570 George Street
Sydney NSW 2000
All mail to GPO Box 4009
Sydney NSW 2001
T +61 2 131 525
F +61 2 9269 2830
www.ausgrid.com.au

8 February 2018

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

Dear Mr Pattas,

Draft amended Service Target Performance Incentive Scheme

Ausgrid welcomes the opportunity to make a submission in response to the Australian Energy Regulator's (AER) draft amended Service Target Performance Incentive Scheme (STPIS).

Ausgrid strongly supports the use of incentives to efficiently improve the reliability of electricity distribution networks to the benefit of customers. In response to the incentives under the current STPIS we have invested in reliability enhancing technologies, such as network automation devices, and made operational refinements to our distribution network, which have offered improved reliability outcomes for our customers.

Our submission covers the following key points:

- increasing the threshold for a momentary interruption to less than 3 minutes will provide increased flexibility and options for the use of distribution automation systems, and will benefit customers by encouraging greater use of such reliability enhancing technologies;
- rebalancing the existing incentive weightings between SAIFI and SAIDI to encourage more opex based reliability solutions that improve SAIDI is not required, because:
    - independent research indicates that customers prefer a reduction in the frequency of outages (SAIFI) compared to their duration (SAIDI),
    - when seeking to improve reliability, Ausgrid actively responds to the existing incentives under the economic framework administered by the AER and selects the most efficient solution at the least cost to customers irrespective of whether it involves capex or opex (this outcome is clearly of benefit to customers),
    - SAIDI and SAIFI are intrinsically linked, with the most significant reductions in SAIDI typically achieved by eliminating the outage altogether (with either a capex or opex solution).
- given the potential variability in both customer preferences and network performance for both SAIDI and SAIFI, the amended STPIS should not bind the AER to a fixed allocation of those incentives. Instead, Ausgrid suggests that the amended STPIS should actually specify an allowable range and permit the allocation to be set through the distribution determination process - in a similar way to how other scheme parameters are determined under the current STPIS requirements. This could better target specific customer preferences as revealed through proactive and genuine consultation; and

- the AER's draft position is to implement STPIS outcomes as a fixed monetary amount rather than a percentage adjustment to maximum allowed revenue, as currently applies. We support this change where an electricity distributor is subject to a revenue cap but note that it may be administratively difficult to apply a dollar value penalty or reward if the relevant control mechanism is a percentage based constraint on the price a distributor can charge i.e. a price cap.

We elaborate on these key points further in **Appendix A**, where we also outline our vision for the future of STPIS. This includes feedback we have received from stakeholders that the current telephone response metric is not a meaningful indicator of customer service and notes our plan to run a pilot scheme in the forthcoming regulatory period - with the aim of developing a new customer service parameter capable of being rolled out NEM-wide.

If you have any queries or wish to discuss this matter in further detail please contact Shannon Moffitt, Senior Regulatory Strategy Analyst, on 02 9269 2280 or via email shannon.moffitt@ausgrid.com.au.

Yours sincerely,

Simon Camroux
Head of Regulation

APPENDIX A

1.1 Momentary interruptions

Ausgrid supports the draft amended STPIS changing the threshold for a momentary interruption from less than 1 minute to less than 3 minutes. We consider that the proposed change will lead to improved reliability outcomes for customers – which is a key priority for Ausgrid.

Network automation devices need to perform multiple actions before they can restore supply following an outage. Although these actions are fully automated, in many cases they can take longer to complete than the current 1 minute threshold. Increasing the threshold to less than 3 minutes will provide increased flexibility and options for the use of distribution automation systems, encouraging greater use of reliability enhancing technologies to the benefit of customers.

This change is also in line with the IEEE recommendation of 5 minutes for a momentary interruption and the decision by Ofgem, in 2000, to amend the definition of a momentary interruption in the United Kingdom from 1 to 3 minutes.

1.2 Ratio of SAIFI and SAIDI incentive rates

The existing 50/50 allocation of incentives between SAIFI and SAIDI are well balanced and, for the reasons set out below, we believe they should remain unchanged.

1.2.1 Customer preferences

Before amending the existing SAIFI and SAIDI incentives, Ausgrid considers that more research should be done into customer reliability preferences – which will improve network business understanding of customer preferences through engagement on components such as 'willingness to accept' and 'willingness to pay'. Ausgrid is keen to work with the AER to facilitate this additional research.

The AER stated in its *Explanatory Statement* that a 60/40 incentive weighting in favour of SAIDI would 'achieve a better balance between the incentive to repair network faults in a timely manner and the incentive to invest in more network automation to isolate network faults'.[1] There is, however, research which suggests that strengthening the incentives for SAIDI while weakening them for SAIFI may not align with customer preferences.

The Australian Energy Market Commission (AEMC), for example, engaged Oakley Greenwood in 2012 to research this issue. To do this, Oakley Greenwood asked 788 residential customers to identify their preference from three choices for reliability investment. They found:[2]

> *Results indicated that 59% preferred investments that would reduce the number of interruptions as compared to investments that would reduce the duration of outages (16.8%) or that would provide better information to customers about how long outages would last (24.2%).*

The AER's STPIS review presents a timely opportunity to seek the views of customers on the reliability improvements they most value. The research on this issue to date, which we are aware of,

---

1 AER, *Explanatory Statement: Draft amended STPIS*, December 2017, p. 11.

2 Oakley Greenwood, New value of customer reliability, 30 May 2012, p. 7 <http://www.aemc.gov.au/Media/docs/Oakley-Greenwood---NSW-customer-survey-results-662076de-5235-4e43-a451-188661253092-0.pdf>

appears to demonstrate that only a small minority of customers (16.8%) would prefer a rebalancing of incentives towards greater SAIDI improvements.[3]

Based on this, additional research should be conducted to test whether stronger SAIDI incentives align with the reliability preferences of customers, with the results feeding into the AER's final decision on the amended STPIS. As noted, Ausgrid is keen to work with the AER to facilitate this additional research.

1.2.2 Effectiveness of the existing regulatory framework

We understand that the AER may be concerned that the current 50/50 incentive allocation between SAIFI and SAIDI could be encouraging capex over opex based reliability solutions.

Ausgrid considers the existing economic regulatory framework administered by the AER is effective and does not provide for a bias toward either capex or opex. We note, for example, the extensive forecasting techniques the AER utilises when assessing expenditure proposals from electricity distributors. This includes repex modelling, governance and detailed project reviews, benchmarking, trend assessments, and extensive stakeholder consultation.

Through the capital expenditure sharing scheme (CESS), electricity distributors also face a reward or penalty of 30 percent of the NPV of any underspend or overspend; the same incentive rate for opex under the efficiency benefit sharing scheme (EBSS). This provides for balanced incentives when making expenditure decisions, such that under the economic framework administered by the AER Ausgrid selects the most efficient solution at the least cost to customers irrespective of whether it involves capex or opex.

Examples of opex based reliability solutions which Ausgrid has employed include proactive wide scale vegetation management programs, reactive investment in vegetation management where an area is identified as experiencing poor reliability due to overgrowth, and repair and maintenance work (including changing the priority and frequency of existing programs).

1.2.3 Effectiveness of capex solutions at improving SAIDI

The *Explanatory Statement* accompanying the draft amended STPIS indicates that the AER considers it necessary to change the existing incentive weightings between SAIFI and SAIDI to encourage more opex based reliability solutions which reduce the duration of network outages.

When considering whether more opex based solutions should be incentivised, we wish to highlight the effectiveness of capex based alternatives at improving reliability for customers.

In terms of effectiveness, the optimal method of improving SAIDI is to prevent customers from experiencing any SAIDI minutes in the first place. In seeking to achieve this, it should be noted that (generally speaking):

- capital investments, such as replacement of a poor condition asset or installation of network automation devices, can interrupt momentary outages before they become sustained interruptions, resulting in no SAIDI minutes for customers; and
- opex based solutions, such as adding another field crew, are often only capable of responding to an interruption once it has occurred, reducing but not preventing SAIDI minutes.

[3] Oakley Greenwood, New value of customer reliability, 30 May 2012, p. 7

There are other reasons why capex based reliability solutions may be more effective at achieving better SAIDI outcomes for customers. These include:

- improved segmentation of the network. For customers, this has substantial SAIDI benefits as supply can be restored through switching rather than waiting for the faulted segment of the network to be repaired;
- lower life cycle costs. A capex based solution involves 'one-off' expenditure capable of providing SAIDI benefits to customers over the life of a new asset (typically 50 years) while opex solutions require ongoing 'year-on-year' expenditure; and
- improved detection of where a sustained interruption has occurred. This enables field crews to respond to network outages more quickly, leading to shorter network outages.

In our view, the current STPIS does not need to change in order to encourage more opex based reliability solutions. Often a capital investment in a network automation device or other reliability enhancing technology will be the most effective option for electricity distributors to implement. As outlined in section 1.2.2 above, Ausgrid also already engages in opex based solutions when they are found to be the the most efficient solution at the least cost to customers, in accordance with the incentives under the economic framework the AER administers.

1.3 Potential application of SAIFI and SAIDI ranges

If it is determined that weaker SAIFI but stronger SAIDI incentives have the potential to offer improved reliability outcomes, then the amended STPIS should not bind the AER to a fixed allocation of those incentives for all electricity distributors. Instead it should specify an upper and lower limit for SAIFI and SAIDI and allow the AER to determine the actual allocation on a case-by-case basis in an electricity distributor's regulatory determination.

This can be achieved by amending the STPIS so it specifies an allowable range for SAIFI and SAIDI incentive weightings which can be determined. The table below sets out what we consider should be this allowable range. In short, we are of the view that the minimum incentive allocation for both SAIFI and SAIDI should be 40 percent and the maximum 60 percent. The total allocation to both should sum to 100 percent.

Reliability parameter	Incentive range
SAIFI	40 to 60 percent
SADI	40 to 60 percent
Total (SAIFI and SAIDI)	100 percent

An approach where a range of SAIFI and SAIDI incentives is specified in the amended STPIS is more preferable than fixing a 60/40 allocation in favour of SAIDI because it:

- aligns with how the revenue at risk and other parameters under the STPIS are set;
- provides more targeted incentives depending on the individual performance of a business;
- would remove the need to amend the STPIS once more if the AER considers that a 60/40 allocation in favour of SAIDI is not achieving improved reliability outcomes for customers; and
- allows for customers and stakeholders in each local network area to provide their input into what the strength of SAIFI and SAIDI incentives should be during the course of making a regulatory determination.

Of these, the increased level of stakeholder consultation that an incentive range should facilitate would provide the most benefits. Customers have different preferences in terms of the reliability they most value. Some businesses may value SAIFI more, as once an outage has occurred, the duration may be irrelevant if any interruption to supply severely disrupts production. A life support customer, on the other hand, may value SAIDI more as their back up plan (battery back up) is likely to only last for a fixed period of time. Customer preferences could also be sought by feeder category, with higher or lower incentives set for CBD, urban or rural feeders, in line with the current STPIS.

If an incentive range is specified in the amended STPIS, then the AER could weigh up these different preferences and select the allocation that most aligns with what customers value in a particular local network service area. It would also encourage electricity distributors to engage more with customers about whether they value improvements in the frequency (SAIFI) or duration (SAIDI) of outages. This would lead to more informed decisions about what the incentive weightings should be for each distributor in the NEM.

1.4 How the s-factor should be expressed

The AER's draft position is to implement STPIS outcomes as a fixed monetary amount rather than a percentage adjustment to maximum allowed revenue, as currently applies.

In our view, the rewards and penalties received under the amended STPIS should be aligned with the control mechanism that applies to an electricity distributor. This is so that a dollar adjustment would be applied under a revenue cap and percentage adjustment applied under a price cap.

We consider this to be necessary as it would be administratively difficult to apply a dollar value penalty or reward when the applicable control mechanism involves a percentage based constraint on the price a distributor can charge i.e. a price cap.

1.5 STPIS of the future

In the course of our engagement on our 2019-24 regulatory proposal, customers have informed us that they do not consider the existing telephone response metric in the STPIS to be a meaningful indicator of customer service. Based on this feedback, we are in the process of exploring better customer service measures which could be included in the STPIS of the future.

An option which customers and stakeholders have found appealing is the operation of a pilot scheme in the 2019-24 regulatory period which requires us to report on a new customer service parameter. This pilot scheme would not have any revenue at risk placed under it. However, the data we report would ideally be used to introduce targets in later regulatory periods.

At this stage our preferred option is to introduce a complaints-based metric. We are still working with stakeholders in relation to the form that such a metric would take. It could, however, be based on the similar parameter introduced by Ofgem in 2010 as part of its Broad Measure of Customer Service (BMCS) scheme.

Under the BMCS scheme, the quality of an electricity distributor's complaints handling procedures is measured against four key indicators. Performance against each indicator is weighted to calculate an overall complaints metric score. The weightings are set out in the table below.

Indicator	Weighting
The percentage of total complaints outstanding after one day	10%
The percentage of total complaints outstanding after 31 days	30%
The percentage of total complaints that are repeat complaints	50%
The number of Energy Ombudsman decisions that go against the electricity distributor as a percentage of the total complaints	10%

In establishing a new customer service parameter, Ausgrid is currently consolidating our complaints systems. This consolidation process is a necessary first step, as a single database is needed to log and track complaints.

The STPIS of the future could also include other measures of customer service. These include a customer survey, where an independent third party contacts a sample set of customers and asks them a list of questions set out in an AER approved questionnaire. The STPIS of the future could also require electricity distributors to submit a report on their stakeholder engagement and vulnerable customer activities annually, with the AER assessing all reports against a set of minimum criteria.

We look forward to sharing the results of our pilot scheme with the AER. With input from stakeholders, these results should lead to Ausgrid eventually putting forward a proposal for the STPIS of the future to include a new parameter that is a more meaningful indicator of the quality of service provided to our customers.