23 February 2017

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

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

Dear Mr Pattas

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

Ausgrid welcomes the opportunity to provide this submission in response to the Australian Energy Regulator's (AER) *Issues Paper: Reviewing the Service Target Performance Incentive Scheme and Establishing a new Distribution Reliability Measures Guideline.*

The Service Target Performance Incentive Scheme (STPIS), by providing incentives to maintain and improve existing levels of supply reliability and customer service levels, plays an important role in promoting efficient price and non-price outcomes, in the long term interests of consumers. While Ausgrid considers the current STPIS, in place since 2009, to be generally working well, we welcome the opportunity to work with the AER and other stakeholders to identify improvements. Our view is that any changes should be limited to clarifying or simplifying the current STPIS and must maintain or enhance regulatory certainty.

We note that the AER is required to publish a Distribution Reliability Measures Guideline that describes a set of common definitions of reliability measures that can be used to assess and compare the performance of electricity distributors. In our view, the movement towards greater commonality in reliability measures, where possible, has the potential to increase the consistency and transparency of the STPIS and improve the reporting and benchmarking of electricity distributors in the national electricity market (NEM).

In developing its new Guideline, Ausgrid encourages the AER to consider the impact of different national and jurisdictional reliability measures emerging, in addition to technology availability. We request that the AER has regard to the increased regulatory complexity and costs of specifying a set of reliability measures that are consistent at the NEM level, but which vary from those that are reported to jurisdictional regulators. Our strong preference is for the AER to work with its jurisdictional counterparts to arrive at a consistent set of reliability measures reported to all regulatory authorities.

If you have any queries or wish to discuss this matter in further detail please contact Joe Pizzinga on (02) 9269 2121 or via email jpizzinga@ausgrid.com.au.

Yours sincerely

RICHARD GROSS
Chief Executive Officer

Attachment A – Summary of Ausgrid's Submission on Issues Paper

	Question	Response
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.	Ausgrid is currently not in a position to express a definitive view as to whether the current penalty/reward ratio between SAIDI and SAIFI should be changed. We consider further analysis should be performed to identify whether changing the existing ratios would materially enhance the operational effectiveness of the scheme. Our view is that any changes should also have the strong support of customers.
2	Would allocating a higher incentive rate to the SAIDI measure—by allocating a higher portion of the energy value to this measure—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.	We do not consider the current rewards/penalty ratio between the SAIFI and SAIDI is over-incentivising either capex or opex. The AER's *Issues Paper* suggests the current ratio may encourage distributors to focus their efforts on making capex investments in network automation infrastructure, such as auto-reclosing devices, and that these investments offer unbalanced benefits to customers. Ausgrid disagrees with this assessment and is concerned that the AER appears to be adopting an overly narrow view of the reliability improvements capital investments offer. Capital investments offer substantial SAIDI improvements. The duration of outages is effected by the available capacity, flexibility and technology on the network. By investing capital expenditure targeted at improving these network characteristics, a distributor will experience SAIDI, as well as SAIFI, improvements. Ausgrid has not yet formed a definitive view as to whether the current penalty/reward ratio between SAIDI and SAIFI should be changed. We may support allocating a higher incentive rate to the SAIDI measure if further analysis revealed that this would better achieve the objectives of the STPIS, and there was strong support from customers.
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?	We would not support any changes to the incentive weights applied across the CBD, urban and rural networks. Any changes to those weightings would have to be supported by engagement with customers revealing that the existing ratios do not support their expectations. In the interests of regulatory certainty, and in the

		absences of clear evidence showing that a different ratio would make a material change to the operational effectiveness of the scheme, our view at this stage is that the existing ratios should remain the same.
4	Should MAIFIe be implemented as the standardised measure for monetary interruptions?	We consider MAIFIe would be a more reliable measure for benchmarking than MAIFI.
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 than 3 minutes to balance the cost of the technologies available to the distributors, the foregone unmeasured unserved energy and customers' preferences?	Ausgrid supports a scheme where there is a fixed reference point for defining a momentary interruption. Though we agree with the AEMC's recommendation that the definition of a momentary interruption should be increased from less than 1 minute to less than 3 minutes, we consider that, once introduced, there should be no flexibility to change that threshold.
6	What method should be applied to identify catastrophic days so that it is able to consistently, reasonably and universally operate across the distributors?	Ausgrid supports the exclusion of catastrophic events from the statistical method used to calculate the Major Event Days (MED) threshold. The occurrence of such events is well outside the credible planning criteria of electricity distributors and, accordingly, they should be excluded from MED calculations. Our preference is for a set of principles to be developed which allow the AER to determine catastrophic events on a case–by–case basis.
7	Given catastrophic days are already excluded under the MED framework, should such events be treated different from the "major event days" concept under STPIS?	We support MED concept under the STPIS being treated differently from the MED threshold. Such events are outside the credible planning criteria of electricity distributors and, accordingly, they should be excluded.
8	Should distributors be permitted to exclude a transmission outage event if the event is caused by the action, or inaction, of that distributor?	We are broadly supportive of a scheme which does not permit an electricity distributor to exclude a transmission outage event in circumstances where it is clear that the distributor is the primary cause of the outage.
9	The AER would like views on the current definitions of the feeder classifications.	In Ausgrid's view, the current definitions of each feeder classification are generally fit for purpose. As the AEMC has recommended, no major changes to feeder classifications should be made.
10	Historically, only feeders supplying the central business district of the capital cities of each jurisdiction have been classified as CBD feeders for STPIS purposes. Should this practice be maintained?	Our primary concern is that there is consistency across regulators. Our NSW Government Licence Conditions currently define CDB feeders in terms of the 'City of Sydney' only. We would not support the AER making any changes to the existing STPIS feeder classifications which would be inconsistent with that definition.
11	Should planned outages be included in the STPIS? What is the value/cost of a planned outage?	We agree with the position outlined by the AER that although planned interruptions should be continued to be monitored, they should not be included as a STPIS measure.
12	What considerations should we take to address the potential safety	The foreseeability of safety risks, associated with potentially

	related issues in order to enable the introduction of incentives to reduce planned outages?	incentivising greater use of 'live-line' techniques, reinforces that planned interruptions should not be a STPIS measure.
13	The AER would like views on what level of supply interruptions is considered worse served.	Ausgrid is supportive of the AER collecting information on the worst served customers provided that there is a clearly defined purpose for its collection. We also are of the view that the data must be collected in a manner which is consistent with that recommended by the AEMC.
14	Do you consider that improved standardisation would increase the effectiveness of the scheme?	Our view is that any changes to the current STPIS definitions should only be made if the benefits of increased standardisation, such as more meaningful benchmarking, clearly outweigh the costs imposed on distributors in amending their existing reporting systems and processes.
15	Should unmetered supplied be included in the performance measure?	Ausgrid does not support a change to the established definitions relating to unmetered supplies. This is so as to maintain consistency with state jurisdictional definitions, and to avoid incurring unnecessary expenditure.
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?	When a reward/penalty exceeds the capped revenue at risk, we are supportive of greater clarity about how adjustments to targets should be made. Generally speaking, we consider the AER's proposed method of reversing the s-factor calculation is appropriate. However, where there are extreme variations in performance levels, more significant measures may need to be taken.
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 reductions will promote economic efficiency?	Ausgrid is not supportive of changing the value electricity distributors are currently able to retain from making reliability improvements. Our view is that the current scheme is generally working well. Unless there is clear evidence showing that changing the value distributors are able to retain would materially enhance the operational effectiveness of the scheme, then in the interests of regulatory certainty, the AER should not make any changes.
18	We would like views on whether the scheme should continue to operate in symmetrical way, i.e. penalties are incurred at the same rate as rewards.	We consider that the STPIS should continue to operate in a symmetrical way. We note that the AER addressed this issue when developing the STPIS in 2008. The AER's reasoning for a symmetrical STPIS was that it closely approximated the operation of the competitive market.
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?	We consider the existing regulatory framework strikes the right balance in allowing consumer preferences to be reflected in capital and operating expenditure funding levels and the application of incentive schemes. We also note that customer preferences are reflected by the Value of Customer Reliability (VCR) calculations

		developed by AEMO. In our view, further changes to reflect consumer preferences are not required.
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).	We are not supportive of changing the existing level of flexibility. In our view, this has the potential to give rise to a level of uncertainty that may impact our ability to make effective long term planning and investment decisions.
21	We would like the views on the current approach for s-factor calculations. Specifically, should and how the calculation of s-factor to be simplified?	Ausgrid supports the current approach for calculating rewards and penalties under the STPIS. We consider the AER's proposed change is unnecessary and may lead to unintended consequences.
22	We would like the views from stakeholders on what other clarification is needed for the GSL section of the current STPIS scheme.	We do not have strong views regarding whether the GSL section in the current STPIS can be improved. Though we are subject to a GSL scheme, it is administered by the NSW Government.
23	In what ways could the STPIS be changed to reflect the needs of consumers with storage or other similar technologies?	Ausgrid notes that the technology trends and developments associated with storage and similar technologies are unclear. In our view, the AER should refrain from making changes to the current STPIS based on its anticipation of future events that are extremely difficult to predict.
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?	We do not support any changes to the current STPIS which would lead to the financial reward or penalty directly based on the "energy-not-supplied". In our view, the existing performance measures, SAIDI and SAIFI, are more preferable and should continue to apply.
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)?	Ausgrid does not consider either KWh or KVA to be preferable to the existing SAIDI and SAIFI metrics.
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?	In Ausgrid's view, the current STPIS is generally working well. We consider a move away from the SAIDI and SAIFI measures to be a substantial change which we could not support.

Attachment B – Ausgrid's Submission on Issues Paper

Question 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.

Ausgrid is currently not in a position to express a definitive view as to whether the current penalty/reward ratio between SAIDI and SAIFI should be changed. We consider further analysis should be performed to identify whether changing the existing ratios would materially enhance the operational effectiveness of the scheme.

The AER's *Issues Paper* suggests that the current ratio may be encouraging investment in activities which drive SAIFI over SAIDI improvements, and that this may necessitate a rebalancing of the existing reward/penalty rates. Ausgrid does not believe that the current scheme over-incentivises SAIFI compared to SAIDI. However, we may support a change to the current rates if there was:

- clear evidence showing that the current ratio incentivises SAIFI over SAIDI
- comprehensive engagement revealing that customers have strong support for a shorter duration of outages compared to a lower number of outages.

In the absence of these twin requirements, we consider that the current scheme strikes the right balance and that it would be inappropriate to change the existing reward/penalty ratios.

Question 2

Would allocating a higher incentive rate to the SAIDI measure—by allocating a higher portion of the energy value to this measure—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.

We do not consider the current rewards/penalty ratio between the SAIFI and SAIDI is over-incentivising either capex or opex, nor is it leading to uneven improvements to customers.

The AER's *Issues Paper* suggests the current ratio may encourage distributors to focus their efforts on making capex investments in network automation infrastructure, such as auto-reclosing devices, and that these investments offer unbalanced benefits to customers. Ausgrid disagrees with this assessment and is concerned that the AER appears to be adopting an overly narrow view of the reliability improvements capital investments offer.

Capital investments offer substantial SAIDI improvements. The duration of outages is effected by the available capacity, flexibility and technology on the network. By investing capital expenditure targeted at improving these network characteristics, a distributor will experience SAIDI, as well as SAIFI, improvements.

We also concerned about the AER assuming that SAIDI improvements mostly involve opex investments. The majority of capital investments in augmenting the 11kV network, by ensuring that there is sufficient capacity to switch and operate our network, is targeted at SAIDI improvements. Conversely, opex on maintenance activities, such as tree trimming, is likely to offer substantial improvements to an electricity distributor's SAIFI performance.

Our view is that amending the current incentive rates would be a substantial change to the current scheme, which we consider to be broadly working well. We may, however, support allocating a higher incentive rate to the SAIDI measure if there was strong support from customers and further analysis revealed that this change would better achieve the objectives of the STPIS.

Question 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?

We would not support any changes to the incentive weights applied across the CBD, urban and rural networks. Any changes to those weightings would have to be supported by engagement with customers revealing that the existing ratios do not support their expectations. In the interests of regulatory certainty, and in the absences of clear evidence showing that a different ratio would materially enhance the operational effectiveness of the scheme, our view at this stage is that the existing ratios should remain the same.

Question 4

Should MAIFIe be implemented as the standardised measure for monetary interruptions?

As noted in the AER's *Issues Paper*, non–Victorian electricity distributors are not subject to reporting on momentary interruptions under the STPIS. Until the necessary systems and infrastructure are in installed and fully operational, Ausgrid does not support introducing such reporting requirements in New South Wales. We nonetheless generally agree with the AEMC's recommendation that MAIFIe is a more suitable measure than MAIFI.[1]

In our view, MAIFI does not reflect a customer's experience of momentary interruptions. Where an auto-recloser makes up to three attempts to restore supply, the MAIFI measure considers each attempt to be a separate event. For customers, however, most of the impact of a series of momentary interruptions, such as the need for clocks, computers and other appliances to be reset, would be due to the first interruption. This leads Ausgrid to consider that up to three brief interruptions within a momentary interruption period should be considered a single event. As this is the approach taken by MAIFIe, we view it to be a more preferable measure of momentary interruptions.

We consider MAIFIe would be a more reliable measure for benchmarking than MAIFI. Ausgrid notes that distributors have varying reclosing settings and remote reclosers installed. In our view, the MAIFIe threshold provides broader scope to account for this variability, allowing for more meaningful benchmarking.

Question 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 than 3 minutes to balance the cost of the technologies available to the distributors, the foregone unmeasured unserved energy and customers' preferences?

Ausgrid supports a scheme where there is a fixed reference point for defining a momentary interruption. Though we agree with the AEMC's recommendation that the definition of a momentary

---

1 AEMC, *Final report: Review of Distribution Reliability Measures*, 5 September 2014, p. 14.

interruption should be increased from less than 1 minute to less than 3 minutes,[2] we consider that, once introduced, there should be no flexibility to change that threshold.

We consider that any changes to the current STPIS should maintain or enhance regulatory certainty. The introduction of a mechanism allowing the AER to change the MAIFI threshold from time to time does not meet that requirement. In our view, such flexibility would impact on the ability of electricity distributors to make effective long term investment decisions. We note that the threshold set between a momentary and a sustained interruption underpins the approaches undertaken to improve reliability. With increased regulatory uncertainty regarding the MAIFI threshold, electricity distributors would lose the stability which is necessary to make effective long term investment decisions targeted at meeting the objectives of the scheme.

In our view the maintenance of a fixed reference point, preferably 3 minutes, is a necessary requirement for effective benchmarking. This is because if the AER wishes to compare the performance of electricity distributors across jurisdictions, then the scheme must specify a stable MAIFI threshold that is applied consistently across the NEM. We also consider the application of a fixed reference point for a momentary interruption will lead to a simpler, clearer STPIS. This is imperative to facilitate broad consultation with a wide range of stakeholders.

Though this matter was not raised in the *Issues Paper*, Ausgrid considers it important that the the MAIFI threshold reported to the AER and jurisdictional regulators is the same. We therefore encourage the AER to work with jurisdictional regulators to implement a common definition. Ausgrid notes that for this to be workable, the MAIFI threshold reported to all regulatory bodies must have a fixed reference point.

Question 6

What method should be applied to identify catastrophic days so that it is able to consistently, reasonably and universally operate across the distributors?

Ausgrid supports the exclusion of catastrophic events from the statistical method used to calculate the Major Event Days (MED) threshold. Events that are considered catastrophic are rare, unpredictable and cause widespread and significant damage. The occurrence of such events is well outside the credible planning criteria of electricity distributors and, accordingly, they should be excluded from MED calculations.

Our preference is for a set of principles to be developed which allow the AER to determine catastrophic events on a case–by–case basis. In our view, a principles–based approach would offer sufficient scope to accommodate any differences in network characteristics between distributors, while still providing an objective method for identifying the circumstances in which an event meets clearly defined criteria to be considered catastrophic.

Question 7

Given catastrophic days are already excluded under the MED framework, should such events be treated different from the "major event days" concept under STPIS?

Ausgrid considers it important for the MED concept under the STPIS to be treated differently from the MED threshold. As outlined in our response to question 6 above, the occurrence of catastrophic events, due to their rarity, unpredictability and the scale of damage they cause, are outside the credible planning criteria of electricity distributors and should be excluded from the MED calculation threshold.

Question 8

---

2 AEMC, *Final report: Review of Distribution Reliability Measures*, 5 September 2014, 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?

We are broadly supportive of a scheme which does not permit an electricity distributor to exclude a transmission outage event in circumstances where it is clear that the distributor is the primary cause of the outage. Our support is nonetheless contingent on whether it is possible to precisely define when a distributor's actions, or inactions, are the "primary cause" of a transmission interruption.

Ausgrid notes that there may be concurrent events leading to a transmission outage. When this occurs, identifying the primary cause of the outage may be too difficult to perform with an adequate degree of certainty. Equally, an intervening event may give rise to substantial difficulties in identifying the primary cause of an outage. This may occur when, for example, a transmission operator's error or failure would not have led to an outage if it was not for a distributor's actions, such as planned maintenance activity, intervening in the normal flow of events. The primary cause may be difficult to identify, too, when concurrent or intervening events increase the severity of, but do not actually cause, a transmission outage.

We conclude that for the proposed change to be workable it must be possible for the scheme to precisely define the meaning of a "primary cause". As a matter of procedural fairness, we are also of the view that the scheme should include a process for resolving any disagreements about the primary cause of a transmission outage event, where there are concurrent or intervening events.

Question 9

The AER would like views on the current definitions of the feeder classifications.

In Ausgrid's view, the current definitions of each feeder classification are generally fit for purpose. As the AEMC has recommended, no major changes to feeder classifications should be made.[3]

Our chief concern is that changes to the current definitions, by reclassifying feeders, would alter the reliability measures of a substantial number of customers. Ausgrid is also concerned about the increase in regulatory complexity and costs associated with the emergence of a common set of feeder definitions at the NEM level, which nonetheless differ to those set by the NSW Independent Pricing and Regulatory Tribunal (IPART). To prevent this from occurring, we encourage the AER to work with IPART and other jurisdictional standard setters.

We note that the AEMC has identified areas of improvement for the current classifications. These include addressing issues associated with the current classifications leading to some urban and short rural feeders changing from year to year due to seasonal variations. In Ausgrid's opinion these issues could be addressed by introducing a process in which electricity distributors were given the flexibility to "manually allocate" a feeder to a particular classification by agreement with the AER or a jurisdictional regulator. We consider this would be useful where, for example, a feeder supplies urban customers but does not qualify for that classification because it does not meet the required load density threshold. Geographic mapping could be utilised to ensure that a manual allocation aligns with customer expectations.

The intent behind the availability of manual allocation is to ensure that feeders supplying predominately urban areas are classified as urban. Principles for manually allocating a feeder between classifications could also be put into place in a manner that promotes greater stability in the regulatory process. We would be pleased to work with the AER in developing those principles.

Question 10

---

3 AEMC, *Final report: Review of Distribution Reliability Measures*, 5 September 2014, p. 32.

Historically, only feeders supplying the central business district of the capital cities of each jurisdiction have been classified as CBD feeders for STPIS purposes. Should this practice be maintained?

The AEMC's recommended new feeder classifications provide that a CDB feeder may be in 'one or more geographical areas'. We note that this may provide scope for multiple feeders, supplying districts other than the capital cities of each jurisdiction, receiving a CBD classification.

Our primary concern is that there is consistency across regulators. Our NSW Government Licence Conditions currently define CDB feeders in terms of the 'City of Sydney' only. We would not support the AER making any changes to the existing STPIS feeder classifications which would be inconsistent with that definition.

Question 11

Should planned outages be included in the STPIS? What is the value/cost of a planned outage?

We agree with the position outlined by the AER in its *Issues Paper* that although planned interruptions should be continued to be monitored, they should not be included as a STPIS measure.

The introduction of planned interruptions as a STPIS measure is likely to have a substantial impact on the cost of operating and augmenting our network. It is unlikely that these additional costs would align with the value customers place on avoiding planned interruptions. There is also a risk that attempting to incentivise a reduction in planned interruptions would lead to an increase in unplanned outages, which have a greater impact on customers.

In any case, Ausgrid already uses its best endeavours to avoid planned interruptions where possible through switching or via 'live-line' techniques, when it is safe to do so. There are considerable costs associated with implementing a planned interruption, incurred as a result of identifying the affected customers and engaging staff to deploy a notification strategy. We consider these substantial costs to already offer suitable incentives to minimise planned outages as much as possible.

Question 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?

For the reasons given in response to question 11, we do not support the inclusion of planned interruptions as a STPIS measure. In Ausgrid's view, the economic benefit of incentivising a reduction in planned interruptions is substantially outweighed by the associated costs. The foreseeability of safety risks, associated with potentially incentivising greater use of 'live-line' techniques, reinforces that planned interruptions should not be a STPIS measure.

Question 13

The AER would like views on what level of supply interruptions is considered worse served.

Ausgrid is supportive of the AER collecting information on the worst served customers provided that there is a clearly defined purpose for its collection. We also are of the view that the data must be collected in a manner which is consistent with that recommended by the AEMC.

Our preference is that before requiring data on the worst served customers, the AER clearly defines the purpose for its collection and explains how the data will assist it in achieving its role as an economic regulator. In the absence of this, we consider the costs of implementing the systems and processes necessary to accommodate an entirely new reporting requirement may not be an efficient investment for customers.

As indicated in its *Issues Paper*, the AER considers any data collected on the worst served customers must be obtained in accordance with how the AEMC recommended. Unfortunately, we do not consider the two proposed measures which the AER included in its *Issues Paper* meet that requirement. They define the threshold for being worst served as:

- customers experiencing more than 48 hours of unplanned SAIDI or more than 10 unplanned sustained interruptions in a year; or
- by identifying the supply areas and the actual unplanned SAIDI and SAIFI levels of the bottom, say 10 percent, of the total distribution customers.

In our view, these definitions do not, as the AEMC recommended, account for reliability outcomes that may vary from year to year.[4] We consider that at a minimum these definitions should be amended so that electricity distributors are only required to report on them if the conditions they describe are present for two consecutive years. Without making this amendment, distributors risk reporting on one-off annual variations in performance as opposed to the actual worst served customers.

Question 14

Do you consider that improved standardisation would increase the effectiveness of the scheme?

Ausgrid is generally supportive of a move towards increased standardisation in STPIS definitions. We, however, note that currently the capturing and reporting of electrical interruption data varies in the NEM to reflect the systems and processes of different electricity distributors. Our view is that any changes to the current STPIS definitions should only be made if the benefits of increased standardisation, such as more meaningful benchmarking, clearly outweigh the costs imposed on distributors in amending their existing reporting systems and processes. Our views on the AER's proposed amendments are outlined below.

Standardising the reporting of unmetered supplies.

Please refer to our response to question 15 which addresses unmetered supplies.

National Metering Identifiers – clarifying which NMI status codes should be reported? (e.g. active, not energised, extinct, greenfield).

Ausgrid is broadly supportive of efforts to standardise NMI status codes. However, we are of the view that implementing this change is unlikely to have a significant impact on the operational effectiveness of the STPIS. This is because the "active" code and its performance metrics are likely to dominate the NMI populations of electricity distributors subject to the scheme. In the case of Ausgrid, we have approximately 1.7 million active ("A") NMIs, 8 500 de-energised ("D") NMIs, and 300 non-market ("N") NMIs. The AER should consider whether the benefits of standardising the status codes of NMIs are sufficient to warrant the change.

Single premises outages – standardising on the reporting of single premises interruptions as a network interruption unless customer fault is actively identified.

We support the scheme standardising the reporting of a single premises interruption if it provides greater clarity in drawing the distinction between an interruption caused by a network outage compared to an interruption caused by a customer installation failure.

Where more accurate (i.e. smart meter) information is absent:

- ***HV single phase outage – Standardising on the reporting of 67% of all downstream customers for a single-phase HV outage on a three phase network. Reporting of 100% 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;***

- ***LV single phase outage – Standardising on the reporting of 33% of all downstream customers for a single phase outage.***

In the absence of widespread smart meters, Ausgrid considers that standardised arrangements for the reporting of HV single phase and LV single phase outages may offer some benefits. Nonetheless, we take the view that standardisation should only be implemented if the benefits clearly outweigh the costs which would be incurred in changing reporting systems and processes. Ausgrid also considers that if the AER proceeds with standardisation, then improvements can be made to the approach outlined in the *Issues Paper*.

With respect to the proposed standardised assumption that 67 percent of downstream customers would be affected by a single-phase HV outage, we do not necessarily disagree with the intent behind the AER's proposal, but note that it would have a negligible impact for Ausgrid. On our network, single phase HV interruptions on a three phase supply are an insignificant proportion of total interruptions across all feeder classifications. This is except for the Long Rural category, which in Ausgrid's case corresponds to an immaterial component of the scheme.

The AER's proposal regarding LV single phase outages would have a more significant impact. We estimate these interruptions currently result in an over-reporting of 3 to 4 percent for SAIDI and 1 to 2 percent for SAIFI. This potential error is significant and, due to the STPIS rewards/penalties, may lead to a distortion in investment signals. Based on this, we consider LV single phase outages may benefit from the introduction of a common methodology or process targeted at more accurate reporting.

We are of the view that improvements can be made to the approach proposed by the AER. Ausgrid notes that the AER's proposed standardisation does not consider customers with 2-phase or 3-phase connections, with the result it may actually underestimate the number of customers affected by an outage. In our view, more accuracy may be introduced by including an adjustment factor, which takes into account the proportion of multi-phase customers on an electricity distributor's network. We would also encourage the AER to make any standardised approach it develops optional. This would allow each electricity distributor to determine whether the benefits associated with implementing it outweigh the costs.

Question 15

Should unmetered supplied be included in the performance measure?

Ausgrid does not support a change to the established definitions relating to unmetered supplies. Our chief concern is to maintain consistency with state jurisdictional definitions, and to avoid incurring unnecessary expenditure that is not in the long term interests of consumers.

The number of un-metered supplies is generally very small compared to metered supplies. In Ausgrid's case, less than 0.25 percent of our total connections, or about 4 400 out of over 1.7 million, fit into an unmetered classification. With such a low volume of connections, we consider the inclusion of unmetered supplies in the STPIS would have a negligible impact on our performance under the scheme and would not be worth making the investment in amending our existing data management and reporting systems.

Question 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?

When a reward/penalty exceeds the capped revenue at risk, we are supportive of greater clarity about how adjustments to targets should be made. Generally speaking, we consider the AER's proposed method of reversing the s-factor calculation is appropriate. However, where there are extreme variations in performance levels, more significant measures may need to be taken.

In the case of extremely negative results, our view is that the AER should be required to consider whether the further application of the STPIS in the following regulatory control period would be in the long term interests of consumers. Our view is that this would lead to a better outcome than the continued application of the STPIS with adjusted targets. This is because the financial impact of a penalty corresponding to extremely negative results may further inhibit a distributor seeking to make reliability improvements. Equally, in a situation where extremely positive results are obtained, a distributor's performance may have reached a point where the rewards available under the scheme exceed the value customers place on further reliability improvements. The long term interests of consumers in such circumstances may lie in the AER determining that the STPIS is not to apply in the following regulatory control period.

Question 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 reductions will promote economic efficiency?

Ausgrid is not supportive of changing the value electricity distributors are currently able to retain from making reliability improvements. Our view is that the current scheme is generally working well. Unless there is clear evidence showing that changing the value distributors are able to retain would materially enhance the operational effectiveness of the scheme, then in the interests of regulatory certainty, the AER should not make any changes.

Question 18

We would like views on whether the scheme should continue to operate in symmetrical way, i.e. penalties are incurred at the same rate as rewards.

We consider that the STPIS should continue to operate in a symmetrical way. We note that the AER addressed this issue when developing the STPIS in 2008. The AER's reasoning for a symmetrical STPIS was that it closely approximated the operation of the competitive market.

We agree with the AER's reasoning at the time. We consider that rewards provide distributors with incentives to implement innovative and cost effective ways to improve reliability. We consider these improvements are valued by customers who suffer less frequency and duration of outages.

In our view, asymmetric incentives would dampen the distributor's incentives to actively search for innovative solutions that improve service quality. The NER does not permit the AER to approve expenditure allowances for reliability improvements except were it to comply with regulatory

obligations.[5] In the absence of a reward under the STPIS, a distributor could not recoup sufficient revenue to compensate them for their efficient costs.

A further reason for maintaining symmetry is that a distributor's annual performance varies as a result of uncontrollable weather volatility. It would be unfair for a distributor to be penalised heavily in one year due to adverse weather activity, but be capped in terms of its reward when the weather is unseasonably good in the following year.

In preparing our response to this question, we have also sought to understand the views of the Energy Users Association of Australia (EUAA) who have advocated for an asymmetrical scheme. The EUAA consider that the excess capacity of the distributor's network has already been paid by customers. In response, we note the STPIS requires the AER to set performance targets to take into account any expected improvements.[6] This provides the AER with the ability to investigate whether excess capacity could improve reliability without the need to introduce asymmetric incentives.

Question 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?

We consider the existing regulatory framework strikes the right balance in allowing consumer preferences to be reflected in capital and operating expenditure funding levels and the application of incentive schemes. We also note that customer preferences are reflected by the VCR calculation developed by AEMO. In our view, further changes to reflect consumer preferences are not required.

In terms of funding levels, the NER already requires substantial stakeholder consultation. Under the capital and operating expenditure factors, the AER is required to have regard to the extent to which an expenditure forecast incorporates the concerns of electricity consumers.[7] Likewise, the existing regulatory framework already requires the preferences of consumers to be taken into account in relation to STPIS incentives. In implementing the scheme, the NER requires the AER to take into account 'the need to ensure that benefits to electricity consumers likely to result from the scheme are sufficient to warrant any reward or penalty'[8] a distributor receives.

Ausgrid is committed to engaging with all stakeholders, within the existing regulatory framework, on issues that are important to them. To this end, Ausgrid has already commenced consultation with stakeholders on our 2019-24 regulatory proposal. We will incorporate the views expressed during that consultation in the development of our proposed capital and operating expenditure, as well as our position on all incentive schemes.

Question 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).

We are not supportive of changing the existing level of flexibility in the current STPIS. In order to effectively plan our network and make efficient investment decisions in the long term interests of consumers, Ausgrid requires a stable, predictable regulatory framework. The introduction of greater flexibility into the input factors of the STPIS to reflect changing consumer preferences has the

---

5 Clauses 6.5.6 and 6.5.7 of the NER.

6 3.2.1(a) of the STPIS (November 2009)

7 Clauses 6.5.6(e)(5A) and 6.5.7(e)(5A) of the NER.

8 Clause 6.6.2(b)(3) of the NER.

potential to create uncertainty that may impact our ability to make effective long term planning and investment decisions. We consider active, meaningful consultation with all stakeholders on the investment decisions we make is a more effective and appropriate method of reflecting consumer preferences in the way we build and operate our network. As outlined in our response to question 19 above, Ausgrid has already commenced such consultation for the purposes of our 2019-24 regulatory proposal.

Question 21

We would like the views on the current approach for s-factor calculations. Specifically, should and how the calculation of s-factor to be simplified?

Ausgrid supports the current approach for calculating rewards and penalties under the STPIS. We consider the AER's proposed change is unnecessary and may lead to unintended consequences.

In our view, specifying the s–factor as a percentage is consistent with other aspects of the scheme. In its distribution determinations, for example, the AER's current practice is to specify the revenue at risk under the STPIS in percentage terms. We consider changing the s–factor to a dollar value would give rise to a misalignment with this practice and could lead to increased complexity and confusion in how the scheme operates. Ausgrid encourages the AER to have regard to the impact of this and the potential for other unintended consequences when deciding whether amending the existing s–factor calculation is merited.

Question 22

We would like the views from stakeholders on what other clarification is needed for the GSL section of the current STPIS scheme.

We do not have strong views regarding whether the GSL section in the current STPIS can be improved. Though we are subject to a GSL scheme, it is administered by the NSW Government. Our preference, however, is that unless there is clear evidence that a change is necessary to enhance the operational effectiveness of the STPIS, the existing GSL section should remain the same and not be applied in NSW in addition to our existing jurisdictional obligations.

Question 23

In what ways could the STPIS be changed to reflect the needs of consumers with storage or other similar technologies?

Ausgrid notes that the technology trends and developments associated with storage and similar technologies are unclear. In our view, the AER should refrain from making changes to the current STPIS based on its anticipation of future events that are extremely difficult to predict. We also consider it to be in the long term interests of consumers that the incentive schemes the AER administers are only amended when the full impact of any charges are understood and there is clear evidence to support the amendments.

Question 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?

We do not support any changes to the current STPIS which would lead to the financial reward or penalty directly based on the "energy-not-supplied". In our view, the existing performance measures, SAIDI and SAIFI, are more preferable and should continue to apply.

The AER's *Issues Paper* considers that the existing performance measures ignore when a customer's load is high and more likely to have a larger social cost than outages at times when a customer is hardly consuming at all. To address this, the AER states that '[p]resumably it would not be difficult to estimate the lost load directly'.

In Ausgrid's view the implementation of a process for estimating the lost load directly would introduce considerable complexity into the STPIS. We are also concerned that this complexity, and the estimation process itself, would give rise to inaccuracies. Given the potential revenue at risk under the STIPS, we do not consider this to be appropriate or in the long term interests of consumers.

Ultimately we consider the creation of a scheme in which performance is measured against energy-not-supplied would represent a significant change to the current STPIS, which we consider to be generally working well. Unless there is clear evidence that basing incentives on energy-not-supplied would materially enhance the operational effectiveness of the STPIS, then the AER should not make the change.

Question 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)?

Ausgrid does not consider either KWh or KVA to be preferable to the existing SAIDI and SAIFI metrics.

Question 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?

In Ausgrid's view, the current STPIS is generally working well. We consider a move away from the SAIDI and SAIFI measures to be a substantial change which we could not support. There is no evidence that customers do not value these measures of reliability. More generally, we caution against the AER making any changes to the current STPIS in anticipation of future events that are difficult to predict and before the impact on service quality is known.

Other Ausgrid comments

We wish to make the following further comments in response to the AER's *Issues Paper*.

Call response times

We recommend that the AER changes the major event day (MED) exclusion applied to the calculation of call response times. Currently, the existing MED definition does not take into account the overflow of calls in the days immediately following a major event. Ausgrid considers that the operational effectiveness of the STPIS would be improved if the period excluded from call response time calculations was lengthened to reflect the stress that is placed on call centres in the days following a major event.