



9 February 2018

Mr Chris Pattas
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Dear Mr Pattas

Draft Service Target Performance Incentive Scheme (STPIS)

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex) welcome the opportunity to provide comment to the Australian Energy Regulator (AER) regarding its Draft Service Target Performance Incentive Scheme.

This submission, which is available for publication, is provided by Energex and Ergon Energy as distribution network service providers (DNSPs) operating in Queensland.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact either myself on (07) 3851 6416 or Trudy Fraser on (07) 3851 6787.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Jenny Doyle'.

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Draft Service Target Performance Incentive Scheme

Joint response to the AER's
Draft STPIS

9 February 2018



Part of the Energy Queensland Group

Draft Service Target Performance Incentive Scheme



ABOUT ERGON ENERGY

Ergon Energy Corporation Limited (Ergon Energy) is part of the Energy Queensland Group and manages an electricity distribution network which supplies electricity to more than 740,000 customers. Our vast operating area covers over one million square kilometres – around 97% of the state of Queensland – from the expanding coastal and rural population centres to the remote communities of outback Queensland and the Torres Strait.

Our electricity network consists of approximately 160,000 kilometres of powerlines and one million power poles, along with associated infrastructure such as major substations and power transformers.

We also own and operate 33 stand-alone power stations that provide supply to isolated communities across Queensland which are not connected to the main electricity grid.

ABOUT ENERGEX

Energex Limited (Energex) is part of the Energy Queensland Group and manages an electricity distribution network delivering world-class energy products and services to one of Australia's fastest growing communities – the South-East Queensland region.

We have been supplying electricity to Queenslanders for more than 100 years and today provide distribution services to almost 1.4 million domestic and business connections, delivering electricity to a population base of around 3.4 million people via 52,000km of overhead and underground network.

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1 INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex) welcome the opportunity to provide comment to the Australian Energy Regulator (AER) on its Draft Service Target Performance Incentive Scheme (STPIS).

This submission, which is available for publication, is provided by Ergon Energy and Energex as distribution network service providers (DNSPs) operating in Queensland.

Ergon Energy and Energex are committed to providing:

- safe, reliable and affordable electricity supply;
- a great customer service experience;
- customers greater control over their energy consumption;
- efficient and sustainable energy solutions; and
- access to the next wave of energy linked innovative technologies and renewables.

The AER note that while agreement has been reached in many areas of the STPIS, there are a number of issues which require further stakeholder input, including:

1. modifications to the current incentive rates calculation method;
2. treatment of unmetered load in terms of performance measurement;
3. feeder classification;
4. standardising reporting of affected customers; and
5. treatment of “catastrophic days” in defining major event days exclusion (further removal of some types of interruptions from the data set when calculating distribution reliability measures).

Ergon Energy and Energex generally support the AER’s approach to the Draft STPIS. However, we do not support the proposed changes to the ratio of system average interruption duration index (SAIDI) / system average interruption frequency index (SAIFI) incentives. We suggest that the proposed changes to the methodology for adjusting the targets where the reward or penalty exceed the revenue cap under STPIS and adjustments to allowed revenue have been unnecessarily complicated. We propose an alternative methodology and our arguments for retaining the existing ratio of SAIDI/SAIFI incentives along with other specific comments on the Draft STPIS are presented in the next section.

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2 KEY MESSAGES

Ergon Energy and Energex offer the following comments on the AER's Draft STPIS.

2.1 Chapter 3 – Reliability of supply component

2.1.1 Performance incentive scheme parameters

Ergon Energy and Energex generally support the inclusion of momentary average interruption frequency index event (MAIFIE) as part of the STPIS scheme as it provides an index which more closely aligns with the customer impact of an event.

2.1.2 Values for parameters

2.1.2.1 Performance targets

Ergon Energy and Energex support the approach whereby future STPIS targets are based on the five years historical performance, for each of the service parameters applicable for the next regulatory period.

We note that clause 3.2.1(a)(1) requires an adjustment to ensure the average performance over the past five regulatory years reflects events excluded under clause 3.3 and Appendix D of the STPIS. Given there are new exclusions under clause 3.3 of the Draft STPIS, we seek clarity on whether the historical data will require further adjustment to account for these additional exclusions for the purposes of the next STPIS reporting period.

We support the adjustment of targets for any reliability improvements completed or planned and expected to result in a material improvement in supply reliability. However, neither Ergon Energy nor Energex proposed any adjustments for reliability capex sought for the 2015-20 regulatory control period on the basis that the worst performing feeder concept is not intended to bring a step change to the network level performance.

For the first time, the Draft STPIS includes a methodology for adjusting the performance target where the reward or penalty exceeds the revenue cap (Appendix F). However as currently drafted, the methodology appears difficult to apply to both Ergon Energy and Energex. For example, Appendix F provides an approach for a DNSP with only CBD and Urban feeders. However Ergon Energy, for example, does not have CBD feeders but does have Short Rural and Long Rural feeders. The absence of a worked example for all scenarios means we are unable to confirm or understand how this would apply in practice.

Furthermore, the proposed methodology appears to duplicate the revised SAIDI/SAIFI weightings for the s-factor. As the adjustment is applied to the s-factor, this already takes account of the incentive rates which incorporate the SAIDI/SAIFI ratio. Therefore, we do not believe it appropriate to re-apply the weightings.

We suggest that should the AER choose to formally document a methodology in the STPIS itself, it should be a more general approach and simpler to understand. Of note, both Ergon Energy and Energex applied an adjustment in our 2015-20 regulatory determination proposals and the methodology utilised was accepted by the AER. An extract from Energex's 2015-20 proposal documentation as provided in section 2.7 of this response. We suggest this could be modelled as

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an alternative Appendix F methodology as it achieves the requirements for adjusting revenue at risk in accordance with clause 2.5 (a), and can also be explained in a clear, concise and more general manner.

2.1.2.2 Incentive rates

Ergon Energy and Energex note that clause 3.2.2(b)(3) includes provision for the AER to determine an alternative VCR in a distribution determination if the AER considers it appropriate to do so. We support the ability for the AER to apply an alternative nationally accepted VCR, such as that determined by AEMO, or one based on new or more accurate research. We understand that this provision applies where it is determined that the CPI adjusted VCRs prescribed in clause 3.2.2(b)(1)-(2) are not considered relevant and only where a more appropriate VCR has been determined through considerable research and would expect that this would be agreed in conjunction with the DNSP based on the merits of the change.

We note that the weightings for unplanned SAIDI and unplanned SAIFI provided in Table 1 under clause 3.2.2(f) have been adjusted to reflect the 60/40 split between SAIDI and SAIFI. However, as noted in both Ergon Energy and Energex's submissions to the Review of STPIS and new Distribution Reliability Measures Guideline (DRMG) consultation, we do not support the change to this ratio. Specifically, there is not a 1:1 relationship between capex and SAIFI and opex and SAIDI and therefore there is no corresponding bias towards a capex option to improve supply reliability.

It is our position that an investment of capex is likely to result in an improved SAIFI *and* SAIDI as removal of a single outage necessarily reduces the duration of that outage to zero. Moreover, a one-off capex investment will return perpetual benefits, whereas to maintain improvements from an opex investment requires ongoing expenditure.

Furthermore, we believe that capex investments which improve both SAIFI and SAIDI deliver better value for money outcomes than ongoing opex investments targeting improved SAIDI. Prudent capex investments will result in more efficient delivery of improved reliability, and this is likely to be reflected in overall customer satisfaction.

Finally, while we acknowledge that the improvement from a capex investment does not deliver proportional outcomes, the data and outcomes reflective of one regulatory control period (as presented in the Explanatory Statement) are insufficient to suggest a conclusion there is an overall disproportional worsening of customer average interruption duration index (CAIDI). A longer time series would be required to support this conclusion (if at all).

For completeness, it is noted that relevant to the calculation of the incentive rate for MAIFle of MAIFI, clause 3.2.2(j)(1) continues to suggest a value (of MAIFle/MAIFI) of 8% of the incentive rate for unplanned SAIFI. Noting that a value can also be determined by a DNSP during its proposals to vary the application of the STPIS scheme to its determination, the 8% was derived from research conducted many years ago (prior to initial development of the scheme) and ideally, should be reviewed to ensure currency.

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2.1.3 Exclusions

As noted above, clause 3.3 of the draft STPIS now provides additional events to be excluded from historical performance under clause 3.2.1(a)(1). We seek further clarity from the AER as to the treatment of these events for normalising historical data for setting the targets for 2020. In particular, as momentary interruptions have increased from 1 to 3 minutes, the STPIS would benefit from providing clarity on whether momentary interruptions for the past 5 years should be recalculated to account for all interruptions of up to 3 minutes duration.

Furthermore, we note that our responses to the AER Regulatory Information Notices excluded Customer Installation Faults, and suggest that a provision similar to that in our Distribution Authorities is also included in clause 3.3. That is, *an interruption caused by a customer's electrical installation or failure of that electrical installation*. Moreover, we note that the draft DRMG proposed excluding interruptions associated with meter malfunctions. While Ergon Energy and Energex both currently report supply interruption events associated with faults and failures of the energy meter, we would support excluding these interruptions in the future and suggest that these are also included in clause 3.3

2.2 Chapter 6 – Guaranteed service level component

2.2.1 Value of parameters

Notwithstanding that the GSL component of the AER's STPIS will not be applied where a DNSP is already subject to a jurisdictional GSL scheme (as is the case for Ergon and Energex), it is noted that STPIS denotes requirements for payment of STPIS GSLs for frequency and duration of interruptions, as well as total duration of interruptions. The STPIS scheme goes beyond existing jurisdictional GSL arrangements (in Queensland) which does not set GSLs for total duration of interruptions. Furthermore, an overall GSL cap (per customer) is in place in Queensland limiting total GSL payments to a single customer of \$454 per annum across all types of GSLs payable (excluding wrongful disconnections).

Without a cap on total STPIS GSL payments and, with application of the total duration of interruptions payments, significant costs may be incurred in payments to customers in any given year, particularly in relation to storm events (where exclusions do not always apply). These payments would be reflected in a DNSP's annual revenue requirement as set out in the relevant distribution determination. The more onerous (than existing jurisdictional GSL arrangements) would also likely require system and process changes to implement. We strongly suggest the parameters of the STPIS-GSL scheme are reviewed whilst the scheme is under consultation, and in particular, consideration be given to including a cap on total STPIS GSL payments.

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2.3 Appendix A – Performance incentive scheme parameters – standard definitions

2.3.1 Reliability component

Ergon Energy and Energex support the amendments to the definitions of the parameters included in Appendix A, as well as the addition of MAIFIE, Momentary Interruption Event and Momentary Interruption. However, the application of these parameters to individual DNSPs (during the Framework and Approach process) must consider their ability to measure and report on the indices.

With respect to the Notes under the Reliability Component table, we support the AER's position to not include unmetered supplies in the definition of distribution customer, as well as the exclusion of customers who advise the DNSP that they do not want supply to be restored. However, we seek clarity as to recording of these customer minutes off. For example, the STPIS would benefit from clarifying if all minutes from the whole outage are excluded, or only those minutes from the time the customer advises that they do not want supply restored. We propose that this exclusion is explicitly made in clause 3.3.

It appears that Note 7 differs to that in the Explanatory Statement for the draft DRMG, which proposed standardising on the reporting of 67 per cent of all downstream customers for a single-phase high voltage (HV) outage on a three phase network and 100 per cent of customers for all other HV outages, for example, when there is a single HV phase outage on a two phase or single phase HV system. However, Note 7 suggests that unless there are accurate means to determine the exact number of customer affected, 33 per cent of all downstream customers are taken to be affected for a single-phase HV feeder outage on a three phase network. We recommend the STPIS is consistent with the proposed DRMG, with reporting of 67 per cent of all downstream customers taken to be affected for a single-phase HV feeder outage on a three phase network.

With respect to feeder categories, we support the amendments contained in the Draft STPIS, and in particular the clarification of CBD feeders and reporting period applicable to Urban feeders. Furthermore, we note that there is no clearly defined term for 'feeder' or 'total feeder route length' which could result in inconsistent application of feeder categories for the purposes of benchmarking. As such we suggest that for clarity and consistency, this would be best placed in the National Electricity Rules.

Additionally, the increasing penetration of Photovoltaic and Battery Energy Storage Systems means there is a growing number of distribution feeders with customers capable of maintaining reliable supply within their premises during power outages. Further, due to global transition of electricity systems to more dynamic networks with bi-directional power flows and micro-grid characteristics, Ergon Energy and Energex strongly believe that the AER should consider the impact of the emerging short-duration self-sufficient customers and subsequently new feeder categories / topologies on STPIS. We believe it could lead to lower overall costs to all consumers (as indicated in the Energy Networks Australia's Network Transformation Roadmap section on "Resilient 2027 Future State") and encourage further research in this area.

Finally, we seek clarity on the application of all changes to the reliability parameters and exclusions in determining the five years historical performance when setting our 2020 targets, as noted above.

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2.4 Appendix B – Calculating incentive rates

As noted in section 2.1.2.2 above, we strongly believe there is neither sufficient historical (data) evidence nor a sound basis of argument to support a change in the ratio of incentive rates for SAIDI/SAIFI.

2.5 Appendix C – Adjustments to allowed revenue

2.5.1 Calculating allowed revenue

Ergon Energy and Energex note that the exact way the s-factor is incorporated into the control mechanism for standard control services should be set out in a DNSP's distribution determination, rather than in the STPIS. This would align with requirements of the NER clause 6.2.6 as referred to in the opening paragraphs of Appendix C of the AER's draft STPIS.

The inclusion of Figure C.1 to demonstrate formulas to apply STPIS to standard control services revenues is unnecessary and will continue to lead to confusion if / when the formulas differ to any set out in DNSP distribution determinations. This is particularly the case due to the referencing and defining of terms (e.g. TAR, AR, ART) within the STPIS which may not align to those otherwise defined in determinations or the NER, and, in the setting of 't' (regulatory year). Rather, Appendix C should maintain a focus on the s-factor calculation formula (currently drafted in Figure C.2).

The lead in paragraphs adequately denote the proposal for STPIS to be additive (not multiplicative) in revenue applications (i.e. we propose the removal of Figure C.1). The inclusion of a calculated financial reward/penalty as a dollar value in the control mechanism formula (maximum allowable revenue) as an additive St for STPIS performance is supported by Ergon Energy and Energex as it is more explicit and preferred over using a fixed revenue cap and multiplicative approach to applying the final s-factor.

Of note, any transition to a new approach must avoid any opportunity for DNSPs to be disadvantaged or risk not being able to recover revenues that had previously been determined in justifying STPIS improvement investments.

2.5.2 S-factor calculation formula

Ergon Energy and Energex generally support the AER's proposal to simplify the calculation of the s-factor, and in particular, linking the reward/penalty for performance to the revenue input of the same year. However, we consider that the AER's proposed formula, as set out in Figure D.2 of the Explanatory Statement, should use the nominal weighted average cost of capital (WACC) in place of CPI, if the intention is to account for the time value of money.

Furthermore, we note that the nominal WACC is used to account for the time value of money for under- and over-recoveries of revenues under the revenue cap and cost pass-through applications.

It would be our preference for a worked example to remain in the STPIS. In the absence of a worked example, we suggest the AER provide an updated model to all participants (suitable for all networks) to ensure comparability in its application in practice.

2.6 Appendix D – Major event days

As noted in our response to the draft DRMG, Ergon Energy and Energex support the Australian Energy Market Commission’s proposal to remove catastrophic day events before the calculation of the major event day threshold (tMED). We note that IEEE standard 1366 considered the application of 4.15 beta to identify and remove severe outliers, but as they were unable to recommend a universally applicable approach, they recommended identifying and processing catastrophic events on a case by case basis. We support an approach which would enable the identification and removal of significant events such as Tropical Cyclones Larry and Yasi on an individual DNSP basis, where it could be demonstrated that they would have a material and long lasting impact on the tMED when retained in the daily SAIDI. We would welcome further research in this area.

2.7 Appendix F – Adjustment of performance target where the reward or penalty exceeds the revenue cap

As noted in section 2.1.2.1 Performance targets, we believe the explanation provided for the proposed methodology for adjusting the performance target where the reward or penalty exceeds the revenue cap is unclear and confusing.

The below extract from Energex’s 2015-20 proposal documentation sets out an alternative (proposed) Appendix F methodology which has been accepted by the AER in the past.

The methodology is to reduce the s-factor for each reliability parameter in proportion to its contribution, such that their sum equals the revenue cap in each year. The reduced s-factor for each reliability parameter is then used to calculate the adjusted performance for that year. The calculation is detailed further below:

- 1. Determine the “raw” s-factor for each reliability parameter in the year that the revenue cap was exceeded. This is done by taking the actual SAIDI or SAIFI performance achieved in the year, subtracting it from its respective target, and then multiplying by the incentive rate for that parameter.*
- 2. Summate the individual raw s-factors for each parameter to calculate an overall raw s-factor.*
- 3. Determine the ratio between the overall raw s-factor and the capped s-factor.*
- 4. Pro rate the s-factor for each parameter by the ratio calculated in (3). These adjusted s-factors should now summate to equal the revenue cap.*
- 5. Convert the adjusted s-factor for each parameter back to a SAIDI or SAIFI value by multiplying it by its incentive rate and then adding it to its respective SAIDI or SAIFI target.*

Note that if any individual reliability parameter is not favourable to its target (i.e. it has a negative s-factor) in the year under consideration, it should not be included in the adjustment, and the ‘capped’ s-factor in step (3) is increased to adjust for the negative value.

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These adjusted SAIDI and SAIFI values then replace the actual values achieved in that year when calculating the five year average.