Mr Matt Zema
Chief Executive Officer
Australian Energy Market Operator
GPO Box 2008
MELBOURNE VIC 3000

2 July 2013

Value of Customer Reliability (VCR) Directions Paper

Dear Mr Zema

The Energy Networks Association appreciates the opportunity to provide feedback on the Directions Paper issued as part of the Australian Energy Market Operator's (AEMO) National Value of Customer Reliability Review (the Review). ENA is the peak national body representing electricity transmission and distribution businesses throughout Australia.

ENA understands that AEMO will develop regional estimates of the values of customer reliability for different customer segments. In this context ENA remains of the opinion that the work of the Review should be integrated with the development of a national reliability framework and methodology through the Standing Council of Energy and Resources Ministers (SCER). It is welcome that the Review's milestones have changed such that SCER will have the opportunity to review the AEMO Draft VCRs and methodology in December 2013 alongside the AEMC's *Network Reliability Framework and Methodology Review*.

The ENA supports AEMO's objective of seeking to develop better VCRs that could ultimately drive more efficient market outcomes. However, VCRs will provide greatest benefit to allocative efficiency where they are calculated at a sufficiently granular level to inform relevant investment decisions in network reliability. While some level of data aggregation will always be required, the question is whether AEMO's methodology will produce VCRs which are 'fit for purpose' in terms of their use for such functions as network investment planning and setting network regulated revenues.

AEMO's top-down approach to deriving VCRs at connection point and feeder levels, from a set of regionally estimated VCRs, would appear to assume that households and businesses place the same value on supply interruptions irrespective of where they live in the region or which network, or part of the network, is supplying them.

This assumption is not necessarily valid at network or feeder level and could lead to inefficient network outcomes. As the Australian Energy Market Commission (AEMC) has observed consumers place different values on the reliability of supply depending on such factors as demography, the nature of their activities whether they have access to alternative energy sources, the extent to which they have experienced interruptions in the past, and depending on the information they can expect to be provided with on the cause of the outage and how it will be managed.

For these reasons, it will be important for the AEMO calculated VCRs to be utilised in a manner which recognises, but does not overstate, their information value and allows the national VCRs to be displaced where more granular data is available and calculated according to an appropriate methodology. ENA proposes that where network businesses undertake specific estimates of local VCRs for network planning and reliability setting purposes at a network or feeder level, these VCRs should be given primacy over the derived AEMO VCRs. Moreover, AEMO should make explicit the limitations of the derived VCRs in order to to facilitate comparisons.

It is difficult to be certain in advance whether AEMO's proposed methodology is 'fit for purpose' given the breadth of the possible SCER reforms, which could see distribution networks under a new national framework incorporate VCRs in network planning, in setting reliability standards and as part of a performance incentives scheme. Further, AEMO's own Directions Paper contemplates the use of VCR for revenue setting, with all the significance this has for both consumers and network businesses. In these circumstances measures of VCRs need to be sufficiently robust. Therefore we propose that as the Review progresses that AEMO utilise the expertise of a number of ENA members to test the methodology and its application given their experience in network specific VCR studies or knowledge of VCR surveys, analysis and evaluation.

Turning to our more detailed comments on the AEMO methodology:

- ENA encourages AEMO to seek the necessary funding to engage both experts in non-market valuation and the Australian Bureau of Statistics (ABS) in the work of the Review;
- ENA considers that the proposed customer classes should be modified to disaggregate the business consumers;
- ENA considers that the impact of longer duration outages could benefit from complementary approaches to consumer surveys, for example in estimating social costs; and
- ENA suggests that AEMO address the limitations of estimates of VCRs by publishing customer damage functions and/or sensitivity analysis.

Choice modelling

ENA supports AEMO's use of choice modelling surveys as the basis for estimating VCRs, for the reasons put forward in the ENA submission on the Issues Paper. As it is important that stakeholders have confidence in the statistical robustness of the VCRs coming out of the Review, ENA encourages AEMO to seek the necessary funding to engage both experts in non-market valuation and the Australian Bureau of Statistics (ABS) in the work of the Review. It is noted the Government has agreed to the ABS involvement in principle, in the context of its response to the Final Report of the Productivity Commission's Inquiry into Electricity Network Regulation on 26 June 2013.

Customer classes

ENA accepts that there may be benefits in aligning the customers classes for VCRs with the data reported to AEMO for market settlement under the National Energy Consumer Framework, which is being progressively rolled out within the NEM. However, as Grid Australia has pointed out in their submission on the Directions Paper, the proposed large business customer class may be too wide (greater than

100MWh/pa) for there to be sufficient granularity in VCRs for network planning purposes. We agree with the Grid Australia proposal that the large business customer class should be further segmented into commercial, industrial and agricultural customers given that these customers have been shown in previous Australian VCR estimates to have significantly different VCRs.

Impacts of different outage durations

AEMO's commitment to presenting a range of VCRs for different outage durations is supported by ENA. In addition the ENA suggests that the proposed estimation of VCRs take into account the use of rotational load shedding of customers over a day or a week. This is because when there is a major power outage or network constraint, distributors generally choose rotational load shedding in preference to leaving customers without power for an extended period in circumstances where load shedding may be applied.

In ENA's view the more widespread the event, the more difficult is it likely to be to capture the impact of these types of outages using customer surveys. Therefore care needs to be taken with the design of the customer survey or complementary methodologies for estimating the impacts may need to be considered.

Sensitivity analysis

AEMO's proposed approach of estimating and publishing regional VCRs according to customer class and types of outage is a considerable improvement over the single values of VCR currently available. In view of the intended use of VCRs by network businesses in investment decision making, it would be beneficial for AEMO to also publish confidence intervals around its estimates as well as provide information on the sensitivity of the estimated VCRs to parameter and within sample changes. This will assist AEMO in communicating the robustness and limitations of its VCR estimates, particularly as they may change over time as VCRs are re-estimated.

ENA appreciates the consultative and transparent process that AEMO has adopted in this Review, and looks forward to continuing to work closely with you. If you have questions on this submission or related matters please contact Lynne Gallagher on 02 6272 1515

Yours sincerely,

John Bradley
Chief Executive Officer