in some instances the generator being constrained off cannot compete with the price at their node and will be constrained off anyway. Should the MPC go up this will be exacerbated.. The NGF therefore advocates that MFP also indexed down to a lower level with the current indexation up of the MPC. That is, should the MPC go up by 2% the MFP should also go down (to a more negative value) by 2%. The reason the NGF advocates indexing the MFP is that it will maintain the status quo regarding access to the Regional Reference Node for generators included in an intra-regional constraint equation.

The NGF notes that a perfectly symmetrical floor and cap would be another option to consider, but could well introduce significant other issues.

- Should MFP be indexed?

As per our arguments set out in the previous section of this submission the NGF advocates indexing down of the MFP to a lower level at the same rate of indexation up to a higher level for the MPC.

Value of customer reliability

- Does the current framework appropriately take into account the value customers place on reliability?
- Should alternative factors or approaches be considered?

The NGF has no comments on this issue.

For further information in relation to the submission please feel free to contact David Scott on 07 3854 7440.

Yours faithfully

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