

Electricity Transmission Service Target Performance Incentive Scheme

Response to AER's Issues Paper

11 November 2011

Table of Contents

1. Introduction	3
2. Key Considerations.....	3
2.1 Purpose of the Scheme.....	3
2.2 Application of the Scheme.....	5
2.3 Rationale for Review of the Scheme	6
2.4 Differences in Characteristics of Transmission Networks	6
2.5 The Efficiency Frontier	7
2.6 Output Based Regulation versus 'Near Miss' Parameters	8
2.7 The Consultation Process	8
2.8 Amendments to the Scheme	9
3. Responses to Specific Questions.....	9

1. Introduction

Grid Australia welcomes the opportunity to provide a submission on the *Issues Paper: Electricity Transmission Service Target Performance Incentive Scheme*.¹

Grid Australia represents the five major Transmission Network Service Providers (TNSPs) which form the backbone of the National Electricity Market (NEM), facilitating retail competition, interstate trading and connecting generation, major electricity users and distribution networks.

Grid Australia TNSPs have participated in the STPIS, and its predecessor service standard guidelines, as they have been progressively introduced since their inception in 2003. The scheme has been designed to include key performance measures of value to electricity consumers and market participants and consequently has influenced TNSP decision making to improve performance.

Grid Australia supports the STPIS as its results have been consistent with the purpose of driving efficient TNSP behaviour. In particular, the scheme has enabled TNSPs to focus on key controllable aspects of their operations to improve the efficiency and reliability of their networks and increase the value obtained by electricity consumers and market participants from network services. The demonstrable success of the STPIS strongly suggests that there is no case for making radical changes to the design of the incentive parameters. However, Grid Australia does consider that there are lessons to be drawn from the experience of the scheme. Those lessons tend to support incremental adjustments and are addressed in this submission in response to the AER's questions.

Grid Australia commends the AER on the consultation, consideration and analysis that has contributed to the development of the scheme to date and looks to a similar level of rigour in the assessment of proposed changes to the scheme.

2. Key Considerations

2.1 Purpose of the Scheme

In any review of the STPIS, it is imperative to be mindful of the purpose of the scheme. The purpose of the scheme in the National Electricity Rules (NER) is to, "provide incentives for each *Transmission Network Service Provider*".²

¹ AER, *Issues Paper: Electricity Transmission Service Target Performance Incentive Scheme*, October 2011.

In particular, Grid Australia notes that:

- The scheme is intended to provide incentives. The AEMC, in its Rule Determination on the current Chapter 6A, made it clear in relation to the link between incentives and the value that the market places on the network that, “incentives in this regard attempt to reward TNSPs for behaving in ways that increase the value that users gain from the network.”³ The issues paper appears to depart from the concept of rewarding TNSPs, with recurring references to penalty approaches despite the acknowledgement that transmission networks are performing well in terms of reliability.
- The scheme is not a de facto compliance scheme. Matters of compliance with the NER are part of the functions and powers of the AER established in Section 15 of the National Electricity Law (NEL), whereas the incentive scheme set out in Clause 6A.7.4 of the NER is intended to provide an economic incentive for TNSPs to maintain and improve the reliability of their networks. An incentive regime is a vastly different regime to compliance regimes, being focussed on improving economic performance rather than penalising participants for illegal behaviour such as breaches of the road rules, which the AER has used as an analogy to develop some of the proposed changes.
- The scheme is not intended to be a tool for benchmarking. The NER states that the STPIS is to provide incentives for *each* Transmission Network Service Provider, in recognition that relevant and applicable incentives may differ between TNSPs. Grid Australia supports the use of robust and applicable benchmarking as a regulatory tool, and all Grid Australia members have used benchmarking over many years to gain efficiencies and other technical benefits for the operation of their electricity networks. Likewise, the AER is required in the NER to have regard to benchmarking in regulatory decisions.⁴ However, the intention of the STPIS is not as a benchmarking tool.
- The AER is bound by the Pricing Principles in the NEL in carrying out its functions. Accordingly, incentive schemes must be consistent with these Principles. For example, the Principles require network businesses to be provided with a reasonable opportunity to recover at least the efficient costs of meeting an obligation.

² AEMC, *National Electricity Rules*, Clause 6A.7.4(b).

³ AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, p102.

⁴ AEMC, *National Electricity Rules*, Clauses 6A.6.6(e)(4) and 6A.6.7(e)(4).

The intention of the scheme to provide incentives must be the key consideration in any potential changes.

2.2 Application of the Scheme

In its first decision on the scheme, the ACCC quite clearly articulated the following intention:

The ACCC's performance-incentive scheme is designed to drive the TNSP's operating decisions as opposed to its capital decisions.⁵

The issues paper does not contain a similar clearly articulated intention, and Grid Australia suggests that it would be helpful for the AER to clarify whether the scheme is intended to continue to incentivise predominantly operating decisions, or partly intended to influence capital investment decisions. This will help to assess potential new parameters in terms of the nature of the behaviours they may be likely to incentivise and determine appropriate levels of revenue at risk for the various parameters.

The issues paper includes consideration of extending the scheme into areas that would primarily incentivise capital investment decisions. Grid Australia supports the development of appropriate incentives for capital investment decisions. However, it would be appropriate to consider such incentives through wider ranging processes such as the AEMC's Transmission Frameworks Review and consideration of the AER's proposed changes to Chapters 6 and 6A of the NER, rather than independently of these processes. There is a significant risk that separate reviews of incentives could become misaligned, and distort network operations and investment programs due to insufficient coordination of changes. Therefore, this review of the STPIS should focus on the continued application of the scheme to operating decisions.

In this regard the AER's own Rule change includes significant proposals in relation to incentives to encourage efficient capital investment, which is yet to be assessed by the AEMC. Accordingly, there is an obvious risk that this STPIS review may pre-empt the outcomes of the current AEMC reviews resulting in sub-optimal outcomes for consumers, and be inconsistent with the Pricing Principles set out in the National Electricity Law.

⁵ ACCC, *Decision: Statement of principles for the regulation of transmission revenues - Service standards guidelines*, 12 November 2003, p5.

2.3 Rationale for Review of the Scheme

From the Issues Paper, it is unclear what the drivers and rationale are for the proposed changes to the scheme. The two reasons provided are firstly that there have been no major reviews or amendments to the service component since its inception, and secondly that the AER has concerns regarding the application of the scheme.⁶

While Grid Australia agrees that periodic review of the scheme is appropriate, and is keen to support simplifying the administration of the scheme, there do not appear to be strong drivers for the magnitude of potential changes proposed in the Issues Paper.

The design of the existing scheme has been carefully informed over a number of years by incentives, behaviours and feedback on those aspects of the performance of transmission networks that are of greatest importance to electricity consumers and market participants. The AER has provided no convincing case why they are no longer appropriate. In contrast, the Issues Paper presents a range of concepts with no clear driver or direction.

Given the success of the existing scheme, as evidenced by positive TNSP responses to the incentives, it seems unusual that the AER would seek to make significant changes.

The implications of too frequent changes to an incentive regime include regulatory uncertainty, the development of a confused incentive that does not clearly incentivise particular types of behaviour, and a lack of consistency over time in the behaviours incentivised.

Grid Australia considers that there is no rationale to support the range of substantial changes proposed.

2.4 Differences in Characteristics of Transmission Networks

One of the advantages of the current STPIS is that it recognises the uniqueness of the operating environments of each Australian transmission network. Some important characteristics that differentiate networks are:

- location of generators and loads on each network;
- distribution of loads, whether centralised or distributed among major flow paths, across each network;

⁶ *Issues Paper*, p8.

- length and topology, that is, the degree of meshing or extension of each transmission network;
- system operating voltage and power carrying capabilities of lines;
- major circuit structures (for example, single circuit or double circuit); and
- natural performance characteristics of the network related to storms, bushfires and other weather-related events which in turn can depend on factors such as altitude, wind and the propensity for natural phenomena such as cyclones.

Therefore it should be kept in mind that when the ACCC established the Performance Incentive Scheme it explored two alternatives in deciding how performance targets would be set: application of industry benchmarks, and application of a TNSP's own recent performance as its benchmark. The ACCC selected the latter, partly due to the differences in characteristics between transmission networks.

The ACCC found that little common performance data existed in Australia and internationally, which created difficulties in applying industry benchmarks. Also, using industry benchmarks requires consideration of unique and complex operating environments of the individual companies used to develop those benchmarks.

Therefore the ACCC has chosen to use the actual performance outcomes of each Australian TNSP from the last three to five years as a guide to set achievable performance targets (see appendix A). The advantages to this approach are as follows.

...

- Using actual performance data reduces complications arising from comparing companies with different operating environments. A TNSP with poor performance results may be operating very well given its local (difficult) conditions and hence an industry benchmark would be inappropriate. For example, it would not be appropriate to give two TNSPs the same industry benchmark, when one suffers many outages due to violent storms and the other does not.

...⁷

Accordingly, Grid Australia believes that the provisions in the existing STPIS that cater for these differences in providing incentives should be retained in future developments of the STPIS.

2.5 The Efficiency Frontier

One of the issues raised in the Issues Paper is the methodology for setting values where a TNSP is operating at or close to the 'efficiency frontier'. While the paper

⁷ ACCC, *Statement of principles for the regulation of transmission reviews: Service standards guidelines*, 12 November 2003, pp4-5.

raises the issue in the context of setting the value of the cap, Grid Australia believes that the issue applies to the methodology for setting all values.

Grid Australia suggests that as a TNSP responds to an incentive parameter, it will modify its behaviours according to the design of the parameter and in doing so, will improve its performance where scope for improvement exists.

Depending on the time taken for the behaviour to be reflected in the performance of the network (which will vary depending on the scope and nature of the change), a TNSP may reach the 'efficiency frontier' within one to two regulatory periods of the introduction of a parameter. From that point on there would be limited scope to improve performance with outcomes dominated by factors beyond the reasonable control of the TNSP, such as network topology or the environment.

The STPIS is intended to incentivise TNSPs to improve *and maintain* reliability. While the use of a TNSP's own performance is still the most advantageous method for setting values, further consideration should be given to the incentive for TNSPs to maintain reliability once they have reached the 'efficiency frontier'. This will need to be considered for all parameters introduced under the scheme.

The AER has included in the STPIS a provision to permit a TNSP to propose a reasonable methodology for determining performance targets when it had reached the efficiency frontier.⁸ Grid Australia suggests that this provision should remain in the scheme and be extended to apply to the market impact component.

2.6 Output Based Regulation versus 'Near Miss' Parameters

Grid Australia has a preference for output based regulation over the introduction of 'near miss' parameters, as an approach that incentivises outcomes that are important to electricity consumers.

2.7 The Consultation Process

The consultation process outlined in Table 1.1 of the issues paper is unusually brief for a review of the STPIS, particularly where a number of significant and new changes are proposed. In previous significant reviews the AER has convened workshops with key stakeholders representing market participants, energy users and TNSPs to consider the proposed changes and resolve issues relating to the review. Grid Australia requests the AER to include a similar workshop in the consultation process for this review.

⁸ AER, *Final decision – Service target performance incentive scheme*, August 2007, pp10-11.

One of the consequences of the brevity of the timeframe is that, depending on the extent of the changes to the STPIS, the review may impose an unreasonable timeframe on ElectraNet to compile and prepare this section of its Revenue Proposal for 2013-2018. This is especially so given the assurance functions that are required for submission of a Revenue Proposal. Grid Australia requests that this be considered in the AER's timing and, if necessary, transitional arrangements be made for ElectraNet.

2.8 Amendments to the Scheme

The AER proposes to remove the ability for TNSPs to seek amendments to the STPIS. Grid Australia considers that precluding the suggestion of improvements is likely to be detrimental to achieving the objective of the STPIS. The AER has the role of approving or rejecting the proposed values and weightings, allowing it to ensure as the regulator that the scheme continues to meet its objectives. The ability for TNSPs to propose amendments would therefore only provide greater potential for to improve the STPIS framework.

3. Responses to Specific Questions

Q.1 Are the AER's current STPIS objectives satisfactory? Should the AER have any other STPIS objectives in mind when considering amendments to the STPIS?

The current STPIS objectives are satisfactory, and Grid Australia has not identified any further objectives for the STPIS. The existing scheme meets these objectives well.

Q.2 Are the evaluation criteria proposed for assessing incentive options appropriate? Are there any other criteria which should be used?

Grid Australia considers the following evaluation criteria appropriate for the reasons provided in the issues paper:

- incentive options should promote the NEM objective;
- incentive options should relate the economic benefit of the TNSP's action to the cost (noting that this is not a one for one relationship);
- incentive options should depend, as far as possible, on the TNSP's action;
- incentive options should be constructed on objective information and analysis that can be audited; and
- incentive options should minimise administrative costs.

There is one criterion that is not considered appropriate, that is, that incentive options should apply consistently across TNSPs. The reason given for this criterion in the issues paper is to avoid a framework that might (dis)advantage some TNSPs against other TNSPs on the basis of immutable differentiating characteristics. While Grid Australia agrees that incentive options should be available for application to all TNSPs, the consistent application of incentive options may actually advantage or disadvantage some TNSPs due to the differences between transmission networks. Grid Australia therefore suggests that this criterion be removed.

Furthermore, it is of concern that the AER has not explicitly included compliance with the Pricing Principles in the NEL as a primary criterion to be met by the design of an incentive scheme. This appears to contrast with the position taken by the AER in its recent proposals to change Chapters 6 and 6A of the NER. In its submissions and public statements it has made much of the guidance provided by these Principles in arguing for reduced prescription to guide its economic regulation role within the NER.

Grid Australia also proposes an additional criterion which, although implicit in the proposed criteria, is sufficiently significant for explicit consideration:

- ***Incentive options should influence specific, identifiable behaviour by a TNSP.*** When the market impact component of the scheme was introduced, the AER published a list of seven operating practices a TNSP could influence.⁹ These behaviours assisted in selecting the appropriate incentive option and gave rigour to the consideration process to minimise the risk of establishing a perverse incentive. Grid Australia notes that the same level of consideration of operating practices has not been made in the issues paper, but considers it is prudent to do so in any significant review of the STPIS. It also helps to ensure that incentives are established to which TNSPs are able to respond.

Q.3 Should the transmission circuit availability parameter still be included as a measure of network reliability?

The purpose of the transmission circuit availability parameter is, “to act as a lead indicator of reliability.”¹⁰ Grid Australia agrees with the observation that, “in many cases reduced circuit availability does not affect network users.”¹¹ However, the purpose of the parameter is to incentivise TNSPs to minimise the duration of both planned and unplanned outages. Behaviours this can encourage include combining

⁹ AER, *Service Target Performance Incentive Scheme – Developing incentives based on the Market Impact of Transmission Congestion – Issues Paper*, June 2007, p15.

¹⁰ AER, *Issues Paper*, October 2011, p14.

¹¹ AER, *Issues Paper*, October 2011, pp14-15.

multiple packages of planned work on the same outage, minimising the duration of planned work which can minimise its cost, and returning equipment to service overnight during planned outages spanning multiple days. The benefit of this incentive is that the less network elements are out of service, the lower the likelihood of an interruption to supply or market event resulting from a network event.

Grid Australia believes the transmission circuit parameter should still be included as a parameter in the STPIS, as the rationale for its original inclusion is still valid. The parameter is used commonly within Australia and internationally to report on networks, and influences TNSPs' behaviour in a way that is beneficial to both electricity consumers and market participants. It meets the evaluation criteria by promoting the NEM objective, relating the economic benefit of a TNSP's action to the cost in a generally predictable relationship, depending to a large degree on a TNSP's action, being readily auditable and attracting minimal administrative costs. Therefore there is no compelling reason for the parameter to be removed from the STPIS.

The identification of acceptable methodologies to set values for transmission circuit availability requires some review. In its existing form including planned and unplanned outages, the parameter is not intended to create an incentive to aim for 100% availability, as at the extreme this would mean outages are not being taken for equipment maintenance and capital works. It would therefore oppose the operating expenditure objective and capital expenditure objective in the NER. Grid Australia suggests further work be done in this area given the maturity of the parameter within the STPIS.

Q.4 Given the overlap between the circuit availability and the market impact component, should the circuit availability parameter focus on unplanned outages (with or without interruption to supply)?

In the issues paper, regarding the circuit availability parameter, the AER states that, "this parameter differs from the other service component parameters that focus on interruptions to supply."¹² However, this is largely incorrect. The average outage duration parameter includes all unplanned outages, whether or not they result in interruption to supply, with exception of the specific parameter definition for ElectraNet. Therefore there is also an overlap between the circuit availability and average outage duration parameters for some TNSPs, however the issues paper has not raised the question of this overlap.

Grid Australia suggests that overlap between parameters is not necessarily undesirable, provided the nature of the overlap is understood. The extent of overlap can be taken into account when determining weightings of parameters. Indeed, in

¹² AER, *Issues Paper*, October 2011, p15.

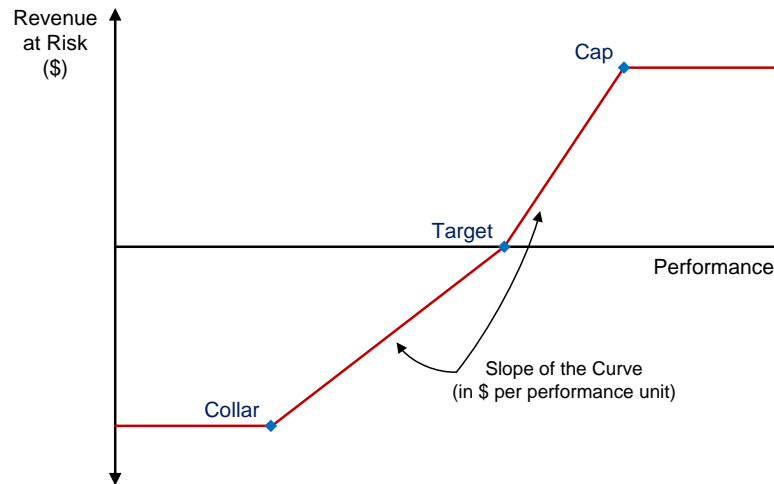
some cases overlapping parameters might lend additional significance to the STPIS' incentive by minimising the instance of sacrificial parameters.

On this basis, there is no compelling reason for transmission circuit availability to measure unplanned outages only. However, this option may be available as a sub-parameter for TNSPs where relevant. Also, some means of reducing the variability caused by large capex outages over time may be an option.

Q.5 Should the target for unplanned outages be zero rather than an average of past performance?

The occurrence of unplanned outages also does not necessarily mean that a TNSP is at fault or imply insufficient maintenance, as the AER suggests. Transmission networks by their very nature are exposed to the elements and experience unplanned outages due to causes such as weather events, bushfires, animals and third parties. Networks can also suffer equipment failure or maloperation caused by design or manufacturing issues, as any consumer who has returned a purchase under warranty will be aware. Further, there are known failure modes of high voltage equipment that can progress from inception to failure in very short periods of time and could not be avoided by any preventative maintenance regime. A target of reducing the incidence of unplanned outages to zero could never be attained in practice and is clearly unreasonable and unsuitable for the scheme. Most importantly such an outcome is unlikely to be economically efficient.

Grid Australia believes that the concept of basing the target setting on an 'idealised world', or setting an unreachable target, is counter to the scheme's purpose under the NEL to provide an incentive and inconsistent with the Pricing Principles in the NEL. The concept is also not consistent with the reliability standards set by each NEM jurisdiction, which recognise implicitly that a zero unplanned outage target is not viable or economically efficient. The design of an effective incentive is achieved by considering its full characteristic, including the rate of change of the incentive with progressive changes in performance (that is, the slope of the curve for the parameter).



The existing scheme, based on the use of historical benchmarks and the use of incentives and penalties appropriately drives performance improvement. That is, the current approach provides incentives to reduce outages to as close to zero as is achievable at a reasonable cost, and in balance with other operational priorities. The introduction of a zero target would not strengthen this incentive.

Q.6 What measure should be used to measure unplanned outages – should it be number of events or total duration (with individual events capped at say seven days)? Should the measure be normalised based on the number of transmission elements, to make comparison between TNSPs possible?

Grid Australia does not have a preference on whether number of events or total duration is used to measure unplanned outages. The existing average outage duration parameter makes use of both measures. One advantage of using duration is that it better measures factors in control of a TNSP, that is, the time taken to restore unplanned outages which measures response. However, Grid Australia is aware that short interruptions can have an impact on customers where plant carrying out a process is interrupted and required to be restarted, and therefore number of events may also be a suitable measure such as a sub-parameter.

A cap in conjunction with outage duration would be advantageous, as is currently the case for the average outage duration parameter. The reason for this is to reduce volatility in the results, keeping performance on the slope of the curve and reducing the possibility of operating on the cap or collar which provides no incremental incentive. The number of events is likely to be less volatile and not benefit from a cap on individual events.

Normalising the measure based on the number of transmission elements will not make comparison between TNSPs possible, due to the individual characteristics of transmission networks outlined above.

Q.7 Should the definitional thresholds for the loss of supply event frequency parameters differ across TNSPs? If so why?

Thresholds for loss of supply event frequency should be expected to differ across TNSPs, as the physical characteristics of networks such as geography, layout and topography are the main contributors to differences in the performance of individual networks. Although thresholds are normalised by system maximum demand, these do not account for the differences in these factors between networks.

Q.8 Is there merit in including these 'near miss' (or any other) additional parameters in the STPIS?

Grid Australia has a number of concerns with the introduction of 'near miss' parameters to the STPIS.

Firstly, only a small proportion of 'near miss' events actually affect electricity consumers, either by a reduction in reliability or an effect on the spot market price. Those that do affect electricity consumers are covered by existing parameters under the scheme. The inclusion of 'near miss' parameters will dilute the effect of the incentive by including events that do not affect customers or the market, which is counter to the requirements of the scheme in the NER. Any consideration of 'near miss' parameters would need to demonstrate a benefit to consumers and be considered on a case by case basis against the criteria for evaluating parameters.

The reason only a small proportion of 'near miss' events affect consumers is that transmission networks are designed to operate through those events. For example, the use of duplicate protections, network operation within system security requirements in the NER, and actions that can be taken to continue to leave circuits in service on a partial outage of a protection system in NER Clause 4.6.5 are important aspects of network design to manage the inevitable occurrences of what the issues paper describes as 'near miss' events. It appears incongruent to penalise TNSPs for events that are already subject to provisions for mitigation under the NER.

Secondly, it is an unusual, and presently unjustified, concept that a business should be liable for 'near miss' events other than the internal costs incurred in responding to the event. A 'near miss' event in an industrial, agricultural or commercial business, for example, will result in internal costs incurred in responding to the event and putting in place preventative measures to minimise the risk of further occurrence, and potential forgone revenue in cases of lost production. There is no additional economic penalty for 'near miss' events. The existing parameters best apply an analogous regime to regulated businesses.

Thirdly, the inclusion of a larger numbers of parameters in the scheme will increase the administrative complexity and costs of data collection and analysis.

In proposing 'near miss' parameters, the AER is informing TNSPs of the value customers place on improving second and third order measures, the so called leading

indicators, which suggests a more conservative approach to asset replacement and maintenance may be required by the TNSPs. It is not clear that driving behaviours in this way in an already highly reliable system is in the long term interests of customers.

Grid Australia notes that the options canvassed in the issues paper for 'near miss' parameters include at least one area covered by the AER's compliance review program. Grid Australia members believe these matters are more suited to an audit regime than incentive regime, which could assure the AER that appropriate processes and procedures are in place to manage them. Further, Grid Australia considers it an unrealistic expectation that best practice maintenance, testing and training would eliminate protection or control system failures.

Historical data relating to potential 'near miss' parameters would also be difficult to collate as required by the STPIS. There are a number of reasons for this.

- A consistent definition of an event can be complex to determine. The pursuit of a simple definition of a "protection failure" has sufficient complexities in scope – whether it includes maloperation, failure to operate for a genuine fault, and firmware lock-up or bug with no further impact, in various permutations across duplicate protection schemes. The other types of events attract similar complexities. If the AER is concerned about the complexity of exclusion definitions under the STPIS, it should be aware that the definitions of 'near miss' events will be even more complex.
- The manner in which events are recorded will vary between TNSPs and depending on impact. Some will be tracked as metrics, others will be the subject of routine reports or investigation reports but not collated into metrics, and others will vary in their classification as defect, fault or failure.

With regard to the potential indicator of "failure to meet reliability standards", Grid Australia offers the following comments.

- Reliability standards differ in nature between jurisdictions. Some require a TNSP to plan the network to particular deterministic criteria; some require the TNSP to plan and operate the network to particular deterministic criteria. Some jurisdictions have adopted probabilistic or part-probabilistic criteria, which by nature is difficult to measure.
- On any given day in a TNSP's outage period, there is likely to be at least one outage and often several outages that require particular parts of the network to operate at less than the planning standards specified by the jurisdiction, while still being within appropriate operational practice. This is commonly the case, for example, in a substation with two transformers or with two incoming transmission lines where one is required out of service. Outages in this situation are managed with appropriate controls such as confirmation of fine weather on the day, co-ordination with major customer plant outages and appropriate recall

times to mitigate the risk associated with the outage. In this case, the only avenues for a TNSP to respond to this potential indicator would be to contract network support expenditure if available, or incur capital expenditure to augment the network to a higher reliability standard than that required by the jurisdiction, in order to meet the minimum standard during outages. This is undoubtedly an inefficient and perverse incentive.

- Failures to meet reliability standards can be caused by actions of third parties such as customers and generators, and in these cases are outside of the control of TNSPs.
- “Failure to meet reliability standards” is also central to the licensing and/or regulatory compliance regime for most TNSPs. Accordingly, this proposal may create unnecessarily complex issues of co-ordination between incentive design and jurisdictional licensing and compliance regimes.

Grid Australia notes that the existing circuit availability parameter, which includes planned outages, inherently incentivises TNSPs to minimise planned outage duration. This is probably the most effective way to incentivise a TNSP to minimise the amount of time for which the network operates at less than the jurisdictional planning standards.

With regard to the potential indicator of “network transfer capability measures”, Grid Australia supports an incentive such as this in principle. However, there would be a number of difficulties in establishing such an incentive, such as the method to determine the ultimate level of network transfer capability and the operation of the incentive where no additional network transfer capability is available. Grid Australia suggests that the AER’s STPIS review timeframe is too limited to determine a robust incentive in this regard, but that it could be considered as a possible future development (possibly in conjunction with the broader Transmission Framework Review).

The exclusion of AEMO from application of the scheme would mean that the power of incentives such as “failure to meet reliability standards” and “network transfer capability measures” would be lessened and inconsistent across jurisdictions.

Q.9 Should the AER apply a common approach to defined exclusions across all of the TNSPs? If not, why not?

A common approach to defined exclusions is not desirable, due to the differences between transmission networks. In the original development of the scheme, the ACCC adopted SKM’s recommendation that, “a flexible approach be adopted in applying these measures to the various TNSP’s, to reflect their differing statutory roles, and transmission system configurations, as well as the lack of reliable data and

immature recording systems in respect of some of the measures.”¹³ While the recording systems for the parameters of the existing scheme are now mature, the other reasons driving a flexible approach are still relevant to the scheme.

Amongst other factors, certain exclusions may be appropriate to the Victorian jurisdiction only to account for AEMO’s role as the Jurisdictional Planning Body.

Given the maturity of the service component of the scheme, exclusion definitions are now well known and there are very few proposed exclusions requiring discussion between the AER and TNSP in any year. Grid Australia does not feel that the workload of reviewing and making decisions on proposed exclusions is particularly onerous at this point.

A change to exclusion definitions would required TNSPs to review and re-classify data used to report historically for the setting of forward targets, which is likely to reduce the quality and therefore value of the information.

Q.10 To the extent that the current scheme parameters are retained can the current definition of third party outages and force majeure events be more clearly defined? If not, are the AER’s principles appropriate and do they need to be developed further? If so, what amendments should be made to these principles?

Grid Australia does not consider that there is lack of clarity on third party or force majeure definitions, and considers the current principles to be appropriate. The precedents in decisions and clarifications already made by the AER over the period of operation of the STPIS provide effective guidelines for assessment of exclusions in the future.

The fundamental requirement for exclusions and measurement in general is that the recording of performance going forward must be consistent with that applied by the TNSP historically.¹⁴ The administrative burden of changing systems and seeking to back cast performance in order to achieve consistency between TNSPs is high and may in some circumstances be impossible to reliably achieve.

Q.11 Do stakeholders consider the current exclusions are sufficient, If not what other exclusions should be considered?

Grid Australia has not identified any further exclusions that should be considered for the standard parameter definitions in the scheme and supports the current approach to exclusions.

¹³ SKM, *Transmission Network Service Provider (TNSP) – Service Standards Final Report*, March 2003, p2.

¹⁴ ACCC, *Statement of principles*, pp4-5.

Q.12 The AER seeks stakeholder views on the defined exclusion approach to applying exclusions.

Grid Australia agrees with the AER's views on the defined exclusion approach, in particular that it is unlikely to provide benefits over the current approach. Grid Australia welcomes the AER's recognition in relation to exclusions that networks are heterogeneous, and observes that the AER should extend this recognition in future designs of the scheme.

Q.13 Is the adoption of a statistical approach for the transmission STPIS appropriate?

Grid Australia does not believe the adoption of a statistical approach to applying exclusions is appropriate, due to the issues with the statistical approach described in the issues paper.

Q.14 Would a statistical approach be appropriate for only some parameters or sub-parameters (e.g. would this approach be appropriate for the loss of supply parameter)?

Grid Australia does not believe the adoption of a statistical approach to applying exclusions is appropriate for any parameters, due to the issues with the statistical approach described in the issues paper.

Q.15 The AER would also welcome views on approaches to developing adjustments to account for parameters, which measure events that are by their nature very irregular and rare under this statistical approach.

The AER has not clearly articulated the rationale for developing adjustments for irregular and rare events, or the advantages of doing this.

Q.16 The AER seeks stakeholder views on whether a service performance threshold approach for transmission STPIS is appropriate.

Grid Australia does not see any benefit in the service performance threshold approach, given the need to also have definitions of exclusions working simultaneously with the threshold.

Q.17 The AER would also welcome views on approaches to developing exclusions to account for parameters, which measure events that are by their nature very irregular and rare.

The AER has not clearly articulated the rationale for developing adjustments for irregular and rare events, or the advantages of doing this.

Q.18 Should the current process for proposing amendments to the STPIS be removed?

Grid Australia believes the current process for proposing amendments should be retained in the STPIS. The current process provides the ability for TNSPs to consider the incentives in view of the objectives of the scheme and requirements of the NER, and propose values and weightings that best reflect the objectives. The AER has the role of approving or rejecting the proposed values and weightings, allowing it to ensure as the regulator that the scheme continues to meet its objectives.

The current process for proposing amendments gives the benefit of regulatory certainty, by facilitating incremental changes to the scheme rather than large-scale changes. It also provides for a review of the STPIS to be carried out in an appropriate time frame prior to lodgement of a TNSP's Revenue Proposal, to provide for collation of data and the appropriate assurance checks to be carried out as required by the scheme and submission guidelines.

Q.19 If the current process for proposing amendments is removed, should it be replaced with a regular review of the STPIS by the AER?

A process for a TNSP to propose amendments to the scheme is necessary under the scheme. If the current process for proposing amendments is removed, it should be replaced with an alternative process for a TNSP to propose amendments.

As noted above, the consultation process outlined in Table 1.1 of the issues paper is unusually brief for a review of the STPIS, particularly where a number of significant and new changes are proposed. In previous significant reviews the AER has convened workshops with key stakeholders representing market participants, energy users and TNSPs to consider the proposed changes and resolve issues relating to the review. Grid Australia requests the AER to include a similar workshop in the consultation process for this review.

One of the consequences of the brevity of the timeframe is that, depending on the extent of the changes to the STPIS, the review may impose an unreasonable timeframe on ElectraNet to compile and prepare this section of its Revenue Proposal for 2013-2018. This is especially so given the assurance functions that are required for submission of a Revenue Proposal. Grid Australia requests that this be considered in the AER's timing and, if necessary, transitional arrangements be made for ElectraNet.

This strongly suggests that the provision in the Rules allowing for a determination in relation to the STPIS to be made as late as two months before a TNSP is required to submit its revenue proposal is unreasonable and should be amended. In introducing Chapter 6A of the Rule in 2006 the AEMC provided transitional provisions¹⁵ to require the AER to produce first proposed guidelines for the STPIS which would apply to

¹⁵ AEMC, *National Electricity Rules*, Clauses 11.6.17 and 11.6.18.

ElectraNet, SP AusNet and VENCORP by 31 January 2007 – one month earlier than has been provided by this review.

Q.20 What approach should be adopted for setting the cap for TNSP performance when the cap set at two (or one) standard deviation from the mean would exceed the natural limit?

The approach of setting the collar and cap statistically at two standard deviations from the mean was first proposed by a consultant in a revenue determination for Powerlink.¹⁶ The principle was to aim for a TNSP's performance to be positioned on the slope of the incentive curve rather than beyond the cap or collar, where there is no incremental incentive. While this principle is appropriate, the statistical approach to setting the cap and collar is not appropriate for three reasons:

- it cannot be demonstrated that performance against a parameter over a regulatory period follows a normal distribution, as acknowledged when the use of two standard deviations was first introduced;
- when a TNSP is operating near the 'efficiency frontier' there is a greater probability of attaining an outcome below the target than above the target, indicating an asymmetrical distribution; and
- the sample size of five or six data points is not statistically significant enough to fit a distribution.

The actual issue is therefore not the approach to setting the cap alone, but the approach to setting the cap, target and collar.

Alternative methods of setting the cap, target and collar can retain the principle of keeping performance within the slope of the incentive curve the majority of the time, while also providing an incentive to reach and maintain performance at the 'efficiency frontier'. This approach would avoid the tendency of the scheme to penalise TNSPs in the long term in response to good performance, which is counter to the scheme's objectives. Grid Australia has considered potential alternative methods, and would be willing to work with the AER on their development in the preparation of the draft guideline.

Q.21 Is there any justification for why weightings should vary across TNSPs for existing parameters? If not, should the weightings be locked into the scheme? Should these weightings be the same across all TNSPs?

¹⁶ PB Associates, *Powerlink Revenue Reset: Review of Capital Expenditure, Operating and Maintenance Expenditure and Service Standards*, p189.

Grid Australia believes there are benefits to the ability to vary weightings between TNSPs. The original intention of this feature of the scheme was to encourage TNSPs to consider:

- the extent to which its parameters provide incentives to improve reliability at the times of greatest value to users and on those elements of the network most important to determining spot prices
- the availability of accurate and reliable data for determining the values for each parameter
- the scope that the TNSP has to improve its performance as measured by each of its parameters
- the extent to which the parameters applying to the TNSP overlap.¹⁷

These factors have been amended slightly since the first proposed scheme but retain the same essence. As the factors differ between transmission networks and TNSPs, it seems sensible that the weightings should also be able to vary similarly between TNSPs and not be locked in to the scheme.

A stark example of this is in Victoria where SP AusNet is also subject to an availability scheme administered by AEMO and therefore, it would be appropriate that the STPIS weighting for availability would differ from other jurisdictions.

Q.22 Should greater weight be put on measures which reflect longer interruptions than shorter interruptions?

It seems sensible for greater weight to be put on measures that reflect longer interruptions than shorter interruptions. The relative weightings of the loss of supply sub-parameters already take this into account, noting that a large loss of supply event also counts as a small loss of supply event for all TNSPs that are incentivised on these parameters. The average outage duration parameter also incentivises TNSPs to minimise the duration of interruptions.

That said, it should be recognised that even a small number of long duration, long return period events has the potential to destroy the strength of an incentive within any year. This suggests that capping the value of such events or their routine treatment under the force majeure provisions of the scheme may be appropriate.

Q.23 Would weights that are less than 10 per cent of total revenue at risk result in weak incentives, if so should a TNSP's revenue at risk be increased such that no individual parameter or sub-parameter weight is less than 10 per cent? Also, if a less than 10 per cent weighting results in weak incentives, does this also apply to sub-parameters?

¹⁷ AER, *Final decision: Electricity transmission network service providers Service target performance incentive scheme*, August 2007.

General performance management practice suggests that a small number of KPIs, or in the case of the STPIS a small number of parameters, help to keep the scheme focused and provide clear behavioural signals in preference to more broadly scattered KPIs. A small number of parameters will naturally engender weightings that do not result in weak incentives.

The actual effect of weightings less than 10 per cent of revenue at risk would need to be considered in the context of the total revenue at risk, the overlap between parameters and the relationship between the scheme and other incentives provided by in the regulatory framework. In view of this the scheme should not preclude the possibility of parameters or sub-parameters with weightings of less than 10 percent revenue at risk, to allow for situations in which this may be prudent. Importantly, any proposal of weightings by a TNSP is subject to approval by the AER, which ensures that the level of revenue at risk for each parameter and sub-parameter remains appropriate.

Grid Australia does not support the apparent thrust of the AER's argument that if 10 per cent may be too small to incentivise behaviour, the overall revenue at risk should be increased to accommodate a minimum weighting of 10 per cent. There may be situations in which there is rationale to reduce the weighting of other parameters at the same time as increasing the weighting of a parameter to 10 per cent.

The key issues regarding the power of the incentives are: the weighting and revenue at risk relative to the cost of actions to improve performance; and from a customer' perspective that the incentive is relative to the prospective benefit of improved performance.

Q.24 Should more weight be given to interruptions to supply rather than duration of the interruption consistent with the distribution STPIS? Do customers place greater value on reducing the number of interruptions than on the length of the interruption?

Grid Australia does not have a preference in the weightings of number of interruptions compared to duration of interruption. It is aware that short interruptions can have an impact on customers where plant is required to be restarted, and that longer interruptions can have a larger impact than shorter interruptions.

The existing loss of supply parameters take into account both number of interruptions and duration of interruption, by their design in counting the number of events above particular system minute thresholds. This has proven to be more statistically stable than other measures such as total system minutes.

Q.25 Should the existing measures be given equal weight, if so why? If not, which measure should receive the most weight and which measure the least weight?

The allocation of equal weight to each measure does not give due regard to the factors listed in Clause 3.5 (d) of the current STPIS, and therefore may be counter to the objectives of the STPIS in some cases.

The weightings given to each parameter will depend on the factors listed in Clause 3.5 (d) of the STPIS. In particular, the level of overlap between parameters will be a factor in determining the relative weightings of the parameters. Grid Australia understands that customers value reliability of supply (reflected in the loss of supply parameters) and electricity price (reflected in the market impact component) more than parameters that are unlikely to affect either of those outcomes.

Q.26 Is there sufficient data to apply a positive weighting to parameters which previously had a zero weighting?

In general, there are likely to be material issues in compiling historic data on parameters and sub-parameters that are not being applied in the existing scheme. Parameters or sub-parameters that are being applied but have zero weighting are likely to have sufficient data to continue reporting under the scheme.

Q.27 Should the AER increase the revenue at risk for TNSPs under the service component of the STPIS?

Grid Australia does not support an increase in the revenue at risk under the service component. The current level of revenue provides a sufficiently powerful incentive to influence the behaviours it is intended to influence, and indeed has successfully done this since the introduction of the original performance incentive scheme and STPIS. The revenue at risk should relate to the behaviours the scheme is intended to influence.

The present incentive of $\pm 1\%$ of MAR is a particularly powerful incentive when considered in terms of the other obligations TNSPs are required to meet, such as operating expenses and the cost of capital. For example, the present incentive equates to approximately 5% of total operating expenditure and an increase in revenue at risk would proportionally increase this ratio.

The revenue at risk for the STPIS must also be considered in conjunction with other incentives in the regulatory environment. The AEMC accepts, “the need for the various incentive schemes applicable to TNSPs to be balanced in order to ensure TNSPs’ decisions are not inappropriately skewed.”¹⁸

Grid Australia also highlights that unless the scheme is amended to better address the incentive where a TNSP is at the ‘efficiency frontier’, there will always be a greater propensity towards penalty outcomes for TNSPs as the scheme continues, even with parameters that have a symmetric component. In this context, Grid Australia believes that increasing the revenue at risk would primarily increase the magnitude of likely

¹⁸ AEMC, *Draft Rule Determination: Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, 26 July 2006, p86.

penalty outcomes for TNSPs, and would be able to have negligible incremental influence on behaviour in areas where TNSP performance is already mature.

Q.28 Should the financial incentive incorporate the economic cost of outages for parameters and sub-parameters which measure loss of supply?

Grid Australia is open to further consideration of the relationship between the economic cost of outages and financial incentive where there is loss of supply. However, it also agrees with the AER's acknowledgement that, "when there is an interruption to supply the financial impact on a TNSP can be relatively large."¹⁹ This raises the question of whether there is actually any benefit in considering the economic cost, if the existing parameters offer a sufficient financial incentive.

There are some considerations that would need to be taken into account if the economic cost of outages is considered for incorporation.

There are potentially material administrative overheads associated with the inclusion of this cost. In order to comprehensively take into account the economic cost of outages, it would be necessary to determine and maintain a value of customer reliability (or alternative) for each connection point in the TNSP's network to account for the variation in economic cost between the residential, commercial, industrial and agricultural customer mix at each connection point. This is not a trivial undertaking, as evidenced in AEMO's present efforts to develop values of customer reliability for all states in the NEM.

The actual energy not supplied results for TNSPs can vary substantially from year to year, depending on the magnitude of the particular events in that year. Thus an incentive that is proportional to actual system minutes lost is likely to result in large variations in results and be difficult to incentivise. The present loss of supply parameter, which statistically considers the number of events above large and small thresholds, addresses that issue while still providing an incentive linked to the magnitude of the events. If the economic cost of outages is considered for inclusion, the volatility of the parameter will need to be considered in the design.

Finally, any consideration of the economic cost of outages in the scheme would need to be consistent with the provisions of Section 120 the National Electricity Law providing immunity in relation to failure to supply electricity. That is, any incorporation of the economic cost of outages must not be effectively a liability as stated in Section 120 of the NEL. This precludes a direct relationship between the economic cost of outages and the financial incentive.

¹⁹ AER, *Issues Paper*, October 2011, p16.

Q.29 Do stakeholders support any of the approaches outlined above for incorporating the economic cost of outages into the financial incentive?

The approaches outlined in the issues paper have not necessarily considered the issues identified in the development of the existing loss of supply parameters. Grid Australia recommends that any further development of incorporation of economic cost into the incentive review and consider these issues.

There is also a risk that depending on the design of the incentive, a TNSP could start to incur increasing penalties where there is no actual change to the reliability of its network. This would be counter to the intention of the STPIS, and Grid Australia cautions against modifications that may have an impact of this nature.

Q.30 Is the VCR an appropriate measure to base calculations on the economic cost of outages? If not, what methodology should be AER use to determine the economic cost of a loss of supply?

Grid Australia notes that the VCR is subject to a number of uncertainties and subjectivities in its calculation, as discussed by AEMO in recent consultations.²⁰ Although the VCR is used in cost/benefit analyses for transmission planning its volatility may make it unsuitable for application to managing operational performance.

Q.31 Should the parameters which have reached the 'performance frontier' be subject to an asymmetric penalty-only scheme?

Grid Australia considers it unreasonable to apply an asymmetric penalty-only scheme to parameters that have reached the 'performance frontier'. This would in effect penalise good performance, which is counter to the purpose of an incentive scheme and would create a dis-incentive to perform well against the parameters. It is clearly at odds with the purpose of the STPIS to encourage TNSPs to improve *and maintain* the reliability of their networks.²¹

As previously discussed, the STPIS is not a compliance scheme and is not analogous to a system of fines, such as for breaches of the road rules. The closest analogy to this in the NER would be the civil penalty provisions attached to certain clauses, which do not include clause 6A.7.4. Rather, the scheme is intended to encourage TNSPs to improve and maintain the reliability of their networks.

Importantly, parameters that are not explicitly designed to be 'penalty-only' can operate effectively as penalty-only parameters where a TNSP has reached the 'performance frontier' or 'efficiency frontier'. By using average historical performance

²⁰ AEMO, *Value of Customer Reliability Issues Paper*, 20 June 2011.

²¹ AEMC, *National Electricity Rules*, Clause 6A.7.4(b)(1).

to set targets, the scheme naturally limits the ability to achieve incentive payments at levels of performance close to the performance frontier. Further, the introduction of a penalty-only scheme may lead to difficulties in identifying the performance frontier in the absence of an incentive to improve performance.

Furthermore, such a scheme would appear to be inconsistent with the Pricing Principles in the NEL, which bind the AER in its economic regulation role.

Grid Australia has proposed an approach for setting caps, collars and targets that may better meet the objectives of the STPIS in the response to Question 20.

Q.32 If 'near miss' parameters are included, should these parameters be subject to a penalty only scheme?

For the reasons previously discussed in this response, 'near miss' parameters should not be subject to a penalty only scheme. If TNSPs perform well against an incentive Grid Australia believes this behaviour should be rewarded, rather than the scheme being designed such that appropriate behaviour is effectively penalised.

Q.33 Taking into account the proposed 'near miss' parameters in section 3.3 of the issues paper, what should the size of a penalty for the occurrence of a 'near miss' measure be set to properly incentivise TNSP behaviour?

For the reasons previously discussed in this response, 'near miss' parameters should not be subject to a penalty only scheme. The magnitude of the incentive for a particular parameter is best considered in conjunction with the design of the parameter, in order that it can be related to the behaviours intended to be incentivised and be appropriate at the 'per occurrence' level of detail as well as at the overall parameter level.

Q.34 Should the financial incentive of the market impact component of the STPIS be symmetrical?

Grid Australia does not believe there has been sufficient experience with the application of the market impact component to consider a symmetrical financial incentive. When the market impact component was established, the AER decided that:

The market impact component of the service target performance incentive scheme should operate as a bonus only scheme. As outlined in the explanatory statement to the draft scheme, this approach is appropriate because at this stage the scheme is to some extent experimental and unproven. Given it is difficult to predict TNSPs potential performance against the market impact

parameter, it is appropriate that a TNSP cannot receive a penalty under the market impact component of the scheme.²²

At present, the operation of the market impact component over time is still unproven. At the longest, TNSPs have had approximately two years of experience with application of the scheme, with most having less. In this regard the absence of any formal review of the effectiveness of this scheme to date by the AER is noted.

In the limited experience of responding to the market impact component, it appears to be more difficult to mitigate the effects of outages for capital works at locations on the network that are prone to constraints, such as interconnections or particular intra-regional cut-sets. This is because outages for capital works are likely to be longer than outages for maintenance due to the nature of the work, and are likely to be more difficult to reschedule if they are part of a program of works with dependencies that are required to be undertaken in a particular sequence. The disruption involved in rescheduling is more likely to have a material impact on subsequent outages and the commissioning program, than for maintenance outages which are more likely to stand alone. Further, outages for capital works vary across different parts of the network between years, which may result in large “block” changes in performance in the years these outages are in parts of the network prone to constraints. The scheme has not been operating for long enough to determine from experience the actual magnitude of this effect.

Further, Grid Australia considers that the transmission framework prevailing as a consequence of government policy will itself impose limits on the effectiveness of an MITC scheme and therefore on its design. The AER and TNSPs should assess the outcome of the Transmission Frameworks Review before considering setting significant additional ambitions for the MITC.

The issues paper suggests that, “TNSP’s possess a higher level of control over market impacts flowing from outages that occur on its network, than first anticipated,” as a conclusion from the observation that more than 80% of outages incurring a market impact are planned outages. Grid Australia does not believe this is a valid conclusion to draw from the observation.

While some factors relating to market impacts of outages are within the control of a TNSP, others will not be, even for planned outages. Some outages will incur market impacts regardless of the time of year or day they are scheduled, and the period of advance notice given to the market. A TNSP may be able to substantially minimise these impacts, but not completely eliminate them. An example of this is a recent project to increase the rating of 86 line in New South Wales. The driver for the project

²² AER, *Final decision – Electricity transmission network service providers Service target performance incentive scheme (incorporating incentives based on the market impact of transmission congestion)*, March 2008, p20.

was a net market benefit, as justified under the regulatory test (prior to introduction of the RIT-T). The nature of the work precluded the use of live line work methods, and it was scheduled at the best season to minimise market impact. Sufficient notice of the outage was provided to the market to allow generators to finalise hedge positions, and the outage was scheduled as separate daily outages rather than a single continuous outage, returning the line to service overnight. The capital value of the works was slightly below \$2 million and the forgone incentive, incurred gradually over the duration of the work, was slightly over \$2 million.

In this case, TransGrid as the proponent of the work forewent incentive income in the process of delivering a market benefit to customers, an outcome that could not have been predicted beforehand. The notion that the scheme has the ability to penalise TNSPs even when they observe the behaviours the scheme intends to incentivise, and are acting in the interests of electricity consumers, is a strong reason not to introduce a penalty component.

Secondly, while it is desirable for TNSPs to reschedule outages to attempt to minimise the market impact, it is often not possible to reliably predict the outcome of doing this given the factors outside a TNSP's control. A pertinent example is a recent update to MT PASA for New South Wales that forecast reserve shortfalls in November following particular events affecting market participants. A reduction in generation reserve increases the likelihood of a constraint binding during a transmission outage. However, any deferral of significant works would need to be until the Autumn 2012 outage window and the disruption to the work program would be material. Competing factors such as these impose practical constraints on a TNSP's response to the scheme, but do not imply that a TNSP's decisions are inappropriate. Introducing a symmetrical incentive that would be likely to penalise such decisions is undesirable in the scheme.

Thirdly, the consideration of a symmetrical incentive has not considered the impact when a TNSP reaches the 'efficiency frontier' at which it can no longer improve. In this case, while the target for the scheme must be set to the average of previous years' performance, the scope for the TNSP to further change its behaviour in response to the scheme reduces and at the same time the revenue at risk for each 5-minute dispatch interval increases. For example, if a TNSP through good performance against the parameter in one regulatory period halves its target in the following regulatory period, the revenue at risk for each 5-minute dispatch interval will double. If the TNSP has made all the behavioural changes possible and is operating at the efficiency frontier, it will be unable to improve its average performance and will be exposed to penalties at a high impact per dispatch interval while still maintaining the same behaviour that benefits electricity consumers and incurring costs for such behaviour.

In its decision introducing the market impact component, the AER stated that it, "will continue to monitor the use of historical data as the basis for setting performance targets and will revisit the issues raised by the EUAA, TransGrid and ETNOF in the

future when further experience is gained on operation of the scheme.”²³ Grid Australia notes that the issues paper does not revisit these issues, even though they are material to the financial incentive of the market impact component. Grid Australia recommends that the AER revisit these issues during this review of the STPIS.

Finally, there are future factors that may change the behaviour of the scheme, such as changes in generation patterns arising from the introduction of a price on carbon.

Grid Australia agrees with the AER that the design of parameters should incentivise sustained changes in behaviour. Concern about outage shifting between periods that is not related to the behaviour the scheme aims to incentivise could be addressed in other ways than a symmetric incentive, for example:

- an alternative approach to significant changes in values between regulatory periods, such as those discussed in the response to Question 35; or
- a linear change in target between years in a regulatory period, rather than use of the same target in every year of the period.

Q.35 If the financial incentive is symmetrical, how should the AER determine the appropriate caps and collars?

Grid Australia does not believe TNSPs or the AER have had sufficient experience with the application of the market impact component over time to consider a symmetrical financial incentive.

Q.36 Does this misalignment between financial year revenue resets and calendar year measurement lead to any perverse outcomes?

The misalignment does not necessarily lead to perverse outcomes, but at present leads to years in which TNSPs report on two six-month periods, at changes in the regulatory period. The use of calendar year periods was originally chosen to minimise the lag between the year over which performance was measured and the year in which the incentive is applied to the TNSP’s revenue.

Grid Australia does not have a preference for financial year or calendar year measurement over the other. A change to with financial years would align with jurisdictional performance reporting; however, it would increase the lag between the year over which performance was measured and the year in which the incentive is applied to revenue. If this change is made, Grid Australia suggests that the incentive should be escalated by the time value of money due to the lag.

²³ AER, *Incorporating incentives based on the market impact of transmission congestion*, p18.

If the occurrence of years in which TNSPs report on two six-month periods is undesirable and calendar year measurement is retained, options which might be considered and offered to better manage this discontinuity include:

- retention of the values from the previous regulatory period for the calendar year in which the new regulatory period commences; or
- use of values in the changeover calendar year that are the average of the values of both regulatory periods, as long as integer targets are retained for parameters that count a number of events.