

Ergon Energy Corporation Limited

Submission on the *Review of Distribution
Reliability Outcomes and Standards*
Australian Energy Market Commission
25 January 2013



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1. INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy) welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) on its *Review of Distribution Reliability Outcomes and Standards*.

This submission is provided by Ergon Energy, in its capacity as a Distribution Network Service Provider (DNSP) in Queensland.

In response to the AEMC's invitation to provide comments on the Draft Report, Ergon Energy has addressed the key questions in the attached template. Ergon Energy is generally supportive of the overall approach to implement a nationally consistent approach to setting distribution reliability standards and performance reporting. Ergon Energy recommends that a nationally consistent framework should be developed in consultation with DNSPs, the Australian Energy Regulator (AER), local jurisdictions and other relevant stakeholders. To enable a robust consultation process, adequate time should be allowed to consult, review and amend the proposed framework. Furthermore, Ergon Energy recommends that the framework provide sufficient flexibility to apply locational specific characteristics for individual jurisdictions and include appropriate transitional arrangements and timeframes.

Ergon Energy is available to discuss this submission or provide further detail regarding the issues raised, should the AEMC require.





2. TABLE OF DETAILED COMMENTS

Question(s)	Ergon Energy Response
<i>Customer consultation and development of guidelines</i>	
<p>1. What should be included in nationally consistent guidelines and which body should be responsible for their development?</p>	<p>Ergon Energy recommends that nationally consistent guidelines should provide a consistent approach to the following:</p> <ul style="list-style-type: none"> • the methodology for the customer consultation process (refer Q2 for further detail); • the economic assessment process (refer to Q3 and Q6 for further detail); • the recommendations/guidelines for handling worst performing feeders or worst served customers (refer Q4 for further detail). Ergon Energy recommends the national framework include no additional targets or obligations for worst served customers; • the definitions and exclusion criteria for all possible reliability measures, giving consideration to the type of network and its customers (refer Q5 for further detail); • the reliability reporting framework (refer Q9 for further detail). Although reliability measures types/targets may differ across DNSPs, Ergon Energy recommends a consistent approach to the type and extent of reporting. <p>The guidelines should also include measures and targets which reflect the different network topologies, historical construction standards, level of connectivity, geography, weather and statistical nature of reliability events, particularly giving appropriate consideration to the geographic dispersion of Ergon Energy's assets and the logistical impacts relating to remote and isolated customers.</p> <p>Furthermore, Ergon Energy recommends that energy and load related reliability indices be included in the guidelines to account for the fact that energy lost on a heavy loaded industrial urban feeder is significantly larger than on a short rural residential feeder given the same interruption time.</p> <p>Nationally consistent guidelines should be developed in consultation with the DNSPs, the AER, the local jurisdictions and other relevant stakeholders. Adequate time should be allowed for a rigorous review and amendment process during the development of these guidelines. Furthermore, Ergon Energy recommends including appropriate timeframes for transitioning to the national framework.</p>



<i>Customer consultation</i>	
<p>2. 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?</p>	<p>Ergon Energy supports that reliability targets are based on customer preferences, and recommends customers be consulted on:</p> <ul style="list-style-type: none">• the economic value that customers place on reliability;• the customer’s willingness to pay for improved reliability levels;• the types (planned/unplanned), frequency and duration of outages that impact particular segments of customers;• the potential targets as well as measures; and• the expected average ‘scale’ of expenditure that may be needed to meet their expectation. <p>However, Ergon Energy believes it may be difficult to correctly identify ‘common’ network performance themes and establish common reliability targets that will represent what different types of customer need and/or value. As such, Ergon Energy recommends that the national framework provide some flexibility and practical options to both the DNSPs and the jurisdiction on the selection of reliability types and targets, based on their customer preferences.</p> <p>The cost of unsupplied load is carried across both customer and supplier. However, the cost of unsupplied load may be difficult to determine accurately for customers as it would depend on the type of customer and time of outage, outage frequency and duration, and magnitude of load interrupted. As such Ergon Energy suggests that the methodology used to evaluate customer perception of reliability be consistent across all DNSPs.</p> <p>Furthermore, consideration must be given to applying consistency in the customer survey (sample) size where applicable, as well as the time, cost and resources required to carry out the customer consultation.</p> <p>Current jurisdictional reliability standards require DNSPs to spend more than otherwise may be required on measures to mitigate planned outages. This is more prevalent for predominantly radial networks like Ergon Energy with a low customer density, and there is no evidence of direct or indirect economic returns to either the DNSP or its customers from such investment. Customers generally do not object to planned outages where</p>



	<p>adequate notice is provided; the frequency and timing are acceptable; and major outages are planned with the community or commercial businesses. DNSPs have worked with their customers for many years to provide an acceptable level of planned outages.</p> <p>Ergon Energy agrees that it is not appropriate to mandate improved customer communication with respect to outages and any improvements to customer communication should be adopted voluntarily by DNSP's where it is their customer's preference to do so and there is clear evidence of a net benefit. Notwithstanding, notification of planned outages should be aligned with the Guaranteed Service Level (GSL) and/or National Energy Customer Framework (NECF) requirements where these are in place, and all national and jurisdictional requirements should be clearly aligned to eliminate any duplication of effort.</p>
<p><i>Economic assessment process</i></p>	
<p>3. What are the relevant considerations for the development of a nationally consistent economic assessment process?</p>	<p>Reliability outcomes are often influenced by a combination of interrelated factors, such as business as usual maintenance and refurbishment works, improved operational practices, network augmentation, the extent of network intelligence, favourable weather conditions etc. As such, establishing or changing the planning/economic assessment process for reliability investment could become very complex and may require sophisticated predictive modelling tools, thus increasing costs, time and resource requirements for a DNSP. The availability of such tools is uncertain. Furthermore, the development, review and acceptance of the economic assessment process itself is likely to be cost and resource intensive for both the AEMC and involved stakeholders.</p> <p>Moreover, economic assessments based on a positive net present value (NPV) calculation utilising a scheme like the Service Target Performance Incentive Scheme (STPIS) and standard average fault rates often delivers a positive NPV or engineering solution investment justification, which may result in the possibility of over investment. As such, an economic assessment process needs to consider the probability of achieving the desired target outcomes and deliver a standard methodology for the measurement of outcomes. Accountability of outcomes against set targets would encourage greater fiscal responsibility.</p>



<i>Worst served customers</i>	
<p>4. Should the jurisdictional target setter have flexibility in setting additional obligations for worst served customers?</p> <p>Are there any other considerations that should be taken into account in addressing worst served customers?</p> <p>What are the costs and benefits of imposing a nationally consistent GSL scheme?</p>	<p>The concept of ‘worst served customers’ may differ to ‘worst performing feeders’. Performance levels of feeders are often measured via ratio based indices like System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) and customer experience could be measured through raw outage duration and frequency.</p> <p>In setting measures for worst served customers the inherent network reliability performance (network configuration, length, design etc.) should be recognised. Above this level, reliability improvement would come at an uneconomic price. Hence it should be recognised there must always be outliers, which would be excluded in statistical analysis. As such, outliers generated through one-off events, particularly those which are beyond the control of the DNSP to predict or prevent with any prudent or efficient solution should not be considered in setting measures for worst served customers or worst performing feeders.</p> <p>Ergon Energy recommends that development of a consistent definition and/or supportive criteria of what defines a worst served customer or worst performing feeder against the set targets, and reporting on what actions were undertaken by the DNSP to resolve this performance would provide greater benefit than establishing additional obligations under the national framework. Flexibility should be driven by assessment of the performance of the worst served customers by the DNSP, over the measured period, and determination of what solutions are able to be implemented to either prevent the event occurring again, or lessening the impact of future events.</p> <p>Ergon Energy recommends that ‘worst served’ customers should be defined as those where performance is consistently and significantly below the customer’s expectations.</p> <p>The introduction of a nationally consistent GSL scheme is unlikely to significantly impact on Ergon Energy’s systems, processes and people. While it is recognised that some changes will be required, current information technology (IT) systems will have the capability to be modified to reflect changes in GSL amounts and parameters. Notwithstanding, Ergon Energy recommends that if a nationally consistent GSL scheme is introduced, it should replace any existing jurisdictional requirements and should be</p>



	<p>consistent with any other national schemes such as NECF. Furthermore, DNSPs should be afforded appropriate transitional arrangements, giving consideration to any existing transitional arrangements.</p>
<p><i>Consistent definitions and exclusions</i></p>	
<p>5. What issues would arise from adopting a consistent set of definitions and exclusions for the development of output reliability targets across NEM jurisdictions?</p> <p>Does the publication of unplanned SAIDI and SAIFI as a minimum provide a sufficient level of consistency for the purposes of benchmarking?</p>	<p>Adopting a consistent set of definitions and exclusions which differ to that currently adopted is likely to incur additional costs and resources associated with:</p> <ul style="list-style-type: none"> • upgrading/changing of IT systems and business processes to collate and process information that complies with the new set of definitions and exclusion criteria; • training and/or self-education of staff involved in collation and/or cleansing of outage information, internal and regulatory reliability reporting and analysis; and • analysis/interpretation of performance trends based on a new set of exclusion criteria. <p>Ergon Energy does not consider that a minimum measure of SAIDI/SAIFI will guarantee consistency unless the associated calculation clauses and criteria are aligned.</p> <p>The type of customer and the value of customer reliability being represented would also need to be included in the framework. Ergon Energy recommends factors that influence SAIDI/SAIFI, like weather related events, are also considered in any jurisdiction reliability comparison. Network configurations, sub-transmission system design (some DNSPs have no sub-transmission level of interconnectivity), historical standards, geography, customer density, access restrictions, and distance all will influence targets and performance, and this will need to be adequately caveated in any benchmarking. It is unlikely that reliability performance could be normalised for all feeder categories to enable benchmarking. Ergon Energy believes that separating and comparing performance further down the delivery chain would assist in benchmarking.</p>
<p><i>Applying consistency across jurisdictions</i></p>	
<p>6. Does the proposed framework provide sufficient flexibility to meet the specific locational characteristics of individual jurisdictions while achieving the benefits of national consistency?</p>	<p>Ergon Energy believes that the framework is not clear on the guidelines for setting measures at the jurisdictional level to reflect locational issues. Ergon Energy recommends that the national framework focus on consistency in definitions for possible reliability measures and the calculation methodology and exclusion criteria for such. For example, the framework should not seek to implement 'numerically' consistent measures across DNSPs for similar feeder categories. The investment for the set targets and expected outcomes should be based on the unique structural, geographical and</p>



	environmental characteristics of a DNSP's network along with its customer types and their preferences.
<i>Process controls and performance safeguards</i>	
<p>7. To what extent should there be an obligation on DNSPs to meet their reliability targets in any given year?</p> <p>What options are available to provide confidence that DNSPs are seeking to meet the output reliability targets on average?</p>	<p>Historical evidence indicates that DNSP network performance is often heavily influenced by the weather conditions for any given year. Moving away from terms like 'best endeavours' to more stringent compliance targets may result in continuance of over investment in efforts to meet targets, if targets are set at unrealistic levels. Setting STPIS on the jurisdictional targets on an annual basis appears to conflict with the intent of measuring 'real' performance improvement.</p> <p>Confidence levels in measuring future performance are difficult to determine and need to factor a reasonable level of performance variability based on weather conditions that exceed average levels. Whilst it is expected that DNSPs have networks that are able to withstand normal weather patterns and conditions, any obligation to meet set targets in a given year must include 'out of the norm' climate conditions (whether by exclusions or by statistically driven performance ranges).</p> <p>Measuring and modelling averages and variability over a long enough period is essential to understand and track the underlying performance of the network, rather than just measuring and managing statistical points from year to year. Impacts of longer term weather and climate trends/changes should also be taken into consideration.</p>
<i>Enforcement and incentives</i>	
<p>8. What jurisdictional compliance obligations should apply?</p> <p>Are there any further considerations that should be taken into account in the implementation of a nationally consistent incentives scheme?</p>	<p>Ergon Energy supports a single set of reliability targets rather than the current practice of a national incentive scheme and jurisdictional reliability standards which have conflicting incentives and inconsistencies in the way performance is measured and reported.</p> <p>Ergon Energy suggests jurisdictional reliability targets be adopted by the AER for STPIS, which could give DNSPs a financial incentive to meet their jurisdictional targets. However, this would require STPIS to adopt the customer preferred reliability measure types/targets and would challenge the STPIS target setting mechanism based on historical averages. Furthermore, applying STPIS on an annual basis does not recognise average performance and may lead to over investment. Applying multi-year rolling averages may provide a suitable alternative.</p>



	<p>Ergon Energy considers that implementation of a national scheme should coincide with the commencement of individual DNSP regulatory control periods as part of transitional arrangements.</p>
<p><i>Reporting</i></p>	
<p>9. What are the important considerations for reporting on performance against reliability targets?</p>	<p>Ergon Energy supports a national framework on reliability reporting. However, the frequency and contents of such reporting must be practical and must add value for the regulators, public, DNSPs, as well as other stakeholders. Ergon Energy supports annual reporting on reliability performance against the annual targets for a given regulatory year, at a summary level only. More frequent reporting within a regulatory year will increase costs and resource requirements for both a regulator and a DNSP without added value, while reporting at a highly disaggregated level such as is required for STPIS is likely to overstate instances of low reliability, particularly where exclusions for isolated, unpredictable outages are not accounted for. Notwithstanding, Ergon Energy supports disaggregating to the feeder level.</p> <p>Ergon Energy strongly suggests that adequate time is provided for transitioning to the new reporting requirements, to allow for IT system changes, resourcing and training etc., and also that adequate time is allowed for reports to be compiled after the close of the regulatory year.</p> <p>Ergon Energy does not support an annual audit of the planning process for long term reliability investment, and reporting of such could prove to be very onerous and resource intensive for both the regulator and a DNSP and would not add any value. Ergon Energy suggests the use of an audit process only where a DNSP consistently fails to meet reliability targets.</p> <p>Furthermore, Ergon Energy does not support the use of public reporting for benchmarking (of performance and/or reliability Capex expenditure) purposes and/or comparative reporting amongst DNSPs. The general public will not always have a full understanding of the underlying reasons behind the differences in performance levels delivered by different DNSPs.</p>



<i>Implementation considerations</i>	
<p>10. Are there any further implementation considerations which should be taken into account in the development of a nationally consistent framework?</p>	<p>Ergon Energy considers there is likely to be additional cost and resource requirements associated with the implementation of a national framework for the DNSPs, the local jurisdictions and the AER. As such, Ergon Energy recommends the framework provide some flexibility and options to both the local jurisdiction and the DNSPs towards the adoption of the nationally consistent framework.</p> <p>The AEMC notes that under the terms of reference there is no time for consultation prior to the publication of a final report. Ergon Energy strongly recommends that there be adequate time for consultation, review by DNSPs, likely amendments etc. before publishing the best practice framework. The draft report does not provide sufficient detail for Ergon Energy to conduct a robust analysis of the proposed changes and to provide detailed feedback.</p> <p>As discussed above, DNSPs should be provided sufficient and realistic timeframes for transitioning into the national framework if its implementation is agreed upon.</p>