18 July 2014

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

Via website: www.aemc.gov.au

Project Number: EPR0041

Dear Mr Pierce

**Distribution Reliability Measures: Draft Report**

SP AusNet welcomes the release of the Commission's draft report providing common definitions for distribution reliability measures, for application in the NEM. We note and support the principles referenced for the Commission's analysis and the formulation of the reliability measures[1].

We are also pleased for the opportunity to provide comments on the draft report. The remainder of this letter is devoted to this purpose.

## 1. Measures

### Momentary to Sustained Interruption Threshold

The Commission is proposing that the threshold distinguishing momentary and sustained outages be changed to 3 minutes. In SP AusNet's view it is preferable that the current I minute threshold be retained.

The proposal is a major change from current practice. A 1 minute threshold is contained in the AER's Service Target Performance Incentive Scheme (STPIS) and in the applicable instruments for each of the NEM jurisdictions. The draft report tends to downplay the materiality of the proposal. The opening statement on the change in duration threshold gives no hint of implications that might be concerning. In relation to momentary outages for example, the report states:

> "*We are not proposing any material change to the current definition of MAIFIe other than defining a momentary interruption as event as having a duration of three minutes or less*"[2] (emphasis added).

It is hard to imagine that as an interruption progresses toward 3 minutes, electricity users would not be wondering whether a prolonged supply interruption might be expected, and

[1] AEMC 19 June 2014, Draft Report – Distribution Reliability Measures, Page 5
[2] Ibid, page 12

have already made a consumer response, for example by contacting the Distribution Network Service Provider (DNSP) and reverting to backup lighting. We would expect that definitions for momentary and sustained interruptions should include a threshold that makes these kinds of customer responses a distinguishing feature.

The 1 minute duration that has applied for many years is now embedded in DNSP network management strategies. This is the basis on which SP AusNet's widely deployed distribution feeder automation (DFA) scheme performance requirements have been designed, supported by the STPIS reliability performance incentives.

SP AusNet commenced its DFA design in 2006, based on technologies available at that time. The design philosophy for the scheme is that for a high proportion of SP AusNet's feeders it would provide service restoration within a 1 minute period, for the majority of outage scenarios.

A constraint for DNSPs in delivering fast acting DFA schemes is said to be the availability of capable communications systems. In SP AusNet's design service restoration times of less than 1 minute have been achieved using readily available communications technologies. Advancements such as the national broadband network are likely to further improve the response capability of economically practical feeder automation schemes.

The Commission observes that the thresholds that apply in the United Kingdom and in the IEEE standard are longer than 1 minute. These are long standing definitions, like the Australian definitions, and serve to illustrate that it is difficult to alter the definitions (in those cases advance them) since such change has implications for the services provided and investment already made.

Changing the definition after it has been the subject of investment incentives would cause a mismatch between performance capability of the DFA schemes and the new performance criteria. It would appear to provide a signal to allow momentary interruption performance on SP AusNet's network to deteriorate from its current levels. We do not think a 3 minute threshold is in the interests of SP AusNet's customers.

The draft report notes the potential for financial impact on DNSPs who have responded to existing incentives. It observes:

> *"Should the proposed change to the definitions be implemented, it will be necessary for the AER to address the uncertainty and the potentially negative financial implications for these distributors when setting transitional mechanisms and price reviews"*[8].

This is an important observation. To provide confidence to DNSPs regarding the implications of the proposed change SP AusNet believes the AEMC should seek the AER's concurrence on this in principle, before finalising its advice to the COAG Energy Council.

**Major Event Day Threshold for Reporting and Incentive Schemes**

SP AusNet supports the Commission's conclusion that there should be flexibility in establishing the Major Event Day (MED) threshold for the purposes of the STPIS. However we think the basis for flexibility described in the draft report does not reflect the intention of giving the DNSP and AER this flexibility.

The draft report proposes that the 2.5 beta method be used for benchmarking and as the default method to be used for the STPIS. We support this approach.

[3] Ibid, page 13

The draft report also proposes that the DNSP be able to amend the 2.5 beta method, with the agreement of the AER. It makes this proposal specific to variation of the 2.5 beta threshold itself (page 24), and apparently in relation to the method more generally (pages 25and 28).

The various discussions regarding amendment of the 2.5 beta method incorporate a trigger for seeking amendment, based on alignment of the methodology with the network's particular environment. For example:

> *The AER's current STPIS also allows a distributor, with the AER's agreement, to modify the 2.5 beta method to provide for a higher major event day threshold, for example a threshold of 2.8 beta, where a higher major event day threshold may better identify those days where the distribution network experienced stresses beyond that normally expected*[4] and
>
> *We also propose that the distributor, with the agreement of the relevant regulator (such as the AER), can amend the 2.5 beta method if the resulting distribution reliability measures better reflect normal operation of that specific distribution network*[5]

For benchmarking purposes, reporting via a consistent method would appear to be necessary. Accordingly we understand that the Commission's intention is for variation to be for the purpose of the STPIS specifically.

In relation to variation of the MED threshold in particular it would be sufficient for the final report to make clear that the DNSP may request variation to the threshold, as provided for in the STPIS. The trigger proposed by the Commission (a number other than 2.5 beta reflecting normal) is neither contained nor implied in the STPIS, and limits the broader consideration of incentive properties that the DNSP and AER may agree are appropriate in the circumstances prevailing for the DNSPs price determination.

**Planned Outages**

Planned outage unavailability is an important component of network performance. The draft report notes that planned outages are not currently included in the STPIS. It comments that:

> *Planned outages are not currently included in economic incentive schemes. This is because the guaranteed service level (GSL) payments for not meeting the minimum notice period are expected to compensate the affected customers*[6]*.*

We do not think minimum notice period GSLs is a likely reason for planned outages being left out of incentive schemes. Only a very small proportion of planned outages would not meet prescribed notice period advice. Generally speaking, planned outages are not subject to financial incentives. However service interruption arising from planned outages clearly impacts customers and there may be value for customers in including planned outages in the STPIS.

Since the comment in the draft report could be read to infer that there is good reason to exclude planned outages from financial incentive schemes we suggest that the comment be deleted.

[4] Ibid, page 24
[5] Ibid, page 25
[6] Ibid, page 28

## 2. Feeder Classification

### Urban vs Rural Feeder Classification

As the Commission observes in the paper, the sole criterion for classifying urban feeders is on the basis of load density. The Commission observes that this causes a misalignment between customers' expectations and feeder classification.

The Commission therefore proposes the introduction of a second criterion based on customer density. However as noted in the draft report, analysis by DNSPs through the Energy Networks Association in exploring the proposal has not identified any clear breakpoint that might divide urban and rural feeders.

SP AusNet considers the current threshold, based on a load density threshold of 0.3MVA / km, set long ago, lacks contemporary relevance. It is quite likely however that this threshold has a statistical basis. A possible way forward would be to introduce a contemporary, statistically derived, division of feeder categories. This could incorporate both load and customer density characteristics. This approach would also enable drift against the thresholds over time to be monitored, providing a basis for future adjustment if warranted.

SP AusNet would support further work being undertaken to develop a statistical basis for defining feeder categories.

The draft report notes that changing feeders between categories would have financial implications via the STPIS, unless reliability targets (based on historic performance) and incentives are normalised to account for the feeder classification changes. We consider this is within the scope of the AER's responsibilities in ensuring continuity of the STPIS across regulatory control periods and could be managed within DNSP revenue review processes and inclusion of (or reference to) a revised feeder classification methodology in the STPIS.

### Classification by Feeder Sections

The draft report identifies feeder category creep as an issue that may give rise to significant costs to a distributor. The report comments:

> *"The current classification system is coarse in that it only has four classifications that span most of the extremes of the Australian continent, and the full range of customer reliability expectations. This can cause material steps in the reliability targets from one classification to another. This means that there may be significant costs to a distributor if a number of its feeders are reclassified from one category to another, which can happen when there are large developments (eg residential) on the outskirts of an urban area"*[7].

The Commission has noted two approaches to address this problem. These are:

- classifying by feeder sections instead of feeder; and
- through the operation of the STPIS (via review of the STPIS).

SP AusNet agrees that feeder capacity creep impacts the effectiveness of the reliability incentive scheme. In our view the preferable approach would be through the STPIS. There are various ways in which a correction could be built into the scheme.

The alternative approach, of classifying by feeder section, could lead to a significant increase in data requirements, analysis and accompanying resourcing. The Commission

[7] Ibid, page 36

notes this in the report, where it advances the prospect of transitioning to classification on the bases of feeder sections over time on the basis that "*it would, in some instances, produce more meaningful measures*". Whilst the draft report observes "*We consider that classifying on the basis of feeder section may have some merit …*" no supporting analysis to demonstrate the added value of this approach is provided. SP AusNet would support further work in this area.

### 3. Lowest Reliability Customers

We agree with the draft report principles for considering lowest reliability customers, set out in box 6.1. However in the report's discussion it could be read to infer that all customers should expect to experience a similar level of reliability.

The draft report comments:

> *"The reliability experienced by the lowest reliability customers is only of concern to the extent that it is significantly different to that of typical or average customers. That is, if the reliability experienced within a network is relatively uniform then no customers appear to be materially disadvantaged. If, however, some customers experience reliability that is much lower than others it may be desirable to examine the reasons why and, where appropriate, address these reasons"*[8].

However, where networks are planned and developed on the basis of economic efficiency principles (refer earlier discussion) uniform reliability performance cannot be expected. More important is that customers are able to understand why their supply may be less reliable than the average reliability for the network, and whether economic improvements can be made.

SP AusNet supports the identification of lowest reliability feeders, or customer groups on feeders receiving lowest reliability, and for the DNSP to be able to provide reasons for an inherently lower reliability performance. SP AusNet also supports DNSP engagement with local communities to explore electricity supply improvement options. A shared understanding may lead to actions that can be taken by both the DNSP and the local community.

We thank you again for the opportunity to provide these comments for the Commission's consideration. We would be pleased to respond to any queries you may have regarding our submission.

Yours sincerely,

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**Manager Regulatory Frameworks**

[8] Ibid, page 39