

13 July 2012

Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

www.aemc.gov.au

Dear Sir/Madam

Draft Report – NSW Workstream – Review of Distribution Reliability Outcomes and Standards

Essential Energy appreciates the opportunity to respond to the Australian Energy Market Commission's (AEMC's) draft report on the review of distribution reliability outcomes and standards for NSW ('the draft report'). Essential Energy would like to acknowledge and thank the AEMC on the cooperative and productive manner in which the review was conducted under such limited and constrained timeframes.

Essential Energy's responses to the questions contained in the draft report are detailed below.

Question 1 - Approach to cost-benefit assessment

a) What discount rate should be used in converting capital expenditure and the value of expected energy not served to net present values?

Essential Energy believes that the use of a discount rate of 10.02 per cent, which is equivalent to the weighted average cost of capital (WACC) for NSW Distribution Network Service Providers (DNSPs) in the current regulatory control period, is a an appropriate rate for calculating net present values.

In addition to the discount rate of 10.02 per cent the draft report also details results using alternative discount rates. Using discount rates of 7 per cent and 5 per cent allows stakeholders the opportunity to gauge the impact of any changes in the WACC that may occur in future regulatory control periods.

Question 1 – Approach to cost-benefit assessment

b) Should any other sensitivities be undertaken to test the bounds of our costbenefit assessment?

Further sensitivities could be conducted on a number of assumptions by the AEMC to test the bounds of the cost-benefit assessment however, in Essential Energy's opinion, any further sensitivities will reach the same conclusions as the draft report, namely:

- The cost savings for consumers from changes in the reliability standards would be relatively modest;
- 2. Significant investment has been made since the NSW distribution reliability requirements were increased in 2005, and future investment will be incremental in order to maintain reliability at the current level.
- 3. The survey undertaken by the AEMC indicates that customers place a relatively high value on a reliable electricity supply.

Ouestion 2 - Customer survey results

Are there any implications from the NSW VCR survey methodology we have used that we should take into account in considering the results.

As noted in the draft report, submissions from Essential Energy, the Customer Council of Essential Energy and the Essential Energy Rural Advisory Group suggested the scope of the NSW workstream should be expanded to consider customer service standards from a different perspective to that contained in the current licence conditions.

That perspective was that network costs could be reduced by replacing network investments for reliability improvement with better communication to customers during outages. Examples of communication would include building systems and processes that answer the fundamental questions customers ask during an outage, such as:

- 1. How long before the power is back on?
- 2. What caused the outage
- 3. Have the work crews been dispatched to the area
- 4. How widespread is the outage?

The AEMC incorporated this suggestion in its customer survey by asking residential customers which of the following three options they would like to see DNSPs invest:

- 1. Infrastructure to reduce the number of supply interruptions that occur;
- Systems to reduce how long supply interruptions last when they do occur; and
- 3. Communications systems to tell customers how long a supply interruption is likely to last.

Whilst Essential Energy believes that these are valid alternatives for customers to choose between, it is disappointing that an approximate cost was not attached to each alternative. The cost of each alternative is especially important in this context as it would be significantly different for each alternative. One would expect that increasing communication with customers would be a minor cost when compared to the cost of upgrading the network. Essential Energy is of the view that, had each alternative included an estimated cost, customer responses to each option may have been quite different.

Unsurprisingly, when provided with the three alternatives, without an estimate of the cost for each one, the survey found that 59 per cent of respondents preferred spending on infrastructure to reduce the number of supply interruptions that occur¹.

¹ AEMC, June, Draft Report – NSW Workstream, Review of Distribution Reliability Outcomes and Standards, p 51

As the survey has now been completed it will not be possible to determine how the survey results may have differed if a cost had been attached to each alternative. However Essential Energy believes that this should be considered when reviewing the survey results, and included in any future surveys that may be completed under the national workstream reliability review.

Question 3 - Options for changes to the proposed scenarios

a) Should any further changes to the AEMCs proposed scenarios be considered? If so, what changes should be considered?

In Essential Energy's opinion, the only change to the scenarios that should be considered is the removal of the cap placed on the number of non-compliant feeders worked on each year under schedule 3 of the current licence conditions.

In their report to the AEMC titled NSW DNSP reliability outcomes ('the Nuttall report') Nuttall Consulting recommended the AEMC consider removing the cap from the scenarios². Further analysis provided by Essential Energy and detailed in section 9.2.1 of the Nuttall report shows that keeping the cap could have a significant detrimental impact on reliability.

Essential Energy is concerned that the introduction of the cap has:

- decreased reliability for customers on rural feeders located in the worst served areas of the network. Table 7 of the Nuttall report shows a significant increase in estimated energy not served under scenarios 2 and 3 due to the introduction of the cap. According to estimates contained in the draft report customers would save a maximum of \$18 per year for this decrease in reliability; and
- decreased capital expenditure on rural feeders over the short term which would necessitate a large amount of "catch up" capital expenditure in the long to medium term when performance of those feeders deteriorated to unacceptable levels.

Question 3 - Options for changes to the proposed scenarios

b) Are there any additional impacts associated with the AEMC's proposed scenarios which should be taken into account? For example, this could include impacts which may have been difficult to model by the DNSPs?

Essential Energy believes that the AEMC should carefully consider the following impacts that are contained in the draft report:

 The majority of capital expenditure savings occur as a result of changes to schedule 1 of the licence conditions (acknowledging the limitations of the calculations for schedule 1 which were contained in section 9.1.1 of the Nuttall report)

² Nuttall Consulting, May, NSW DNSP reliability; Review of licence conditions, p. 7

 Essential Energy's customers on poor performing long and short rural feeders would be subject to significant decreases in reliability under scenarios 2 and 3, but that decrease would not be matched by savings for customers.

Table 1 below shows the percentage of total capital expenditure savings attributable to Essential Energy's network verse the total percentage of estimated energy not served attributable to Essential Energy's network.

Table 1 - Essential Energy - Capex savings verse estimated energy not served

Description	Scenario 1	Scenario 2	Scenario 3
Essential Energy % of total capex change	11%	22%	26%
Essential Energy % of energy not served	23%	57%	50%

Source: Nuttall Consulting - AEMC NSW reliability standards review Table 6 and table 7

Table 1 shows that under scenarios 1, 2 and 3 Essential Energy contributes a relatively small percentage of total capital expenditure savings but bears a relatively large proportion of energy not served. This means that under scenarios 1, 2 and 3 Essential Energy's customers are likely to suffer a disproportionate decrease in reliability compared to other DNSPs' customers, with only a modest decrease in their bill.

More importantly customers impacted by the estimated decreases in reliability are likely to be located in the worst served areas of the network where reliability is below target.

Ouestion 3 - Options for changes to the proposed scenarios

c) Should the definition of a major day event in the NSW licence conditions be aligned to the definition used in the AER reporting framework?

Essential Energy believes the definition of a major day event in the NSW licence conditions should be aligned to the definition used in the AER reporting framework.

Question 4 - Customer survey results

a) Are there any other implementation considerations that should be taken into account in relation to the AEMC's scenarios for distribution reliability in NSW?

In Essential Energy's opinion the draft report considers the implementation issues that the NSW government would need to contemplate if it intends amending the NSW licence conditions.

If any changes are to be made to licence conditions Essential Energy agrees that they should be made as quickly as possible to enable them to be incorporated in each DNSP's next regulatory proposal.

The draft report also suggests that if changes to the licence conditions are not finalised before DNSPs are required to submit their regulatory proposals, an

alternative set of expenditure forecasts could be included in proposals to reflect the future requirements if the NSW policy intent is unclear³.

The preparation of a second set of expenditure forecasts is not Essential Energy's preferred option. Effort in submitting a regulatory proposal begins approximately three years prior to the end of a regulatory control period. The capital and operating expenditure forecasts are not prepared in isolation and impact all elements of a DNSP's regulatory proposal. Essential Energy does not believe that the preparation of a second set of forecasts is in the best interest of consumers given the time and expense involved in making amendments to a regulatory proposal, nor would it be realistically achievable in the timeframe envisaged by the draft report.

Other comments

Moving to an outputs based approach

Essential Energy believes that setting reliability standards on a more outputs based approach could potentially lead to improved customer outcomes. However, whilst this change may be desirable in the long term, it would not be possible for DNSPs to implement prior to the next regulatory control period. This opinion was shared by the AEMC in their draft report when it stated:

"...it would be a very significant change for the NSW licence conditions to move away from an approach that incorporates design planning criteria. Further analysis would be required before determining whether such a change was appropriate. Such a change would also require the NSW DNSPs to make significant changes to how they plan and operate their networks and it is unlikely that it could be implemented before the start of the next regulatory control period."

Due to the substantial analysis that would be required to establish and develop appropriate outputs based reliability standards, Essential Energy recommends that the current structure and expression contained in the NSW licence conditions be maintained for the 2014-19 regulatory control period in order to enable timely preparation of upcoming regulatory proposals.

Other comments

National review of distribution reliability outcomes and standards

On 28 June 2012 the AEMC commenced a national review of reliability outcomes and standards ('the national review'). The national review is designed to advise on the merits of moving to a nationally consistent framework for expressing, delivering and reporting on distribution reliability outcomes. The national review may result in recommendations to amend or replace current NSW reliability standards. Therefore, it appears desirable to wait until the final outcomes of the national review are determined before making significant changes to NSW licence conditions.

³ AEMC, June, Draft Report – NSW Workstream, Review of Distribution Reliability Outcomes and Standards, p
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&</sup>lt;sup>4</sup> AEMC, June, Draft Report – NSW Workstream, Review of Distribution Reliability Outcomes and Standards, p
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NSW DNSPs are now in the process of finalising expenditure forecasts that will underpin regulatory proposals for the 2014-2019 regulatory control period. Given the proposed timeframes for the national review, it will not be possible to incorporate any recommended changes to licence conditions in upcoming regulatory proposals. However, Essential Energy notes that there are regulatory mechanisms available, for example cost pass through provisions, which may be used to incorporate any amendments approved by the NSW government in 2014-19 NSW distribution determinations within the regulatory control period.

Other comments

Further explanation of statements made in the draft report.

The draft report makes the following comment:

"However, the significant level of over-achievement particularly in relation to some feeder types may also suggest that the DNSPs could have achieved compliance with the reliability standards with a lower level of capital expenditure."

Essential Energy does not agree with this suggestion. The different schedules of the licence conditions impose separate and independent obligations on DNSPs.

Essential Energy has performed better than expected under schedule 2 of the reliability standards. As a result of being above target, Essential Energy has ceased specific investment to comply with the requirements of schedule 2.

Essential Energy is currently complying, or will comply, with the requirements of schedule 1 and schedule 3 by 30 June 2014.

The draft report also states:

"Some of the DNSPs also appear to apply design planning criteria that exceed the requirements of schedule 1 of the licence conditions, as they consider that higher levels of reliability are prudent and necessary to deliver acceptable levels of customer service.

For example, from discussions we have had with Essential Energy we understand that it provides a n-1 level of redundancy for zone substations where the customer load exceeds 5MVA, despite the licence conditions only requiring a n-1 level of redundancy for loads which are larger than 15MVA."⁶

Essential Energy's current planning policies provide for an n-1 level of redundancy to some smaller remote towns (which have populations of several thousand) where the licence conditions do not strictly require it. Essential Energy provides this level of redundancy because there is only a single substation supplying the town and in the event of a transformer failure there is no backup for any part of the load, and the response time to reconnect customers could be several days.

⁵ AEMC, June, Draft Report – NSW Workstream, Review of Distribution Reliability Outcomes and Standards, p

⁶ AEMC, June, Draft Report – NSW Workstream, Review of Distribution Reliability Outcomes and Standards, p 20

Essential Energy would be pleased to discuss this matter further with the AEMC. Should you require further information please feel free to contact Paul Brazier on 02 6589 8619 or Col Lambert on 02 6589 8851.

Yours/sincerely

Gary Humphreys Interim Chief Operating Officer