

28 June 2013

Ms Reena Kwong Australian Energy Market Operator Baulkham Hills BC NSW 2153, PO Box 7326

Via email: reena.kwong@aemo.com.au

Dear Ms Kwong

Value of Customer Reliability, Directions Paper

Alinta Energy welcomes the opportunity to make a submission in response to the Value of Customer Reliability 2013 Directions Paper, released by the Australian Energy Market Operator (AEMO). The views expressed in this submission, build upon Alinta Energy's previous submission to the earlier issues paper.

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 700,000 retail energy customers in Western Australia and across the National Electricity Market (NEM).

Overview

Energy reliability is essential to underpinning Australia's future economic growth and prosperity. As such, achieving an appropriate balance between community expectations and the level of infrastructure investment required to meet this expectation is a challenging task. Recent debates regarding the cost of electricity networks demonstrate this.

As such, Alinta Energy supports AEMO's efforts to enhance the VCR methodology and concludes that improvements should be welcomed by industry and stakeholders and improvements provide scope to effectively apply a better articulated VCR in network planning, revenue regulation and operational decisions across the NEM.

In this regard, Alinta Energy broadly supports the incorporation of the choice survey methodology, greater granularity conditions and use of interval thresholds. On the contrary, Alinta Energy continues to note the inconsistency between the Market Price Cap (MPC) and VCR, and transmission reliability standards more broadly, and the notably different governance arrangements in Victoria compared with other jurisdictions.

Notwithstanding the above, Alinta Energy notes that the Productivity Commission's recent *Electricity Network Regulatory Frameworks* recommend the use of the VCR but noted that the AEMO should commission and pay the Australian Bureau of Statistics to undertake the required surveys with work by AEMO to supplement these survey results. Given the substantive comments provided by the Productivity Commission are unable to be fully considered at this late stage, it would be appropriate that AEMO give further opportunity to consider these findings before drawing conclusions as part of this consultation.



Role of VCR

Alinta Energy notes that the VCR is primarily used in probabilistic Victorian transmission planning reviews, to place a financial value on an unserved energy event for customers in that region¹. The VCR value may then be assessed with a conjunction of other variables under the Regulatory Investment Test for Transmission, in order to calculate any net economic benefits of a transmission network investment for a certain region.

Other NEM regions, New South Wales, Queensland, South Australia and Tasmania, use varying deterministic reliability standards where network investment decisions are only progressed if it is proven that such a decision will contribute to maintaining the existing reliability criteria. In deterministic transmission planning, the VCR can be used to value the benefit of reducing the probability of an unserved energy event.²

Alinta Energy is of the view that the VCR is a useful variable which could enhance transmission planning across the NEM. AEMO has previously floated intentions to establish a nationally consistent VCR. Whilst it is beyond AEMO's remit to determine the context of where the VCR is applied, Alinta Energy supports efforts in developing a VCR methodology which can be applied more broadly.

This suggests that to enhance the role of the VCR and help deliver improved network investment decisions requires greater granularity starting at the connection point and building up to regional and sector specific VCRs. It also suggests that the process for determining the VCR needs to be conducted in a manner which is suitable to market participants and stakeholders, other than AEMO, who may be expected to directly use or refer to the VCR going forward.

Approach and methodology

Alinta Energy agrees with AEMO that the role of the VCR is placing an accurate financial value on a consumer's willingness to avoid a potential power interruption. As discussed in the issues paper, there are a number of methods to achieve this goal including a direct costs approach, economic principle of substitution estimations, contingent valuation surveys, choice modelling surveys as well as focus groups and workshops.

Alinta Energy agrees with AEMO, that a choice survey-based modelling approach, which incorporates contingent valuation questions, is a proven method which provides the most analytically valuable results. This survey based approach is consistent with previous analytical VCR work undertaken by Monash University in 1997, CRA in 2002 and Vencorp in 2007.

Other methodologies which are more qualitative in nature, such as focus groups and workshops, are likely to be less compatible with the goal of placing an accurate financial value on consumers VCR. Given this, Alinta Energy would caution against the integration of more subjective research methods for determining VCR's.

For example, Alinta Energy understands AEMO plans to hold face-to-face VCR forums, in which, customers who wish to be included in the survey, can provide an email address to do so. While such responses are likely to provide a useful sense check as part of the methodology, the outcomes are likely to be skewed by specific biases.

This suggests that further work may be required to ensure the most valid methods continue to be used as would be applied by suitably qualified experts. Again, this has links to some of the matters raised very recently by the Productivity Commission.

¹ AEMO (2010), Value of Customer Reliability Background Paper, pg 7

² AEMO (2012), National Value of Customer Reliability (VCR) Planning document, pg 2



To summarise: In the absence of an alternative, Alinta Energy endorses AEMO's proposed choice modelling approach and suggests that random population sampling be the primary method used for distributing VCR surveys to participants should such an approach be possible.

Customer classes – weighting at connection points

Alinta Energy supports the development of regional and sectoral VCRs. Given this, it is a positive development that AEMO is now able to distinguish between customer types by energy consumption thresholds, allowing the percentage of different customer types, to be broken down regionally.

Nonetheless, it remains to be determined how different customer types will be weighted when calculating an aggregated transmission connection point VCR. Alinta Energy understands that AEMO proposes to calculate the connection point VCR according to the proportion of each customer class at that particular connection point.

Alinta Energy notes that determining a connection point VCR value in this manner can produce differing values in comparison to calculating the VCR in proportion to total energy usage by different customer class.

For example, if in a small town one large customer accounted for a majority of total energy consumed at that connection point, but the connection point was weighted according to the amount of customer classes, rather than total energy usage, then it is likely the connection point VCR will be undervalued in that region.

Whilst it is unclear what, if any, material effect this would have on planning implications, for discussion purposes it is telling that depending on what weighting method is used, connection point VCR values could deviate notably.

Alinta Energy suggests that further analysis which demonstrates different calculation methodologies, based on weighting methods, would be beneficial in this area, and that it may be important to consider whether a singular VCR, as opposed to a range reflecting sectoral differences, is a better guide in determining planning decisions.

Catering for uncertainty

Alinta Energy supports AEMO's proposed approach of incorporating a range of different duration length thresholds into the survey design.

The inclusion of such should reflect the value customers place on unserved energy events and will likely produce evidence displaying that customer's VCR values are positively correlated with the length in which an unserved energy event occurs.

Assuming it is not cost prohibitive to do so, the development of a range of VCR's at transmission connection points would be a beneficial. Alinta Energy welcomes AEMO's work in this area.

Relevance for the wholesale energy market and Market Price Cap

Alinta Energy suggests that customers are solely concerned with adequate energy supply and cost, not about whether or not it is generation solutions or transmission networks, which are providing energy reliability, only that it is provided.

This is consistent with AEMO's observation in the directions paper that "*customers are concerned* solely about the impact of lost electricity supply, not which section of the network has caused this"^{3.}

³ AEMO (2013), Value of Customer Reliability Directions Paper, pg 11.



While AEMO made this comment in the context of valuing transmission and distribution, the sentiment is equally valid as it relates to generation and transmission.

In this regard, the achievement of reliability at efficient cost cannot be considered without attention to any inconsistency between the MPC and VCR.

As such, the objective should be the achievement of reliability of customers at efficient cost. For this reason, a material difference between generation and transmission, which means VCR and MPC, would be problematic.

While a comprehensive analysis of the role of the VCR in determining the MPC is not within AEMO's remit, further analysis in this area is desirable. Alinta Energy suggests that AEMO contribute to the work of the AEMC and the Reliability Panel in this regard.

Conclusion

Alinta Energy broadly supports the VCR directions paper and appreciates the work of AEMO. Alinta Energy agrees that AEMO have identified a number of beneficial changes to the VCR methodology but notes this is in the context of a number of broader matters which are yet to be resolved including those raised very recently by the Productivity Commission.

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

Yours sincerely,

Jamie Lowe Manager, Market Regulation