Contact:Andrew KnowlesPhone no:(03) 6270 3695Our Ref:NW30394005Your Ref:EPR0031



30 January 2013

Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Dear Sir

Draft Report – National Workstream: Review of Distribution Reliability Outcomes and Standards

Thank-you for the opportunity to provide input to the *Draft Report – National* Workstream: Review of Distribution Reliability Outcomes and Standards, released on 28 November 2013 (the Draft Report).

Aurora Energy Pty Ltd, ABN 85 082 464 622 (Aurora) is an incorporated, State Government owned fully integrated energy and network business, with complementary activities in telecommunications and energy-related technologies. Aurora provides electricity generation, retail and distribution services to more than 270,000 customers in the Tasmanian jurisdiction. In this document, reference to Aurora should be taken as reference to Aurora in its capacity as the provider of distribution network services licensed by the Regulator under the Electricity Supply Industry Act 1995.

Aurora understands that the distribution reliability framework proposed in the Draft Report is to have the following features:

- an outputs-based approach (performance targets) as opposed to strict input planning standards (such as n-1, n-2, etc.);
- reliability targets developed by each jurisdiction under a nationally consistent economic assessment process using a nationally consistent set of definitions and exclusion criteria;
- reliability targets set and approved by the relevant jurisdictional regulator or government, which take into account customer preferences and community needs and expectations;
- flexibility for the relevant jurisdictional government to transfer responsibility to the AER for the setting of output reliability targets;
- an incentive system with material financial rewards and penalties to strengthen accountability and encourage distribution businesses to perform to the level of the output reliability targets;
- an allowance for additional measures to be included and evaluated on a costbenefit basis to address the requirements of worst served customers; and
- a nationally consistent framework for public reporting;

Aurora broadly supports the framework presented in the Draft Report. Using an outputs-based approach allows distributors latitude to develop innovative solutions to reliability issues that may not be possible under an inputs-based approach.



However, it is not clear how this framework is intended to interact with the Service Target Performance Incentive Scheme used by the Australian Energy Regulator, with which it shares many features. Aurora notes the recognition in section 7.7 of the Draft Report of the effects of having (potentially) two sets of reliability standards: one set by the jurisdiction, and one used by the Australian Energy Regulator in their application of the Service Target Performance Incentive Scheme. Aurora supports moves to address this.

Aurora notes that there is an assumption throughout the Draft Report that the parties performing certain actions (for example, the "jurisdictional target setter", which may be the State Government or local regulator) are able to be bound to follow certain procedures. Aurora is uncertain that this assumption is valid.

The attachment to this letter provides Aurora's answers to the questions posed in the Draft Report.

If you have any questions, please address them to the contact noted above.

Yours faithfully

Anton Voss General Manager Commercial, Regulatory and Strategy Distribution Business Aurora Energy



ATTACHMENT TO AURORA SUBMISSION TO EPR0031

This attachment to Aurora's response to consultation EPR0031 provides Aurora's answers to the questions posed by the Australian Energy Market Commission (AEMC) in their *Draft Report – National Workstream: Review of Distribution Reliability Outcomes and Standards* on 28 November 2013 (the Draft Report).

In this document, reference to Aurora should be taken as reference to Aurora Energy Pty Ltd, ABN 85 082 464 622 in its capacity as the provider of distribution network services on mainland Tasmania, licensed by the Regulator under the Electricity Supply Industry Act 1995.

Terms used in this attachment are contained within the appendix to this attachment.

For ease of identification, the questions posed by the AEMC are presented in boxed text.

Question 1. Customer consultation and development of guidelines

What should be included in nationally consistent guidelines and which body should be responsible for their development?

Aurora considers that desire for nationally consistent guidelines is already met with the AER's STPIS. That which is missing is a mechanism for direct community consultation and an approach to economic assessment that "compares the costs of investments in reliability with the value placed on reliability by consumers"¹. Aurora considers, however, that the latter is now implicit in clauses 6.5.6 and 6.5.7 of the NER and, potentially, should be one aspect of the expenditure forecast assessment guidelines being developed by the AER under the "Better Regulation" banner.

Question 2. Customer consultation

What are the important elements of customer consultation and what types of issues should customers be consulted on as part of the process of setting output reliability targets?

Should customer consultation consider whether additional measures are warranted to inform customers of planned and unplanned interruptions?

Aurora notes that there are existing regulatory requirements relating to the notification to customers of planned and unplanned interruptions in Division 6 of Part 4 of the National Energy Retail Rules. Alternative arrangements for notification will need to be considered in this context to prevent the creation of a conflicting set of regulatory requirements.

¹ Draft Report, page 17



Question 3. Economic assessment process

What are the relevant considerations for the development of a nationally consistent economic assessment process?

Aurora considers that the most important consideration in the development of a nationally consistent economic assessment process is the transparency of the process so developed.

Aurora has concerns about the robustness and maturity of the VCR methodology and interpretation of the results. For example, to provide a proper cost-benefit analysis of reliability expenditure, VCR calculation and the reliability targets should relate to the same sample of the customer base. That is, in the event that the reliability targets were based on the whole area served by the DNSP, the VCR must also apply to the whole area served by the DNSP; if the VCR is based upon the industrial sector, the reliability targets considered must also apply to the industrial sector; and if the VCR is based upon the CBD of a particular city, the reliability targets should apply to the CBD of that city.

Question 4. Worst served customers

Should the jurisdictional target setter have flexibility in setting additional obligations for worst served customers?

Are there any other considerations that should be taken into account in addressing worst served customers?

What are the costs and benefits of imposing a nationally consistent GSL scheme?

In the event that the "jurisdictional target setter" is the AER, the AER is not restricted to any particular form of STPIS under clause 6.6.2 of the NER, provided that the chosen form meets the principles set out in that clause. That is, the AER already has flexibility to set additional obligations should it see fit to do so. Aurora notes that the GSL scheme devised by the AER is already intended to address the issue of "worst served customers".²

In the event that the jurisdictional target setter is not the AER, that party is implicitly the State Government or local regulator. Aurora understands that these parties are already empowered to alter the jurisdictional schemes to meet jurisdictional policies and acceptable regulatory outcomes.

Neither the Issues Paper nor the Draft Report seem to identify deficiencies in the jurisdictional approaches to addressing the issue of worst served customers beyond the lack of consistency. Aurora is unconvinced that this is adequate reason for change and consequent additional expense to customers.

² see page 10 of the Final Decision: Electricity Distribution Network Service Providers Service Target Performance Incentive Scheme, published by the AER in June 2008 in combination with page 10 of the Issues Paper: Electricity Distribution Network Service Providers Service Target Performance Incentive Scheme, published by the AER in November 2007.



In the absence of detail about the proposed form of a nationally consistent approach to addressing the issue of worst served customers, it is difficult to provide firm values for the costs and benefits of such an approach. The costs will vary with the amount of resources required to alter systems to capture and report on the appropriate data, and to action any mandatory payment regimes. The benefits will depend upon the degree to which various parties are affected.

Aurora notes that, in relation to outages, the default GSL scheme contained within the AER's STPIS scheme is less onerous than the jurisdictional scheme under which Aurora currently operates.³ In consequence, while the overall cost to customers would be reduced, the worst served customers also see a reduction in the amount received in recognition of reliability below that which is expected.

Question 5. Consistent definitions and exclusions

What issues would arise from adopting a consistent set of definitions and exclusions for the development of output reliability targets across NEM jurisdictions?

Does the publication of unplanned SAIDI and SAIFI as a minimum provide a sufficient level of consistency for the purposes of benchmarking?

Aurora can see no harm in adopting a consistent set of definitions and exclusions for the development of output reliability targets, provided that the targets are set and performance measured using those defined quantities.

Aurora notes that, to achieve the level of transparency such that the actual reliability experienced by the customer base is that reported by the relevant DNSP, there should be no excluded outages, and the reliability should be reported at the smallest, practical level.⁴ By way of illustration, Aurora considers that the "community" and "category" approach used in Tasmania is the largest degree of aggregation to provide a workable indication of reliability: ideally, the disaggregation would extend to the transformer level. Such disaggregation would have cost no more than the state-wide indices generally used, as these indices were created from the analysis of the (already captured) transformer-level data.

Aurora recognises that, whilst the "no exclusion" approach is a true reflection of the reliability experienced by a customer, a workable incentive scheme should consider factors only within the control of the DNSP: that is, there should be some exclusions. Aurora's response to question 7 contains some further discussion on this issue.

In relation to the second part of the question, if it is considered useful to compare the performance of non-identical networks using summary statistics, then SAIDI and SAIFI, the primary drivers of which are factors that are, in general, beyond the control of the distribution networks,⁵ are as good as any other similar measure currently in use.

³ Contained within the Otter *Guideline Guaranteed Service Level (GSL) Scheme*, Version 3, published in July 2012.

⁴ In the event that there are no exclusions, provided that the targets are formed using such data, and performance is measured similarly, the existing STPIS still works as well as ever.

⁵ See the Appendix to this Attachment for an example based upon Aurora's distribution network.



Question 6. Applying consistency across jurisdictions

Does the proposed framework provide sufficient flexibility to meet the specific locational characteristics of individual jurisdictions while achieving the benefits of national consistency?

The framework presented in the Draft Report is insufficiently detailed to ascertain whether it successfully balances local requirements with the desire for national consistency.

Aurora observes that the existing framework contained within the AER's STPIS provides sufficient flexibility to meet the specific locational characteristics of individual jurisdictions while achieving the benefits of national consistency.

Aurora notes that the statement in the Draft Report,

However, it is worth noting that DNSPs in Tasmania and South Australia already report under feeder categories to the AER for the purposes of the STPIS.⁶

is not correct. The application of the STPIS to Aurora is based upon the five reliability categories contained within clause 8.6.11 of the Tasmanian Electricity Code.⁷

Question 7. Process controls and performance safeguards

To what extent should there be an obligation on DNSPs to meet their reliability targets in any given year?

What options are available to provide confidence that DNSPs are seeking to meet the output reliability targets on average?

A significant number of outages (with significant reliability impacts) are caused by factors beyond the control of DNSPs (see the Appendix to this Attachment for an example based upon Aurora's distribution network). In the event that these outages are not excluded from the reliability targets and reporting, and given the essentially random location and subsequent effect of any given outage, it is challenging to guarantee that a DNSP would meet appropriate reliability targets in any given year. Accordingly, it is inappropriate to place an obligation upon a DNSP to meet its reliability target, unless the obligation is enforced with a recognition of the issues surrounding reliability.

Aurora understands that the reliability of supply components of the AER's STPIS is intended to provide confidence that DNSPs are seeking to meet the output reliability targets set by the AER by being developed to ensure the requirement contained within clause 6.6.2(b)(3)(v) of the NER. It is unclear why there would need to be a deviation from this reliability regime.

⁶ Draft Report, page 35

⁷ Aurora Final Determination Attachments, page 170



Question 8. Enforcement and incentives

What jurisdictional compliance obligations should apply?

Are there any further considerations that should be taken into account in the implementation of a nationally consistent incentives scheme?

Aurora has no comment on the first part of this question, considering it best addressed by the jurisdictions.

The second part of the question appears to be a duplicate of question 10.

Question 9. Reporting

What are the important considerations for reporting on performance against reliability targets?

Aurora understands that these issues have been considered by the AER in developing its STPIS and the various Regulatory Information Notices served upon DNSPs as part of the distribution determination process and the subsequent administration of those determinations, and the AEMC in the rule change process to implement the Distribution Planning and Expansion Framework. Aurora reiterates its submissions to these various consultations, and emphasises the need to consider:

- the costs to DNSPs of meeting further reporting obligations, which costs are ultimately borne by customers;
- whether the new reporting obligations will duplicate existing reporting obligations; and
- whether the information required under the reporting obligations will lead to improved customer service delivery.

Question 10. Implementation considerations

Are there any further implementation considerations which should be taken into account in the development of a nationally consistent framework?

Aurora suggests that, in addition to consideration being given to the timing for any changes to jurisdictional legal instruments and the NER, consideration should be given to the timing of when these obligations apply to the DNSPs.

Aurora supports the suggestion on page 20 of the Draft Report about the timing of the changes to the reliability targets to minimise disruption created by a potential pass through event during this period of transitional pricing arrangements arising from the recent changes to chapters 6 and 6A of the NER.



Term	Meaning		
AEMC	Australian Energy Market Commission		
AER	Australian Energy Regulator		
Aurora	Aurora Energy Pty Ltd, ABN 85 082 464 622, in its capacity as a Distributor licensed by the Regulator under the Electricity Supply Industry Act 1995		
Aurora Final Determination Attachments	Final Distribution Determination Aurora Energy Pty Ltd 2012-13 to 2016-17 Attachments, published by the AER in April 2012		
DNSP	Distribution Network Service Provider		
Draft Report	Draft Report – National Workstream: Review of Distribution Reliability Outcomes and Standards, published by the AEMC on 28 November 2013		
GSL	Guaranteed Service Level		
Issues Paper	Issues Paper, <i>Review of Distribution Reliability Outcomes and Standards</i> , released by the AEMC on 28 June 2012		
NER	National Electricity Rules		
OTTER	Officer of the Tasmanian Economic Regulator		
SAIDI	System Average Interruption Duration Index		
SAIFI	System Average Interruption Frequency Index		
STPIS	Service Target Performance Incentive Scheme		
STPIS Final Decision	Final Decision Electricity Distribution Network Service Providers Service Target Performance Incentive Scheme, published by the AER in June 2008		
STPIS Issues Paper	Issues Paper Electricity Distribution Network Service Providers Service Target Performance Incentive Scheme, published by the AER in November 2007		
VCR	Value of Customer Reliability		

Appendix 1: Terms Used in This Document



Appendix 2: Causes of Unplanned Outages in Tasmania

This appendix contains an analysis of reliability data presented in Aurora's Regulatory Annual Performance Reports for the years 2007-08 to 2011-12. Aurora has been required to report on these data to Otter as part of its reporting requirements under clause 12.8.2 of the TEC.

The average SAIFI, SAIDI and number of interruptions for the period 1 July 2007 to 30 June 2012 are presented in Table 1. The effects of planned outages are not included in these values, and the effects of Major Event Days are not excluded.

Table 2 shows the contributions that outages of each of the highest level of outage cause classifications make to the total number of outages, system SAIDI and system SAIFI for the period 1 July 2007 to 30 June 2012. The effects of planned outages are not included in the calculation of these values, nor are the effects of Major Event Days excluded.

Aurora is required to maintain a vegetation clearance zone around its infrastructure under chapter 8A of the TEC. To monitor the effectiveness of its vegetation maintenance practices, Aurora further classifies vegetation-related outages according to the assessed origin of the vegetation that caused the outage. A further breakdown of outages attributed to vegetation is given in Table 3. Please note that this analysis is based on the period 1 July 2008 to 30 June 2012 because the data for the year 1 July 2007 to 30 June 2008 are not available from the Regulatory Annual Performance Report for that year.

Aurora suggests that the outage causes that are wholly within its control are "Assetrelated" and "Vegetation Inside Clearance". These two causes contribute to 41% of SAIFI and 33% of SAIDI.

Two outage causes relate to factors beyond Aurora's control: loss of supply due to transmission outages and outages caused by third parties⁸. These two contribute 19% to SAIFI and 16% to SAIDI. It must be recognised that the effects of failures in the transmission system are explicitly excluded from the reliability component of the AER's STPIS⁹ but consideration of such is relevant for the purposes of illustration of the factors that result in outages on distribution networks.

The remaining factors, over which Aurora has some limited control, contribute 40% to SAIFI and 51% to SAIDI.

In summary, outages over which Aurora has either no control, or only some limited control, account for 59% of SAIFI and 67% of SAIDI, a significant portion.

Table 1. Average interruption statistics for Aurora's system reliability for the period 1 July 2007 to 30 June 2012

Cause	SAIFI (interruptions)	SAIDI (minutes)	Number of Outages	
System Average over 5 years	2.09	249	9,158	

⁸ such as "car hit pole" and vandalism.

⁹ clause 3.3(a)(5) of the STPIS Scheme.



Table 2.	Contribution	of outage ca	uses to Au	rora's system	n reliability	for the	period 1	July	2007
to 30 Jun	ie 2012								

Cause	SAIFI	SAIDI	Number of Outages
Asset Related	39%	31%	55%
Birds and Animals	7%	4%	10%
Vegetation	20%	27%	8%
Weather	15%	22%	14%
Transmission	9%	6%	1%
3rd Party	10%	10%	12%

Table 3. Break down of contribution of outages on the Aurora distribution network caused by vegetation for the period 1 July 2008 to 30 June 2012

Cause	SAIFI (interruptions)	SAIDI (minutes)	Number of Outages
Inside Clearance	8%	7%	23%
Outside Clearance	92%	93%	77%