IPRA Preliminary Submission to AEMC Transmission Frameworks Review First Interim Report

(AEMC Reference EPR0019)

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1 Introduction

International Power-GDF Suez Australia (IPRA) welcomes the opportunity to provide this preliminary submission on the consultation that the AEMC is conducting on transmission frameworks in the NEM.

This preliminary submission in intended to provide an insight into an alternative proposal being developed by IPRA. IPRA, however, reserves the right to vary its proposal in the final submission to the AEMC as it develops its thinking further.

2 Desirable features of a transmission framework

In the first interim report, the AEMC specified a set of desirable features for a transmission framework such that the national Electricity Objective will be supported. These features are stated as:

a) TNSPs have incentives to efficiently invest in and operate their networks to meet load requirements at least cost and support a competitive generation sector;

b) generators have incentives to offer their energy at an efficient price and invest in new plant where and when it is efficient to do so;

c) the policies, incentives and signals that govern transmission and generation decisions are coordinated to promote consistent decision making between the regulated and competitive sectors of the NEM; and

d) safety, reliability and security of the transmission system is maintained.

IPRA is generally supportive of this approach, and agrees with the features as specified. However, we are concerned that this approach is incomplete without the recognition of the history of NEM development and of existing investments.

We propose an additional feature that new transmission frameworks should include and then examine the justification for this. The additional feature is –

e) Once connected to the network, generators should not be impacted by changes to the level of access and costs. Specifically generators in existence at the time that new transmission frameworks commence should not be disadvantaged by the change

The justification for this feature lies directly in the National Electricity Objective. The market relies on private investment in generation to maintain a continuing reliable supply. A major source of new investment in the NEM can be expected to be incumbents, who will be heavily influenced by the expectation of the impacts of future regulatory risks. This applies to project investors and financial institutions providing investment funds.

Imposition of unmanageable regulatory risk will clearly raise concerns for all classes of potential future investors, at best leading to greater risk margins, or at worst diverting capital into other markets with less perceived regulatory risk. The electricity sector competes for investment funds with other sectors both domestically and internationally. With the financial crisis in the EU and the spectre of a second global financial crisis, investors are far more risk averse and funding is more challenging to secure.

We acknowledge but disagree with concerns that the features sought in the interim report cannot be achieved without disadvantage to incumbents. We address this concern in our submission by describing in detail new transmission frameworks which provide all the features now proposed by the AEMC and also include our additional feature (e) covering existing generators.

We also recognise that there may be an objection that this feature would constitute unfair treatment of some groups of generators. Our response to this is in three parts:

- Firstly, we note that this feature involves uniform treatment of all generators in the important sense that all generators get the outcomes expected when they made an investment decision to connect to the grid or on commencement of the market;
- Secondly, the National Electricity Objective calls for economic efficiency, not for 'fairness' (a subjective quality in any event). We believe that 'fairness' is desirable, but only if it does not compromise economic efficiency. Since disadvantaging incumbent generators would compromise economic efficiency, this objection fails the test of consistency with the NEO; and
- Thirdly, consider whether achieving a perceived 'fairness' in transmission frameworks would support more effective market competition. In relation to this we note that existing generators have been progressively connected to the grid over a period spanning several decades. Over this period many issues related to competition between generators have changed greatly. These include generation technology, the availability and cost of fuels, environmental regulations and objectives, the operational and maintenance demands of plant etc. We contend that in the face of these many differences, an attempt at perceived 'fairness' focussing only on transmission arrangements is unlikely to materially impact on the efficiency of competition in the market.

We further note that even if we confine our attention to transmission costs, it is now unlikely that the extent to which individual generators have already indirectly paid for network access can be accurately assessed, whether through a privatisation process prior to the NEM, or though debt allocation in the process of disaggregation of earlier state-owned bodies.

In short, we consider that while it is desirable to seek 'fairness' as a notion within each group of generators, this must not be at the expense of economic efficiency, and we do not believe that there is any benefit in relation to the NEO in seeking 'fairness' across plant of widely different vintages. Finally, the historical information that would be required for any realistic effort to achieve 'fairness' in retrospective transmission charging is not available.

3 Integrated package of framework elements

This section of our submission describes an integrated package of complementary measures that we propose as major components of a new transmission framework. We will later demonstrate that this package delivers all the features that the Commission has set out as desirable as well as meeting the additional requirement that we have proposed above.

We will also later show the connections between some of these elements and evident, but unrealised, intentions within the current Rules.

We will begin by listing these elements, and will then examine each in some detail.

a) Protection of agreed access
b) Locational signals through charging deep connection costs for new entrants
c) Choice of level of access
d) Ability to trade access
e) Congestion management
f) Interconnector planning to maintain a sufficiently integrated NEM

Before describing our proposed integrated package, IPRA stresses that in its view the ultimate objective remains the ability for generators to be able to manage all of their risks due to congestion and pricing events, and make economic decisions regarding the risk/cost trade-off for their business circumstances. However in recognising that this ideal has proven difficult to achieve to date, we propose the following integrated package as a pragmatic step towards more effective risk management. At a later time it may be appropriate to consider additional mechanisms for generators to secure higher levels of risk assurance, after the materiality of residual generation financial risk resulting from the present proposal can be assessed.

However, when major transmission events occur (eg, multiple transmission outages due to bushfires, or multiple contingency transmission events), market participants are exposed to potentially devastating financial risks with no effective means of mitigation[1]. Although the integrated package described below does not address these risks, IPRA is firmly of the view that a mechanism to manage these risks should be an integral part of the transmission framework, and recommends that consideration of the need for more specific risk management mechanisms for these events should occur promptly.

3.1 Protection of agreed access

The intention that agreed access should be protected from degradation due to subsequent generator entry is evident in the current Rules. Our proposal in this regard is that the future frameworks should ensure that this intention is realised, rather than remove clauses that attempt to reflect this intent[2] because they are inconvenient or unworkable in their current form.

Maintaining this original intent that there be some protection of agreed access is proposed for two reasons:

- If access is unprotected in the sense that the access of one participant, as agreed with the TNSP, can be degraded by the action of a third party, then this must adversely impact on potential investors in a way that is contrary to the NEO. The potential investor will either be discouraged or will seek a greater risk margin on this account; and
- If, as we separately propose, new entrants face a locational signal in the form of a cost of access (which is consistent with the NEO), then they will not be justified in paying for an efficient level of access if that access is not protected (nor is it reasonable that they should do so).

[1] For example, multiple transmission line trips due to bushfires on 9 February 2009, and multiple line outages between Hazelwood and Loy Yang on 23 July 2008.

[2] These provisions were approved under the original Access Undertaking for the NEM

In seeking a form of protection of agreed access, we need to be clear on the form of protection proposed. The actual level of access that a group of nearby generators share can be envisaged as the combination of:

- A base level of access which applies when the network is in a defined state (in terms of availability of network assets, temperature, wind speed, voltage levels and other relevant circumstances); together with
- Frequent and sometimes large fluctuations away from this base level. Most of these fluctuations will give lower access (although to some extent this depends on how the base level is defined – see later discussion).

The proposal we are advocating is a planning process to ensure that the base level of access, under certain defined conditions, is sufficient to simultaneously provide all the agreed individual levels of access to all relevant generators.

This proposal leaves generators still facing the remaining fluctuations in network access as system circumstances change. While protection from, or compensation for, such fluctuations would clearly be desirable from the perspective of generators, it is not part of the proposal advocated here.

The first part of implementing this proposal would be a requirement in the Rules that a Network Service Provider must not agree to any additional access unless and until it has demonstrated by a planning study that it can provide this new access in parallel with all previously agreed access (but would remain obliged to do whatever is necessary to provide the access sought). This may or may not require network augmentation, depending on circumstances.

The second part of implementation would be defining a set of principles to be adopted in the above evaluation, what might be called a “measurement protocol”. Some considerations in relation to such a measurement protocol will be given in IPRA’s full submission.

3.2 Locational signal for new generators

We propose that the transmission frameworks should include effective and complete locational signals related to transmission as applicable for new generators.

This is necessary to ensure that decentralised decisions by prospective generators result in overall efficient investment across both their own investment in plant and the consequential investments in the transmission network.

We have emphasised “effective and complete” locational signals because we recognise that some aspects of the current market arrangements provide limited locational signals, but also that one important aspect has not been implemented. This is the cost of providing access in terms of maintaining the adequacy of the shared network capability (by augmentation of the network as necessary). The cost of maintaining network capability, relative to access granted, is appropriate because if capability is not so maintained then the cost of one generators entry can be imposed largely on other generators, leading to inefficient investment decisions.

It is also relevant to note here that one of the existing locational signals, namely the application of average marginal loss factors in market settlement is, largely for technical reasons, inflated to about twice its physical value. This practice has applied since market start and was intended as the principal transmission locational signal. We recommend that the Commission should, in parallel with filling the gap to make locational signals more effective and complete, also seek a way to counteract this existing inefficient over-signalling. We note that there is an inconsistency, which needs to be resolved, between the requirement for efficient dispatch , requiring marginal loss factors, and the requirements for efficient locational signalling, requiring average loss factors.

This over-signalling has very different locational characteristics from the costs of network augmentation, and hence these two issues of network costs and network losses should not be regarded as trading off one against the other.

A critical characteristic of locational signals for generators is that they can only be effective to the extent that they are known in quantitative terms when the locational decision is made. It is generally impractical (technically and commercially) to re-locate a generator once constructed, so retrospectively applied or altered incentives will have no benefit as a locational signal. The issue of retirement incentives is better handled by other means.

In this regard, the cost of any network augmentation that is needed to provide access would form an efficient and practical locational signal, since the lifetime cost of network assets is quite well defined at the time of construction.

In contrast, the existing locational signals of congestion and loss factors are impossible or extremely difficult at best, for a prospective generator to forecast over the life of their plant, and hence are inherently less efficient. We nevertheless support their continued application, subject to the changes proposed in this submission (which will provide a more predictable level of congestion, and eliminate the over-signalling of the current marginal loss factor practice). Our support is on the basis that these are better included, however imperfectly, rather than hidden.

While supporting the application of charges in relation to any necessary network augmentation in order to complete the locational signals, we recognise that the important issue of economies of scale in network construction will complicate the application of this principle. We note however that this issue is not unique to our proposal, but is an important issue in relation to any process of charging for transmission services, even if it is not made explicit.

3.3 Choice of level of access

The level of access for a generator need not match the capacity of the plant. While we expect that all generators will want connection equipment that matches the capability of the generation plant, there are different incentives in relation to the capacity of the shared network to allow access. For this, a generator may rationally choose a lower access level, where that generator foresees little conflict between their needs and the needs of other nearby generators, for example, in cases where the purpose of the new generator is to "firm up" or "backup" existing plant.

We also note that a generator could correspondingly seek access greater than its plant capacity in order to give a high level of assurance of reliable access or to cater for future plant expansion. Our proposal would allow this, if desired, and the network could be upgraded to achieve this level of access.

The proposal to allow a choice of access level relates to the previous two elements of this proposal, namely protection of access and cost of access.

The chosen level of access would be the level protected during entry of subsequent new generators. It would also be the basis for determining any network augmentation needed to support access, and hence determine the magnitude of that locational signal.

In order that a choice of the level of access should lead to efficiency gains, the participant making the choice should be subject as far as possible to the genuine consequences of that choice.

The first relevant consequence, as mentioned above, is that the participant would face network charges that relate directly to the choice made.

The second form of appropriate consequence is that the operational consequences should relate appropriately to this chosen level. Thus a chosen low level of network access should lead to more restrictive operational consequences than a higher level of access. But, on the other hand, in order to maximise market efficiency, these operational consequences should not result in under-utilisation of the network.

The proposal below satisfies all these conditions.

Before setting out the detail, it is convenient to discuss the means by which these operational consequences would be imposed. The context within which the arrangements will operate influences the form they should take. We note that a partial access level would need to be agreed between a prospective generator and the Network Service Provider. The quantity would appear in the bilateral connection agreement between these parties. It is therefore convenient and pragmatic to keep the operational consequences within this agreement. This has the advantage that market dispatch and settlement processes do not need any alteration and, by avoiding any need to keep a third party informed of agreed access level, the risk of error is reduced.

The proposal is that the Rules would be changed to require that a Network Service Provider that agrees to provide a level of access to a generator which is less than the plant capacity must include certain specific conditions in that agreement. For convenience we will refer to such access as “partial access”.

The requirements that the connection agreement would impose on the generator with partial access are as follows:

- The generator with partial access is free to offer to the market as it choses except when there is a relevant binding network constraint (this is to avoid needless restrictions on network utilisation);
- When there is a relevant binding network constraint the generator with partial access must not offer greater generator availability to the market than its agreed partial access level; and

- In the event that a generator with partial access fails to comply with the above condition, then it owes the Network Service Provider compensation equal to the additional revenue received due to non-compliance.

The term “relevant binding network constraint” used above refers to constraint equation applied in dispatch and representing a network limit in which the output of the relevant generator appears explicitly as a dispatch quantity.

A further aspect of this proposal is that the Network Service Provider, if it becomes entitled to such compensation, would be obliged to use the whole amount to compensate those other generators that are determined to have been adversely affected by the non-compliance. This compensation would be required to be in proportion to those losses of revenue due to that non-compliance. It should be noted that such a mechanism is quite similar to the outworking of the original NEM Code as contemplated by its designers.

The obligation to avoid the incidence of a relevant binding constraint or to limit their offer, allows the generator to make use of network capability to provide more than their agreed access at times, but on the other hand imposes an obligation to monitor the possibility of congestion and act in a timely manner when that risk is imminent. The rewards of greater access (above the agreed level) are balanced by the need for prudent and timely action to meet their obligation.

We note that while this proposal includes the possibility of compensation paid by one generator and received by others, it is not the intention that such compensation would normally apply. Rather the compensation mechanism has the intention of ensuring compliance with the obligation to restrict offered availability to avoid or reduce network congestion. If this obligation is met then no compensation would be paid or received.

It might be thought that a restriction on generation availability offered to the market would adversely affect supply reliability. However it should be noted that the circumstances in which an availability offer would be reduced are circumstances where all the offered availability would not genuinely add to reliability because it would be restricted in dispatch due to the congestion.

This component of our integrated package is logically connected to those previously described. If a prospective generator is required to pay for the network augmentation needed to allow ongoing access, then it should have the choice of the level provided and hence the cost to be met and should also face the operational consequences consistent with that choice.

3.4 Ability to trade access

The proposal described above allows a prospective generator to choose the level of network access that suits its particular purposes. However over the life of a generating plant the needs for access may change.

The case of a generator seeking a greater level of access is straightforward; the generator would negotiate with the Network Service Provider for a higher level of access and this process would resolve any changes to costs and the associated operational benefits.

The contrary case is more difficult, since the cost of initially providing access will often be the construction of expensive and long-life assets, and there would naturally be a risk that a reduction in access provided would leave a stranded asset. It would be inappropriate to allow a generator reduced charges for reduced access if there were no reduction in network costs and no alternative source of funds. However, reduced charges could apply if there were another generator willing to buy a part (or all) of the existing access provision. We propose that the Rules should provide for such transaction, with particular conditions.

We note that network access is location-specific and hence that a purchaser of existing access should be responsible for any plant needed to get their output to the location of the existing access.

The purchaser would take on a proportion of the existing agreed access and the same proportion of any ongoing costs associated with that access.

The Network Service Provider would need to be satisfied that the purchaser's plant satisfied technical requirements, and that the purchaser was credit-worthy in relation to any ongoing charges.

Such a transaction may leave the seller or the buyer (or both) holding partial access for their plant, and we envisage the provisions described above for partial access would be applied where relevant.

The proposal to allow trade of access has particular relevance where plant retirement is contemplated. In this case there may be a number of advantages for new plant locating where plant is retiring. In addition to the use of existing network access, there may be other benefits in relation to fuel supply or transport, cooling water facilities, skilled local workforce etc.

We submit that providing for trade in network access would best allow these commercial issues to be balanced without an intrusion from a "central planning" model. Any "central planning" model would be unable to determine a market value for the existing access, and would provide only a more or less arbitrary charge based on historical costs.

This proposal is logically linked to our proposal for protection of agreed access, because without such protection there would be nothing durable to trade.

The negotiation of the terms of such a trade would provide an alternative locational signal that could then be compared to the costs of alternative entry at other locations.

The ability to trade a quantity of access that is suitable to a prospective buyer is dependent on having arrangements for partial access, such as those described above.

3.5 Congestion management

We propose the implementation of a congestion management regime, of the type that we have earlier described to the Commission and which formed the basis for the SACP proposal in the first interim report.

We will not repeat here the details of that proposal, but will briefly summarise the reasons for its inclusion in our package, covering the circumstances that support its inclusion and the expected outcomes from it.

The capability of the transmission network, particularly in the Australian context, is subject to frequent and sometimes large changes. Partly as a result of this, augmenting the network to reduce the incidence of congestion is subject to diminishing returns, and hence it is not regarded as practicable to reduce network congestion to negligible levels.

In addition, because of its geographical extent, the network is subject to a variety of environmental risks which can cause major disruption. These risks include bush fires, severe storms, floods, earthquakes, landslides, among others. Hence the possibility of large scale congestion with little warning is always present.

Under the current arrangements, when congestion occurs, participants behind the constraint are frequently incentivised to make offers at the lowest price allowed ($-1000/MWh). This results in inefficient dispatch of those generators subject to the congestion, and leads to market behaviours and market outcomes which are difficult to explain or justify to those unfamiliar with the current dispatch arrangements.

The incentive for this action (pejoratively dubbed as "'disorderly bidding'") can be eliminated by changes to the market settlement process to provide effective price signals to alter behaviours. These need to retain substantial settlement quantity at the Regional Reference Price, in order to support hedging contracts, while at the same time giving incentives at the margin for generation variations which reflect the local price determined by the dispatch process.

This could, at least in theory, be done on local and time-limited way to deal with substantial congestion as it arises. However, application in this form would be expensive, and given the great unpredictability of congestion would generally be lagging (I.E. "behind the action").

The alternative which we have proposed is to institute a standard process which is triggered by the actual incidence of congestion and hence provides a proportionate and timely response as circumstances change.

This proposal has previously been described to the Commission and here we will only briefly describe its effects:

- It eliminates the incentive for 'disorderly bidding';
- As a consequence it allows improved dispatch efficiency in the event of congestion, with the benefits shared between the affected generators;
- By eliminating 'disorderly bidding' it allows the dispatch process to schedule counter-price interconnector flows if and only if these are economic;
- In the event of economic counter-price interconnector flows, the changed settlement process leads to a positive settlement residue for the interconnector;
- This positive settlement residue eliminates the need for the market operator to limit economic counter-price flows; and
- The positive settlement residue arising from a counter-price flow enhances the value of settlement residue auction units in the management of inter-regional basis risk.

This proposal is complementary to other parts of our proposed package in relation to time scale. This congestion management regime has its effects in the operational time frame when the change in incentives to discourage 'disorderly bidding' must apply. On the other hand our proposals on protection of access, locational signals and choice of level of access all have their effect at the time that a locational decision needs to be made.

The congestion management proposal also contemplates another aspect of our package, to be described below, intended to increase the certainty of interconnector capability. One seeks to increase the certainty of interconnector physical capability, while another, namely congestion management seeks, inter alia, to increase the inter-regional risk management support that derives from a given physical capability.

A further complementarity exists in that our proposals in relation to generator access are designed to allow choice by generators of their level of access. It is not possible to say in advance whether this exercise of choice, if implemented, would result in more or less congestion. In this context, the implementation of congestion management in advance, to deal with whatever level of congestion does emerge should be seen as a prudent and low-cost precaution.

Congestion management would provide various efficiency improvements in the operational time frame, complementing the larger-scale measures that form the remainder of the package.

3.6 Interconnector planning to maintain a sufficiently integrated NEM

IPRA proposes that there should be a change in the network planning arrangements with the intention that sufficient interconnection capacity should be maintained to ensure that the National Electricity Market functions broadly as described, rather than as a series of separate markets.

We note that in the context of a Rule change proposal on potential generator market power the Commission has contemplated the possibility of classifying a market region as a separate market for the purpose of assessing market power issues. That this outcome is seen as a serious possibility causes us concern, as it suggests to us that interconnector performance may have fallen below some critical level that enables what can be described as a “National” market, rather than a series of loosely interconnected markets.

Further, we have provided the Commission with evidence that in particular instances the average capability of interconnection has declined over time, and separately that interconnection capability has exhibited extreme short-term volatility. These outcomes raise concern in relation to whether interconnector capability has been sacrificed as a solution to local transmission issues, or at least reflects the pre-eminence of intra-regional investment mechanisms in the NEM over inter-regional investment mechanisms.

We note that there appears to be no defined responsibility for interconnector capacity or reliability under the current frameworks.

This proposal is less defined than other component of our package because we recognise that there are likely to be alternative methods which would achieve our aim, and we can at present see no convincing reason to prefer one over another. Furthermore the method adopted should be matched to whatever transmission planning regime is recommended by this review.

Accordingly we will confine our recommendation to broad aims. These are:

- There should be a single body responsible for determining for every regulated interconnector, the necessary capacity and reliability for delivery of that capacity for each flow direction and each year, for a substantial planning period (say 5 years);
- The bodies responsible for transmission planning locally should be obliged to determine and implement the most economic means to deliver that performance; and
- In the same way as new connection should not be permitted to undermine the level of access available to other participants, so new connections or network augmentations should not be permitted to reduce interconnection capability.

The last of these aims is consistent with our reasoning in above. Investment certainty for participants is not restricted to certainty that access to the regional reference node is maintained. Locational decisions also involve consideration of the dynamics and potential of the market as it operates in adjacent regions, and the likely risks arising from changes (positive or negative) in the capability of interconnection to support access to and from these regions.

In proposing this change we are not seeking to make the case that adequate interconnector capability cannot be delivered by the current framework. Rather we are suggesting that the current framework gives insufficient assurance that adequate interconnector performance will be provided and that greater assurance would be consistent with the NEO.

The assurance of interconnector capability is likely to become more important over time, as the distribution of low CO_2 emitting energy resources may lead to increasing departures from the approximate regional supply-demand balance that applied early in the market. In these circumstances the assurance of future interconnector capability would be increasingly important in generation investment decisions.

4 Alignment of proposal with desirable features for Transmission framework

IPRA has noted earlier in this submission our support for the list of features proposed in the first interim report. We have also proposed an additional feature to further enhance the contribution of the transmission frameworks to the National Electricity Objective. In this section we will examine the alignment between our proposal as described above, and this set of desirable features.

4.1 TNSP incentives for investment and operation

Our proposal provides for efficient investment in networks and allows enhanced incentives for efficient operation.

In relation to network investment to support generator access, the proposal ensures that a connecting generator faces both the costs and the benefits of any network investment to support their access. The generator is enabled to commit to such costs because the agreed access will be protected. The choice of level of access allows the generator to gain the network access that suits its individual needs. We contend that individual choices driven by commercial disciplines (resulting in reciprocal rights) will lead to more economic outcomes than any “central planning” model can achieve.

In relation to network investment to support interconnector flows, our proposal provides greater efficiency by separating the decision on the level of interconnection needed from the optimisation of the cost of providing that level. TNSPs are not well placed to evaluate competition benefits from increased interconnector capability. Furthermore, a TNSP seeking to increase interconnector capability by changes within its network may be frustrated by the absence of complementary changes in the neighbouring network. Hence we contend that NEM-wide analysis should be the basis for decisions on interconnector capability.

In relation to efficient operation of the network, we note that currently the efforts by AER to incentivise efficient network operation are limited in their effectiveness because 'disorderly bidding' obscures the cost of network congestion. The congestion management component of our integrated package will eliminate the incentive for 'disorderly bidding', and hence enable a more effective incentive arrangement to be developed and implemented.

4.2 Generator incentives

The incentives for efficient investment in new generation plant are improved by several of the components of our integrated package. These are:

- Protection of agreed access;
- Locational signals through charging deep connection costs for new entrant generators;
- Choice of level of access; and
- Ability to trade access.

These allow the generator to make the appropriate trade-offs, from their perspective, between the locational costs associated with the transmission network and the various other costs that are affected by a locational decision.

In relation to generators offering energy at an efficient price, we note that the congestion management component of our integrated package will eliminate the incentives for 'disorderly bidding', which is now the major component of inefficient pricing.

4.3 Coordination between transmission and generation

IPRA agrees that the policies, incentives and signals that govern transmission and generation decisions should be coordinated to promote consistent decision making. Our proposal supports such coordination in the following ways:

- The protection of agreed access gives generators sufficient basis to commit to pay for access where this forms part of their optimal locational choice;
- The right for a TNSP to charge for deep connection costs gives them a firm basis for investment in any augmentation needed to provide a chosen level of access;
- The choice of a level of access allows a coordinated approach to the planning of generation and any network augmentation needed to provide that level of access; and
- Our proposal for interconnector capacity planning allows the required network service to ensure adequate inter-regional competition to be determined independently,

while maintaining the responsibility of the TNSP to serve this requirement in the most economical way.

4.4 Safety, reliability and security of system maintained

Our proposal is fully consistent with the maintenance of the safety, reliability and security of the transmission system at current levels, or better.

We note that under the existing arrangements when congestion occurs there have at times been efforts to maintain production levels, other than 'disorderly bidding', which have compromised system security. We expect that the implementation of the congestion management component of our package will substantially reduce the pressure to take such action, and hence will support security outcomes which are at time better than under the current arrangements.

4.5 Existing generators not disadvantaged

This additional feature, proposed by us, has been a guiding principle in the design of our package, and is a significant difference separating our proposal from the options considered in the first interim report.

The reasons for adopting this feature are outlined earlier in this submission.

The elements of our package that support this feature are as follows:

- Existing generators are required to make only those payments for transmission services that they anticipated at the time of either connection or market start; and
- Existing generators are not treated as having lesser access rights than generators that subsequently enter the market.

5 Glossary

Abbreviation	Description
AEMO	Australian Energy Market Operator
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
CPI	Consumer Price Index
CPT	Cumulative Price Threshold
ETS	Emission Trading Scheme
EOM	Energy Only Market
FIT	Feed In Tariff
MPC	Market Price Cap
LRMC	Long Run Marginal Cost
O&M	Operation and Maintenance
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Regulation
NSP	Network Service Provider
RET	Renewable Energy Target

SACP	Shared Access Congestion Pricing
VEET	Victorian Energy Efficiency target