

26 November 2013

Mr John Pierce Australian Energy Market Commission Sydney South NSW 1235, PO Box A2449

Submitted via website: EMO0026

Dear Mr Pierce,

## Advice to SCER on linking the reliability standard and reliability settings with VCR

Alinta Energy welcomes the opportunity to make a submission in response to the *Advice to SCER on linking the reliability standard and reliability settings with VCR* consultation paper, released by the Australian Energy Market Commission (AEMC).

Alinta Energy is an active investor in the energy retail, wholesale and generation markets across Australia. Alinta Energy has over 2500MW of generation facilities in Australia (and New Zealand), and a growing customer base of approximately 750,000 retail energy customers in Western Australia and across the National Electricity Market (NEM).

Energy reliability is essential in underpinning Australia's future economic growth and prosperity. As such, it is appropriate to assess how each segment of the energy chain contributes to providing consumers reliable and cost efficient energy. Alinta Energy has long held the view that inconsistencies between the Value of Customer Reliability (VCR) and the Market Price Cap (MPC) favours transmission investment over generation solutions and hence requires further consideration.

Alinta Energy welcomes the consultation paper, and endorses the view that alternative approaches be explored which will positively contribute to customer reliability at least cost.

### **Reliability and Market Parameters**

<u>MPC</u>

Alinta Energy considers the MPC vital to ensuring that sufficient incentives exist for peaking generation infrastructure investment. New entrant marginal peaking generation must be adequately profitable (purely in the wholesale market) whilst only running during a limited amount of trading intervals a year, reflecting the fact that peaking generators are the last to be dispatched.

The MPC thus plays an important role in balancing competing objectives by ensuring that adequate generation infrastructure exists to safeguard the fulfilment of the reliability standard. An incorrectly set MPC thus has the effect of undermining investment incentives or delivering an inefficient mix between generation and transmission.



# <u>VCR</u>

At present, there is a broad assumption that the VCR delivers an reasonable estimate of the value customers place on the avoidance of supply interruption. However, it should be noted that the current VCR is not segmented between different categories of energy users and therefore does not necessarily provide a reflection of the potentially varied regional and sector specific reliability needs.

Nevertheless, the 2010 VCR is segmented by region. This implies a national average VCR of approximately \$47,680, highlighting the existing disparity between the MPC which was \$12,500 in 2010 and has since risen to \$13,100.

VCR by Region					
VCR	NSW	QLD	SA	TAS	VIC
2010 KWh	41.53	44.31	44.3	50.97	57.29

Alinta Energy understands the Australian Energy Market Operator (AEMO) is making significant progress in disaggregating VCR data by customer types at connection points, with the possibility of producing a range of VCRs. Similarly the AER is developing a timetable for updating jurisdictional VCRs "at least every five years".

Alinta Energy welcomes AEMO's development of additional and updated VCRs which act to inform the market. It is important to note that in the first instance the creation of additional VCRs are primarily only planned to be used as a market informing instruments as well as updating the singular national VCR.

As outlined below, Alinta Energy would encourage a cautious approach to practically implementing the use of multiple VCR's across jurisdictions if intrinsically linked to the setting of any MPC, given the difficulties involved in operating multiple MPCs.

# <u>CPT</u>

The CPT (currently \$193,000) is a mechanism used to bind the magnitude of financial risk participant's face in the market during low probability high impact events which are spread across a 7 day period. When the CPT threshold level is reached, the market is placed into an administered price cap of \$300 for a set period of time.

Whilst reviews in the past have focused on the linkage between the MPC and the CPT, Alinta Energy considers these parameters should be considered separately.

In separating the CPT and MPC, the distinct role of each parameter becomes clear:

- the MPC acts as an upper bound on prices over singular intervals, as well as providing investment signals to marginal generation; and
- the CPT is the mechanism preventing participants facing significant cash flow stress immediately following extreme events. Notably, the CPT does not inhibiting voluntary market clearing within shorter and less severe market events over single trading intervals.

As such, Alinta Energy considers that options explored within the consultation paper, which may result in an increased MPC will not necessarily additionally result in an increased risk to market participants if the value of the CPT is decoupled from the MPC.

Thus, any assessment of the risks of increasing the MPC, should acknowledge the separate role of the CPT in capping market risk.



## International markets

Alinta Energy notes the work undertaken by NERA in assessing how alternative approaches to setting wholesale market parameters operate in international jurisdictions. It is clear that the linkages between the VCR and MPC are varied and are dependent on the exact circumstances of individual jurisdictions.

Whilst international comparisons are beneficial, they should only be considered by regulators where directly relevant to the individual circumstances surrounding the ability of the NEM to provide price signals which appropriately balance supply and demand conditions.

In the context of this discussion it is important to note that apart from the CPT outlined above, several other risk mechanisms are available in the NEM, as outlined within the NER. For example, AEMO can direct participants to follow certain instructions to prevent the possibility of load shedding.

Therefore, whilst the discussions in this paper consider scenarios of uncapped market risk and widespread load shedding, it is important to note such circumstances are largely academic and should not be given disproportionate weighting.

# Options for linking the reliability standard and settings with VCR

## Option 1 – Direct application of VCR as market price cap

As outlined above, there currently exists a large discrepancy between the value of the MPC and the VCR. Having two divergent values is likely to undervalue investment in generation in favour of transmission. This is likely to be inefficient

Alinta Energy holds the view that a closer alignment of the VCR and MPC is needed to ensure sufficient incentives exist for marginal generation to be built, whilst satisfying expectations of reliability standards at least cost. As such, Alinta Energy supports further investigation of the option of directly applying the VCR as the MPC.

This method has several merits, the first of which is simplicity, given the strong relationship between the VCR and the MPC. The VCR represents an accurate estimation of the value consumers place on reliability. This point was acknowledged by the ACCC<sup>1</sup>, who indicated the linkage between the VCR and MPC would provide a public benefit (assuming this leads to a higher MPC), in that peaking capacity would be directly encouraged by consumer's valuations of reliability.

As such, the linkage of the MPC and the VCR would provide an economically efficient investment signal for new generation, based on customer's actual valuations.

Nonetheless, any administrative measurement of the VCR is intrinsically subjective and as such there is a risk that the VCR and thus the MPC could be subject to significant and frequent change, depending on the methodology used to administratively determine the VCR.

The concern associated with this is approach is that the VCR could be subject to unwanted instability, putting at risk a stable environment required to entice long term investment decisions. Similarly, this could result in stranded assets if the MPC price were to decline below the price on which marginal generation entered the market.

<sup>&</sup>lt;sup>1</sup> AEMC (2013), *Advice to SCER on linking the reliability standard and reliability settings with VCR*, pg 19.



To avoid this situation it would seem appropriate to investigate options of ensuring the level of the MPC cannot be lowered. This would avoid the risk of a lower MPC value undermining sunk investments.

Furthermore, the current development of several VCRs in different sectors and regional connection points in the NEM, whilst beneficial in determining an average VCR, would be problematic if applied in different regions as the surrogate MPC. Alinta Energy does not believe market participants currently desire multiple MPCs representing different regions, nor would such an arrangement be workable in practise and provides little discernible benefit to consumers.

To summarise, Alinta Energy supports further investigation of this approach, with a possible long term implementation strategy to avoid market risk and avoid stranded asset risk.

### Option 2 – Use VCR as a cross-check on the reliability standard and reliability settings

Alinta Energy supports the establishment of efficient investment signals. In this regard, efforts to align market parameters and justify any material discrepancies which may exist between the MPC and VCR, is a well supported reform.

An examination of any major variations would serve to clarify to market participants, the basis and rationale for any justifiable discrepancies. Additionally where the reliability standard is found to no longer reflect customers' VCR, this would indicate to regulators the need to amend the standard.

Where discrepancies are found, Alinta Energy understands the AEMC would be charged with assessing and justifying such variations or pursue changes to the MPC. Given the subjective nature of considering the materiality of allowable and disallowable discrepancies, establishing the relevant assessment criteria within the NER would be appropriate.

Similarly, it would seem prudent to phase in changes over time, to reduce market disruption and provide a level of certainty for participants.

In terms of achieving an appropriate balance between reliability, least cost solutions and encouraging price incentives for investment, Alinta Energy considers this cross checking system beneficial in allowing reliability to reflect the value placed on it through the VCR, and when discrepancies are identified, they be suitably justified. As such, Alinta Energy supports further investigation of this option.

### Option 3 – Direct application of VCR as market price cap at "periods of scarcity"

Alinta Energy understands this proposal would directly apply the VCR as the MPC during specifically defined "periods of scarcity" which could include load shedding, congestion or extreme market stress. At all other times there would be no MPC.

As outlined in option 1, this option would assist valuing reliability against the theoretical expectation of the price at which customers would agree to have their supply interrupted. Like option 1, this approach would provide a strong investment signal for marginal generation.

Additionally, this option would provide the benefit of providing a market price cap only during the very extreme circumstances of market stress; this would cap the price when for physical or other reasons the market may be unable to respond appropriately.

However, Alinta Energy considers that several difficulties exist in progressing this option.

 How a "period of scarcity" is defined is likely to be a contentious decision which could significantly affect market outcomes.



- The case for introducing arrangements which removes a price cap completely (outside of the scarcity periods) has not been made.
- Regulators have long argued that such arrangements would lead to the introduction of
  perverse incentives which could result in portfolio generators withdrawing some units from
  the market, in order to financially benefit other units taking advantage of higher prices and no
  MPC. Whilst Alinta Energy does not subscribe to this scenario, it is clear obstacles to
  implementation exist.
- This option would result in more frequent government intervention, potentially distorting incentives.
- On a simplistic level, it appears counter-intuitive to have no MPC during normal market conditions, but to then cap the price during market stress, a time when price indicators should be providing the strongest signals to entice generation to come online.

For the reasons outlined above, Alinta Energy believes applying the VCR as the MPC during periods of scarcity and at other times applying no MPC is an option which is unlikely to realistically gain traction with market participants. Further, this option contains several deficiencies which are unlikely to be resolved in the short term. As such, Alinta Energy does not support further investigation in this area.

### Option 4 – Different levels of VCR offered into dispatch

Under this option Alinta Energy understands no absolute MPC would exist, rather a range of MPCs would exist for different customer groups, each representing the VCR assigned to a particular set of customers. These VCR's would be offered into the wholesale market pool as default bids.

These default bids could notionally result in customers whom have a VCR lower than the prevailing market price, to be dispatched as demand response and affectively have their load interrupted. Under this method, if market prices reach a customer's VCR level this would affectively become a method to prioritise load shedding, over high market prices.

Theoretically, this approach does act as an economically efficient method of determining prices in real time in the wholesale market. Customers will only have their load curtailed at the exact price at which that particular customer will derive the most utility from having no supply, as opposed to paying a price higher than their particular VCR.

Nonetheless, the technical and administrative difficulties involved in implementing such an option would be potentially insurmountable and could cause several customers market stress.

For example, VCRs are currently a standalone yearly average that does not necessarily accurately represent an individual customer's value of reliability on particular days or times. Whilst certain commercial and insutrial customers may have a VCR level assigned to them, these VCR levels are likely to fluctuate on particular days of the year, due to operating cycles etc. Therefore the VCR assigned to a customer is unlikely to reflect their real time valuation of supply.

This option would require a range of VCRs being assigned to each customer group on hourly, seasonally, daily or weekly time periods. Practically it is impossible to decipher this range of granularity from present VCR surveys. Realistically determining commercial and industrial customer's VCRs in real time would require active demand side management including the technical capability to participate in NEM trading. Alinta Energy notes that demand side management is already a practice in which several participants engage as best suits their needs and contract position.

On a mass market level, customers would be grouped together by particular connection point node and would be correspondingly assigned a VCR according to that node. However, this raises various complications; if a particular customer has a relatively high VCR and is grouped together on the basis of connection point or distribution network to other customers whom have a relatively low VCR then



this particular customer will have no ability to accurately display their VCR and will thus be adversely affected in the event of load interruption.

Whilst theoretically this option may be the most efficient method in prioritising load shedding, on a practical level the technical and administrative issues involved make this option impossible to progress. As such, Alinta Energy does not support further investigation of option 4.

## Conclusion

Alinta Energy welcomes this discussion paper and appreciates the work of the AEMC and SCER in reviewing the current misalignment between the MPC and VCR.

Alinta Energy welcomes further investigation and consideration of options 1 and 2 as approaches which could positively contribute to the MPC and VCR and promote efficient market responses.

Should you have any queries in relation to this submission, please do not hesitate to contact me on, telephone, 02 9372 2633, or Mr Anders Sangkuhl on, telephone, 02 9375 0962.

Yours sincerely,

Jamie Lowe Manager, Market Regulation