



9 February 2018

Mr Chris Pattas
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001
By email: AERInquiry@aer.gov.au

Dear Chris

Draft Service Target Performance Incentive Scheme Amendment

We welcome the opportunity to respond to the Australian Energy Regulators (**AER**) draft decision on amendments to the Service Target Performance Incentive Scheme (**STPIS**) Guideline.

We do not support the AER's draft decision to reweight the incentive ratio to 60/40 for SAIDI/SAIFI, because:

- the AER is making a subjective call that customer's value SAIDI more than SAIFI without evidence. The AER should ensure incentive neutrality between SAIDI and SAIFI. Arbitrarily reweighting incentives may introduce distortions in the STPIS leading to inefficient investment decisions.
- the AER's concern the current 50/50 balance creates bias towards capital solutions is misguided. We seek to employ the most efficient solutions which provide the greatest reliability benefit to customers at the lowest cost. Capital solutions however are often the most efficient solution because they involve one-off expenditure and provide long term reliability benefits, both SAIDI and SAIFI.
- altering the incentive balance to pursue operating expenditure solutions which solely address SAIDI is inefficient and will be ineffective. The most effective and efficient way to reduce SAIDI is first to prevent an outage occurring and second to mitigate the impact. It would be inefficient to continue ongoing response activities if long term prevention solutions are available.

We recommend the AER retain a 50/50 balance in the SAIDI/SAIFI incentive rates to ensure its incentive schemes are balanced and solution neutral. Balanced incentives best promote efficient investment decisions.

Our submission also recommends the Guideline include:

- a description of the process for determining the Value of Customer Reliability (**VCR**)
- the formula for calculating $S_{t-2}^{\%}$ and publication of a worked example in an attached worksheet.

Should the AER have any queries regarding this submission, please do not hesitate to contact Megan Willcox on (03) 9236 7048, or mwillcox@powercor.com.au

Yours sincerely,

Brent Cleeve
Head of Regulation, CitiPower, Powercor Australia and United Energy

1 Ratio of SAIDI and SAIFI incentive rates

The AER has not provided evidence that changing the balance of incentives reflects customer values

The AER's draft decision reweights the SAIDI/SAIFI incentive weighting in favour of SAIDI without evidence that customers' value SAIDI more highly.

The STPIS scheme was developed on the basis of a 50/50 balance which ensures incentive neutrality between SAIDI and SAIFI. Incentive neutrality promotes efficient investment in least cost solutions which deliver the greatest reliability benefits, irrespective of whether these are SAIDI or SAIFI benefits.

The AER should not be introducing incentive distortions through the STPIS scheme. Distorting the balance of incentives has the effect of altering the cost-benefit analysis of different reliability improvement solutions and has the potential to lead to inefficient investment decisions. Further, the level of the reweighting proposed in the draft decision is substantive and not justified without any supporting evidence of the relative customer values of SAIDI and SAIFI.

We employ the most efficient solution

The AER's concern that the current 50/50 balance in the SAIDI/SAIFI incentive rates creates bias towards capital solutions is misguided.

We are not bias towards capital solutions. We employ the most efficient solution which provides the greatest reliability benefit to customers. The optimal solution is dependent on the underlying cause and the relative costs and benefits of each feasible solution.

We do not have a predefined preference for capital or operating expenditure solutions and the relative balance in the SAIDI/SAIFI incentive rate does not create an incentive for preferring capital or operating solutions. We employ multiple operating and capital solutions to address both SAIDI and SAIFI, examples include:

- installing Automatic Circuit Reclosers (ACR), switches and monitoring equipment (capital solution)
- reviewing vegetation and maintenance procedures (operating solution)
- reviewing field response procedures (operating solution)
- investing in field mobility and works management tools (capital solution).

Capital solutions are often the most effective and efficient for reducing both SAIDI and SAIFI. Capital solutions involve one-off expenditure and provide long term reliability benefits. While operating expenditure solutions are incurred on an ongoing basis and provide temporary reliability benefits. It is not efficient to keep incurring operating expenditure to mitigate outage impact when long term solutions to prevent outage occurrence exist.

Importantly, capital solutions can specifically target the time to restore supply (SAIDI). For example we have recently undertaken the following capital programs to reduce SAIDI:

- during 2017 we implemented a new technology which enables quicker resolution of faults. The technology automates switching processes currently conducted manually in the control room. The technology will reduce fault duration through faster switching but will not reduce fault incidence. This is an example where we have used a capital solution to improve outage duration. The benefits will be realised gradually as we rollout the technology across our network.
- in late 2016, we developed an IT tool to improve scheduling and dispatch of field crew. As this tool is rolled out, field crew will be deployed more efficiently, reducing travel times and enabling faster outage response.
- installing ACRs, switches and monitoring devices to narrow the fault area. Field crew are then deployed to a more targeted location enabling quicker identification of the fault cause and faster restoration. This is an example where capital solutions are more efficient than operating solutions.

For example, we have a 400 kilometre rural long feeder supplying approximately 4,500 customers in the Castlemaine, Guildford and Taradale areas. Prior to 2015, identifying outage location involved field crew patrolling up to 400 kilometres (**km**) of line which prolonged outage duration. Based on its SAIDI performance, in 2015 we installed an ACR on the Guildford section, which serves approximately 1,200 customers and consists of 65 km of feeder. This investment was justified on the basis it would greatly reduce patrol times and therefore reduce outage times. It also reduced the number of customers affected by an outage in the Castlemaine and Taradale areas.

Seeking to promote operating expenditure solutions is inefficient and ineffective

The AER consider it necessary to incentivise operating expenditure solutions—such as additional field crew—to improve SAIDI. In general, employing additional field crew is an inefficient solution because:

- we operate an expansive network covering 65 per cent of Victoria’s area and the cause and location of unplanned faults is unknown. Therefore seeking to base additional field crew with right skills and equipment in the correct location to restore unplanned faults is impracticable and inefficient. Employing additional field crew would risk under-utilisation of employees and will not materially reduce SAIDI.
- rural feeders do not take the most direct route from start to end of the feeder. Feeders traverse the country side, often through inaccessible terrain and spurs often head cross country away from roads and developments to supply small groups of customers. Without monitoring devices and ACRs, additional field crews would be ineffective at reducing SAIDI because the greatest time is spent following the feeder route to find a fault location. With monitoring devices, crews typically save time (even if located further away) by driving straight to the affected network area and then inspecting a few km of line.
- capital solutions involve one-off expenditure on assets with average lives of over 50 years, whereas operating expenditure for additional field crew is incurred on an ongoing annual basis. We estimate the cost of every one additional field employee (without considering vehicle and equipment cost) is equivalent to the cost of procuring and installing around 45 ACRs, with the latter having more material improvement in SAIDI.

2 Value of customer reliability

The 2008 VCRs are not relevant and should be replaced

The draft amended guideline retains the old Victorian value of customer reliability (**VCR**) from 2008. However the AER did not apply these in the previous round of regulatory determinations on the basis AEMO published more recent VCRs in 2014. We consider it inappropriate to retain outdated VCR which the AER presumably has no intention of applying in future.

Given the VCR is periodically reviewed and updated it would be more appropriate to include in the guideline a description of the process for determining the VCR. This would ensure the STPIS Guideline remains relevant over time and does not include hardcoded values which are outdated by the time the Guideline is applied in regulatory determinations. This option is paramount for Victoria given the VCR is frequently reviewed mid-way through the regulatory determination process.

The VCR should be calculated based on a long term average

We recommend the STPIS Guideline allow for the VCR to be calculated based on a longer term average of VCR studies, for example over 10 years.

The VCR is a key input in our investment decision making. The VCR impacts both the STPIS incentive rate and the Regulatory Investment Test for Distribution (**RIT-D**). The current volatility in the VCR is not conducive to efficient investment decisions, particularly when investing in assets with average lives of 50 plus years.

3 Revenue adjustment formula

We recommend the following technical changes to the revenue adjustment formula in appendix C, formula 5:

- there should be a multiplication sign between AR_{t-2} and $S_{t-2}^{\%}$
- the rate of return represents the time value of money, therefore financial amounts should be escalated by the nominal rate of return rather than by the inflation rate. The banking mechanism can be used to smooth out revenues from year to year which is a consumer benefit. However, if banked amounts are not escalated by the time value of money, the banking mechanism may not be used by networks to benefit consumers.
- $AR_{t-2} \times S_{t-2}^{\%}$ is expressed in t-2 dollars which is recovered in year t and therefore needs to be escalated for two years' time value of money. The current formula only escalates it for one year

Additionally, the definition of $S_{t-2}^{\%}$ states that it is calculated annually through the compliance assessment, however there is no formula in the Guideline. Given the level of complexity in the calculation of $S_{t-2}^{\%}$ it is recommended the AER:

- set out the formulas in the Guideline
- include a worked example in a worksheet published as an attachment to the Guideline, or at least reinstate the worked example within the Guideline as before.

4 Other matters

We reiterate our support for the following aspects of the draft STPIS Guideline:

- amending the definition of momentary interruptions from less than 1 to less than 3 minutes duration
- amending the definition of urban feeders to enable the feeder length and maximum demand to be measured over the preceding three years
- including an exclusion for interruptions caused or extended by a direction from state or federal emergency services
- allowing an exception to the exclusion of unmetered sites where distributions are unable to identify unmetered supply in historical data.