

24 February 2017



Mr Chris Pattas
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Australian Energy Regulator
GPO Box 520
MELBOURNE VIC 3001

Dear Mr Pattas

Issues paper: Reviewing the Service Target Performance Incentive Scheme and Establishing a new Distribution Reliability Measures Guideline

Energex Limited (Energex) appreciates the opportunity to provide a submission to the Australian Energy Regulator (AER) on its *Issues paper: Reviewing the Service Target Performance Incentive Scheme and Establishing a new Distribution Reliability Measures Guideline* (issues paper).

The issues paper discusses the AER's review of the Service Target Performance Incentive Scheme (STPIS) and issues identified in implementing the scheme since 2009 as well as the AER's position on developing a Distribution Reliability Measures Guideline. Energex's responses to the specific questions raised in the AER's issues paper on both matters are provided in **Attachment A**.

Energex looks forward to further participation in the consultation process. Should you have any queries regarding this submission, please contact Charmain Martin, on (07) 3664 4105.

Yours sincerely

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**Issues paper: Reviewing the Service Target
Performance Incentive Scheme and Establishing a
new Distribution Reliability Measures Guideline**

February 2017



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Energex Limited (Energex) is a Queensland Government Owned Corporation that builds, owns, operates and maintains the electricity distribution network in the growing region of South East Queensland, including the poles and wires and underground cables used to connect houses and businesses to the electricity network. We provide distribution services to almost 1.4 million domestic and business connections, delivering electricity to a population base of around 3.2 million people.

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Table of Contents

1	INTRODUCTION	3
2	GENERAL COMMENTS	4
	2.1 Service Target Performance Incentive Scheme	4
	2.2 Distribution reliability measures	4
3	RESPONSE TO CONSULTATION QUESTIONS	5
	3.1 Ratio of SAIFI and SAIDI incentive rates	5
	3.2 Distribution reliability measures	6
	3.3 STPIS specific issues	9
	3.4 Future of STPIS	11

1 Introduction

Energex Limited (Energex) welcomes the opportunity to provide a response to the Australian Energy Regulator's (AER's) *Issues paper: Reviewing the Service Target Performance Incentive Scheme and Establishing a new Distribution Reliability Measures Guidelines* published on 5 January 2017.

The issues paper discusses the AER's review of the Service Target Performance Incentive Scheme (STPIS) and issues identified in implementing the scheme since 2009 as well as the AER's position on developing a Distribution Reliability Measures Guideline. As both matters are closely related, the initial consultation processes for the STPIS and Distribution Reliability Measures Guideline have been combined.

The AER has requested that interested parties should make submissions on the issues paper by 24 February 2017. Energex's responses to the specific questions raised by the AER are provided in section 3 of this submission.

2 General comments

2.1 Service Target Performance Incentive Scheme

Given that the current STPIS has not been reviewed since being established in 2009 and in light of recent amendments to the National Electricity Rules (NER) relating to the publication of the Distribution Reliability Measures Guideline, Energex agrees with the AER's assessment that it is timely to review the scheme.

Energex has been operating under an AER administered STPIS during both the 2010-2015 regulatory control period and the current 2015-2020 regulatory control period. During this time, Energex has not identified any significant issues with how the scheme has operated and agrees with the AER's assessment that it has been largely successful in delivering improvements in supply reliability.

Energex's comments regarding the specific questions raised by the AER on the various observations and issues identified with respect to the operation of STPIS are outlined in section 3 below. In general, Energex supports maintaining the scheme in its current format.

2.2 Distribution reliability measures

Energex participated in the consultation process undertaken by the Australian Energy Market Commission (AEMC) as part of its review of distribution reliability measures, along with other distribution businesses and Energy Networks Australia. Energex is satisfied with and supports the recommendations made by the AEMC in its final report with respect to the common definitions for distribution reliability measures to be applied across the National Electricity Market (NEM).

Energex also notes that the AEMC highlighted areas for further review by the AER, specifically:

- The treatment of exclusions and MEDs, particularly the exclusion of catastrophic event days from STPIS calculation;
- Clarifying the definitions of CBD, urban, short rural and long rural feeders;
- Adopting a system wide approach to measure those customers experiencing lower reliability; and
- Measurement and collection of other reliability measures data.

Feedback on the questions raised by the AER with regard to these issues is provided in section 3 of this submission.

3 Response to consultation questions

3.1 Ratio of SAIFI and SAIDI incentive rates

Consultation Question	Energex response
<p>1. The AER would like views on the appropriateness of the current approach for setting the ratio of the relative reward/penalty rates between SAIDI and SAIFI, which is very close to the duration of a typical outage time, or CAIDI.</p>	<p>The current ratio between SAIDI and SAIFI is reasonable. In Energex's view, there should always be greater emphasis placed upon determining the root causes of problems and preventing future faults from occurring. Focussing on the prevention of outages not only delivers overall improvements to network reliability and improved service to customers but also contributes to better community safety outcomes, for example, where instances of 'wires down' are reduced. The higher incentive rate for SAIFI can be further justified by the greater level of expenditure typically required to address the root causes of outages than that required to provide faster response times.</p> <p>The results of recent customer research show that customers in South-East Queensland are generally satisfied with the overall quality of supply as well as the frequency and duration of outages. The majority of South-East Queensland customers (75%) felt that the existing balance between cost and reliability was 'about right', while only a small minority of customers (7%) indicated they would be willing to pay more to increase reliability. Based on customer expectations and the fact that greater focus on further improving SAIDI performance is likely to result in increased operating costs for distributors, there would appear to be little justification for changes to the current approach to setting SAIDI/SAIFI ratios at this time.</p>
<p>2. Would allocating a higher incentive rate to the SAIDI measure - by allocating a higher proportion of the energy value to this measure –</p>	<p>As noted above, Energex supports maintaining the current ratio of the relative reward/penalty rates between SAIDI and SAIFI.</p>

Consultation Question	Energex response
<p>provide a more balanced approach between incentives to improve reliability through capex and opex, and provide a more even improvement to all customers? If yes, what should be the relative weights between SAIDI and SAIFI incentives?</p>	<p>It should be noted that there is not always a fixed relationship between capital expenditure (capex) and SAIFI and operating expenditure (opex) and SAIDI. Capex can be used to improve both SAIFI and SAIDI, as can opex. For example, an auto-recloser will improve SAIDI at the same rate it improves SAIFI and preventative inspection or vegetation management programs are typically a significant opex program aimed at reducing faults (i.e. SAIFI).</p>
<p>3. Currently there is a slight difference between the ratios for SAIDI and SAIFI incentive weights across the CBD, urban and rural networks (the Wn factor of equations (1) and (2) of STPIS, see appendix C). Should a uniform ratio be applied to all network types?</p>	<p>Taking into consideration the varying nature of the impacts of both frequency and duration of power outages on CBD, urban and rural customers and different levels of customer tolerance for outages, Energex considers it is appropriate for different ratios to be applied to each network type.</p>

3.2 Distribution reliability measures

Consultation Question	Energex response
<p>4. Should MAIFle be implemented as the standardised measure for momentary interruptions?</p>	<p>The use of MAIFle as the standardised measure for momentary interruptions is supported. Energex favours MAIFle over MAIFI as it is widely recognised as a more suitable measure for comparing customer reliability service levels. MAIFle is less likely to be skewed by different operational practices and allows for more meaningful intra and inter comparisons.</p>
<p>5. Even if the definition for performance comparisons was set at 3 minutes, should the STPIS provide flexibility to change the MAIFI threshold to a value other</p>	<p>Energex supports the extension of the momentary interruption threshold from one minute to three minutes as it is not expected that this extended threshold will result in any significant adverse customer impacts, such as longer momentary</p>

Consultation Question	Energex response
<p>than 3 minutes to balance the cost of the technologies available to the distributors, the forgone unmeasured unserved energy and customers' preferences?</p>	<p>interruptions. It is also expected that the extended threshold will potentially drive future improvements in automated restoration to the benefit of all customers, e.g. investment in Fault Detection, Isolation and Recovery (FDIR) and self-healing networks. Energex does not consider there is a need for providing flexibility to change the MAIFI threshold as it is expected that technological solutions will be effective within the three minute threshold.</p>
<p>6. What method should be applied to identify catastrophic days so that it is able to consistently, reasonably and universally operated across all distributors?</p>	<p>In Energex's view, a threshold of 4.15 beta (section 3.5 of the Institute of Electrical and Electronic Engineers Standard 'IEEE Guide for Electric Power Distribution Reliability Indices') should be applied to identify catastrophic days. This was also the recommendation of the AEMC in the final report on its review of distribution reliability measures published in 2014 (refer Box 4.2). This is a reasonable method to identify more extreme outliers and can be applied consistently across all distributors.</p>
<p>7. Given catastrophic days are already excluded under the MED framework, should such events be treated differently from the "major event days" concept under STPIS?</p>	<p>The option to exclude catastrophic events from the statistical method used to classify major event days would be an enhancement to the 2.5 beta process and potentially provides a more stable threshold to define normalised performance.</p>
<p>8. Should distributors be permitted to exclude a transmission outage event if the event is caused by the action, or inaction, of that distributor?</p>	<p>It would seem reasonable that transmission outages caused by a distributor should not be excluded. However, if the event occurs on a day which exceeds the Major Event Day (MED) threshold, it should still be excluded as this method is independent of cause.</p>
<p>9. The AER would like views on the current definitions of the feeder classifications.</p>	<p>The current feeder definitions were reviewed by the AEMC with input from Energy Networks Australia and individual distribution businesses, including Energex. There were some deficiencies with current definitions noted during this process and these were taken into consideration by the AEMC in developing the recommended feeder classifications. Energex supports the proposed new definitions.</p>

Consultation Question	Energex response
<p>10. Historically, only feeders supplying the central business districts of the capital cities of each jurisdiction have been classified as CBD feeders for STPIS purpose. Should this practice be maintained?</p>	<p>Energex supports restricting the application of the CBD feeder classification to the central business district of the jurisdiction's capital city as the combination of network design and customer types are generally unique to those feeders.</p>
<p>11. Should planned outages be included in the STPIS? What is the value/cost of a planned outage?</p>	<p>Energex does not support inclusion of planned outages in STPIS. Planned outages are covered by jurisdictional minimum service standard (MSS) requirements in Queensland. In Energex's view, the MSS provides sufficient incentives for Queensland distributors to maintain or improve performance to meet minimum service levels.</p> <p>Any further incentives to reduce planned outage frequency and duration may lead to unintended consequences such as safety issues or a decline in unplanned outage performance levels.</p>
<p>12. What considerations should we take to address the potential safety related issues in order to enable the introduction of incentives to reduce planned outages?</p>	<p>As noted above, Energex does not support the inclusion of planned outages in STPIS.</p>
<p>13. The AER would like views on what level of supply interruptions is considered worst served?</p>	<p>Energex currently reports on its worst performing feeders in its Distribution Annual Planning Report as a jurisdictional requirement.</p> <p>Energex is participating in an ENA review of options for defining and reporting worst served (poor reliability) customers. This work was a follow-up to the AEMC review which suggested further work to achieve a national approach.</p> <p>Further clarity is also required from the AER on how information collected on worst served customers would be utilised, i.e. whether the information will be used for monitoring purposes or incorporated into the STPIS.</p>

Consultation Question	Energex response
14. Do you consider that improved standardisation would increase the effectiveness of STPIS?	Energex considers that standardisation would improve the consistency and accuracy of STPIS.
15. Should unmetered supplies be included in the performance measure?	As unmetered supply is not currently included in the performance measure, there would be significant costs involved in identifying and including unmetered supply into existing reporting systems with, in Energex's view, little or no benefit. Energex therefore does not support inclusion of unmetered supplies in STPIS performance measures.

3.3 STPIS specific issues

Consultation Question	Energex response
16. What is the appropriate method to adjust the target when the performance improvement or deterioration results in the financial reward/penalty that exceeds that cap level?	<p>Energex supports, in principle, adjusting the targets when performance improvement/deterioration results in the reward/penalty exceeding the threshold cap and considers that the method proposed by the AER is reasonable.</p> <p>It should be noted that Energex proposed an adjustment to its targets as part of its 2015-20 Regulatory Proposal in accordance with clause 3.2.1(a)(1B) of STPIS. The methodology used is presented in Appendix 47 of Energex's Regulatory Proposal 2015-20. Although the methodology is slightly different to the example provided in the AER's issues paper, the result should be the same.</p>
17. Do you consider that allowing distributors to retain the same proportion of the value of reliability improvements as they do capital and operating expenditure	If the approach results in a distributor being rewarded/penalised by approximately 30%, this outcome would be consistent with other schemes (i.e. CESS and EBSS) and therefore an appropriate/balanced approach. However, Energex

Consultation Question	Energex response
<p>reductions will promote economic efficiency?</p>	<p>considers that it would be worthwhile for the AER to provide the modelling that demonstrates the sharing of benefits/penalties for further consideration by distribution businesses.</p>
<p>18. We would like views on whether the scheme should continue to operate in a symmetrical way, i.e. penalties are incurred at the same rate as rewards.</p>	<p>Energex supports retaining STPIS as a symmetrical scheme because it is consistent with competitive market outcomes as previously determined by the AER. Additionally, the target setting process should provide a neutral outcome at the commencement of the scheme and should not be biased towards investment.</p>
<p>19. Should consumers' preferences be reflected through the capital and operating expenditure funding level, or through the STPIS incentives, or a combination of both measures?</p>	<p>Energex acknowledges that this is a significant issue but because of the way tariffs are currently structured (i.e. with no locational tariffs), neither capex/opex expenditure funding nor STPIS can effectively reflect customer preferences on a disaggregated basis. This is a recognised shortcoming of the current regulatory regime.</p>
<p>20. Which input factors of the STPIS should be, or could be, made flexible to reflect consumers' preference on reliability level, for example the VCR rate, level of revenue at risk and the major event day exclusion criterion (which determines the coverage of the reliability measures).</p>	<p>There may be benefits in allowing flexibility in VCR rates and the level of revenue at risk based on different consumer preferences and willingness to pay for reliability. However, the MED exclusion criteria should remain as defined to consistently report the underlying performance of the network by excluding statistical outliers.</p>
<p>21. We would like views on the current approach for s-factor calculations. Specifically, should and how the calculation of s-factor be simplified?</p>	<p>Energex does not have any significant concerns with the current approach for s-factor calculations but would not have any objections to a more simplified approach if an appropriate method is identified.</p>

Consultation Question	Energex response
22. We would like views from stakeholders on what other clarification is needed for the GSL section of the current STPIS scheme.	The GSL component is not applicable to Queensland distributors as they are subject to a jurisdictional GSL scheme.

3.4 Future of STPIS

Consultation Question	Energex response
23. In what way could the STPIS be changed to reflect the needs of consumers with storage or other similar technologies?	Theoretically, the VCR may decrease over time as more customers take up energy storage. Therefore, Energex does not envisage that any changes will need to be made to the STPIS scheme overall due as a result of new technologies.
24. The existing STPIS is not based directly on the energy-not-supplied. Do you think it would be preferable to base the financial reward or penalty directly on the energy not supplied? How shall we measure the social harm associated with network outages?	In theory, energy-not-supplied would likely give a better indication of the impact of the outage on the customer. However, energy-not-supplied would be very difficult to determine and measure until appropriate technologies and systems to evaluate energy-not-supplied at individual customer premises is available. In addition, distributors would need to be able to access the customer's meter data. In Energex's view, this option is considerably more complicated than the current method.
25. The existing STPIS is estimated as the product of the outage duration (and frequency) of an average customer and the incentive rates for the SAIDI (and SAIFI). Do you think it would be preferable to base the average outage duration and frequency on energy not supplied (KWH) or load (KVA)?	As noted above, Energex's view is that basing these measures on energy-not-supplied or load would be difficult to measure for individual customers and complicated compared to using SAIDI and SAIFI.

Consultation Question	Energex response
<p>26. Should the AER move away from service quality measures mainly based on SAIDI and SAIFI measures? If not, how do we know when we have reached that point? What other measures should be considered?</p>	<p>Energex's view is that the STPIS should be based on measures which value the customer's energy security, rather than energy delivery. The 'network connection' should be secure and the incentives should remain focussed on reducing the incidence of supply interruptions and faster restoration of supply. There should also be no disadvantage to customers who do not adopt solar PV and/or storage, such as customers who are renting, living in apartment buildings or located in lower socio-economic areas. At present SAIDI and SAIFI continue to address these issues.</p> <p>Although Energex supports maintaining current measures at this time, there may be justification for a future move away from the historical use of SAIDI and SAIFI as a means by which to incentivise businesses as customers' expectations and needs change.</p>

