NATIONAL GENERATORS FORUM

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Chairman
Australian Energy Market Commission
PO Box H166
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Dear Dr Tamblyn

Proposal for Rule on Transmission Entry and Exit Charges: Addendum

We understand that there is a requirement for the rule change proposal which we submitted on 21 December to meet the new requirements for a rule change which came into effect on 1 January 2008.

We have reviewed these new requirements and have addressed them as follows. Firstly, please find attached an Addendum which covers the issue of the costs and benefits of the proposed rule change in more detail. Secondly, we have made minor editorial changes in the attached proposal which changes references to the NEM Objective to the National Electricity Objective.

We trust that this now brings our proposal into line with the new requirements. If you have any queries on this proposal, please contact David Bowker on 03-62305775.

Yours sincerely

JBoshier

John Boshier
Executive Director

Proposal for Rule on Transmission Entry and Exit Charges

1. Request for a Rule change

The National Generators Forum requests the AEMC to make a Rule under Part 7 of the National Electricity Law (NEL). This Rule change aims to address an area in the National Electricity Rules (the Rules) that leads to the shifting of costs from historically shared transmission services, to entry or exit services as a result of a re-allocation of costs or a network reconfiguration undertaken for the benefit of network users generally. The proposed Rule change will increase efficiency in the National Electricity Market (NEM) by removing the price shocks from the shifting of costs and by increasing regulatory certainty.

The Rule would change the National Electricity Rules (Rules) to establish that:

- Only entry or exit services provided by a 'grandfathered' asset as at 16 November 2006 are to be treated as prescribed entry or exit services. Entry or exit services that are provided by all other assets (including network assets that are reconfigured so as to provide connection services after that date) will therefore be classified as negotiated transmission services;
- The costs which are allocated to the provision of prescribed entry or exit services are limited to the costs of assets that, as at 16 November 2006, were fully dedicated to the provision, at the relevant connection point, of connection services;
- Any costs that would have been allocated to prescribed entry or exit services but for the limit referred to above must be allocated first to prescribed TUOS services and then to prescribed common transmission services, to ensure no revenue shortfall;
- Assets that previously provided prescribed transmission services but which, as a result of a reconfiguration, now provide connection services, cannot be removed from the Regulated Asset Base (RAB) unless the affected Transmission Network User(s) have requested or consented to the reconfiguration or have consented to the removal of those assets from the RAB (consent should not be unreasonably withheld); and
- The Transmission Ring-Fencing guidelines do not affect the allocation of costs to transmission services.

2. Person requesting the Rule

The National Generators Forum (NGF) requests the making of this Rule.

The address of the NGF is: Level 6, 60 Marcus Clarke St, GPO Box 1301, Canberra ACT 2601.

From this point onwards reference will only be made to generators or entry services. However, these references can equally be taken to apply to entry and exit services, and the Rule change treats these services in a consistent manner.

3. Background – chapter 6A review and related issues

In late 2006, the AEMC published the final version of new Chapter 6A and related amendments to the Rules dealing with the economic regulation of transmission services. The publication of Rule numbers 18 and 22 of 2006 (2006 Economic Regulation Rules) concluded the review process commenced by the AEMC in July 2005 pursuant to its obligations under Section 35 of the NEL.

Chapter 6A establishes the process that a Transmission Network Service Provider (TNSP) must follow when determining the prices for prescribed transmission services and negotiated transmission services. The price determination process for each of these categories of transmission services is different. Under the revised definitions introduced by the 2006 Economic Regulation Rules, entry services should generally be characterised as negotiated transmission services.

Chapter 11 sets out the transitional Rules for Chapter 6A. Clause 11.6.11 is most relevant to whether a generator will be considered as using prescribed or negotiated transmission services. It states that services that would otherwise be negotiated transmission services (as a result of the 2006 Economic Regulation Rules), will instead be prescribed transmission services if:

- The asset that provides the service is in use or committed for construction as at 9 February 2006;
- The value of the asset is included in the Regulated Asset Base (RAB) under a revenue determination in force as at that time; and
- The price for the service has not been negotiated under a negotiating framework which applied prior to Chapter 6A coming into operation.

The Cost Allocation Principles in Chapter 6A prevent costs which have been allocated to prescribed transmission services from being reallocated to negotiated transmission services. Within prescribed transmission services, costs are allocated to each category of prescribed transmission service in accordance with the attributable cost share.

Chapter 6A also establishes a process for the removal of the value of an asset from the RAB. The Australian Energy Regulator (AER) may elect to remove the value of an asset or group of assets from the RAB for the purposes of rolling forward the RAB from one regulatory control period to the next, but only if a number of conditions are satisfied:

- The asset is dedicated to one Transmission Network User (or a small group of such users);
- The value of the asset as included in the RAB is more than $10 million (indexed);
- The asset is no longer contributing to the provision of prescribed transmission services; and
- The TNSP has not sought to adequately manage the risk of the asset no longer contributing to the provision of prescribed transmission services.

The 2006 Economic Regulation Rules encompassed changes to many aspects of the Rules. Whilst the outcome promoted the NEO in the main, our proposed Rule aims to amend aspects of the Rules that have potential outcomes which we believe were unintended, and which would be contrary to the NEO (see below).

Indeed, the issue of reconfiguration was not dealt with by the original version of the Rules since it was likely to have been assumed that the network would continue to expand. The network in many places is now an aging one and hence issues of reconfiguration are likely to increase in frequency. It has therefore risen to the fore and requires addressing. Typically such projects are driven by the need to maintain customer reliability, and are therefore undertaken for the benefit of the shared network.

During the consultation process on the 2006 Economic Regulation Rules, several parties raised issues on cost allocation in submissions on the AEMC's draft determination. However, between the draft determination and the final determination, the AEMC moved away from a causation-based cost allocation approach which was seen to be problematic, stating:

> "The Commission considers that the clearer articulation of the application of the cost allocation approach should address the concerns of Flinders Power and Hydro Tasmania regarding cost allocation and price shock respectively. In particular, this is because the Final Pricing Rule is clear that costs can be allocated and reallocated on

> the basis of how they are used rather than making an initial assessment of what may have 'caused' the assets to exist"[1].

In addition, the AEMC, in its Rule determination on a Stanwell raised Rule proposal[2], responded to a submission from Flinders Power acknowledging certain outstanding issues, which are now addressed in this current Rule proposal:

> "The Commission received a late submission from Flinders Power in response to the draft Rule. The submission raises the issue of the possible reallocation of shared system costs to connection costs as a result of reconfiguration projects and the risk that this could lead to unwarranted increases in prescribed transmission entry charges for connected generators. The Commission notes the issue raised by Flinders Power regarding the reclassification of connection assets, and appreciates the circumstances surrounding the late submission. However, the Commission is of the view that it is not appropriate to address the issues raised by Flinders Power in the context of the Stanwell Rule proposal."[2]

While the AEMC acknowledges these issues, they were felt to fall outside the specific scope of the Stanwell Rule proposal. The AEMC will now have the opportunity to address these unresolved issues during the process of assessing this Rule proposal. We believe that, to date, the issues regarding cost allocation and price shocks have not been fully addressed and so deserve further consideration and refinement in the context of this Rule proposal.

4. Description of the proposed Rule

Suggested drafting for the proposed amendments to the Rules is set out in Appendix 1. Appendix 2 explains the effect of the specific draft clauses. The proposed Rule has four main elements.

4.1. Clarification of grandfathered services

The proposed Rule clarifies the grandfathering provisions in clause 11.6.11, introduced as part of the 2006 Economic Regulation Rules. The proposed Rule will ensure that only those services which provided entry services before the 2006 Economic Regulation Rules came into operation (16 November 2006) are grandfathered as prescribed entry services. This is consistent with the intent of this provision and the underlying purpose of grandfathering, which is to ensure that matters treated in a particular way before a regulatory change continue to be treated in the same way after that change. The proposed Rule clarifies that it is the services provided by relevant assets at a point in time that are grandfathered, and not the services provided by those assets at any time. A subsequent change in the use of an asset (e.g. from network to dedicated connection as a consequence of a reconfiguration project undertaken to benefit network users) cannot result in new prescribed entry services being provided by that asset. Such services will instead be classified as negotiated transmission services.

4.2. Application of cost allocation provisions to grandfathered services

The proposed Rule specifically preserves the cost allocation methodology in respect of grandfathered entry services that applied immediately prior to the commencement of new Chapter 6A of the Rules. It does this by providing that costs which are directly attributable to or are incurred in the provision of entry services, and hence which are allocated to prescribed entry services, are limited to the costs of assets that were fully dedicated to the provision of those services as at 16 November 2006. This maintains the initial cost allocation position under the old Part C and schedule 6.2 of old Chapter 6 in that only fully dedicated assets

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[1] AEMC 2006, National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22, Rule Determination, 21 December 2006

[2] AEMC 2007, Transmission network replacement and reconfiguration, Rule Determination, 1 March 2007, Sydney (Page 27)

could be classified as entry assets for which the costs were recoverable through entry service charges. In this way, the proposed Rule will ensure that a generator's attributable cost share can not in future contain costs relating to assets that previously were considered to be providing prescribed TUOS services and hence were shared between Transmission Customers, as a consequence of developments on the network not triggered by the generator.

A consequential change is also proposed to ensure that the TNSP is still able to recover its full aggregate annual revenue requirement (AARR) from transmission users, ensuring no revenue shortfall. Any portion of the AARR that would have been allocated to entry services but for the limit described above will remain allocated first to prescribed TUOS services (up to the stand-alone amount) and second to prescribed common transmission services.

In terms of cost allocation to generators, this Rule will maintain the market position prior to the introduction of the 2006 Economic Regulation Rules, while preserving the operation of the new priority ordering approach. This will improve certainty.

4.3. Prevent removal of assets from RAB due to reconfiguration

The proposed Rule ensures that an asset cannot be removed from the RAB as a result of a reconfiguration of the transmission system if the relevant Transmission Network User or group of users:

- Has not requested or consented in writing to the reconfiguration; and
- Has not unreasonably refused or failed to consent to the removal of the asset from the RAB within a reasonable time after receiving a written request for such consent from the relevant TNSP (in this situation, such a refusal or failure is deemed not to be unreasonable if that removal, and the consequent application of the TNSP's Negotiated Transmission Service Criteria, is likely to result in an increase in the charges paid by a user of more than 5%.

Thus, if an asset which was characterised as providing prescribed TUOS services is reconfigured so that it subsequently provides only entry services, it cannot (as a result of that reconfiguration) be removed from the RAB (and hence be re-characterised as providing negotiated entry services) unless the above conditions have been satisfied. Clearly, in the case where such a project was triggered at the request of the generator, these conditions would be satisfied.

Of course both the AER and the TNSP do not analyse from first principles the make-up of the RAB for each new regulatory determination. Rather clause S6A.2.3 is aimed at providing clear rules regarding the treatment of those assets whose purpose has considerably changed for whatever reason. Consistency between regulatory determinations is important for certainty and continuity of operation of the market particularly as matters such as cost allocation have ongoing effects – what occurs in one regulatory period will affect that which takes place in the next.

4.4. Application of Transmission Ring-Fencing Guidelines to cost allocation

As an incidental matter, the proposed Rule also amends certain provisions of rules 6A.19 and 6A.21, in order to remove the potential for the Transmission Ring-Fencing Guidelines to deal with the allocation of costs as between transmission services (as opposed to the allocation of costs as between transmission and other services). The allocation of costs as between the different categories of transmission services (including prescribed and negotiated transmission services) should only be in accordance with the requirements of the Cost Allocation Principles.

5. Issues relating to existing Rules

The NGF recognises and commends the principles adopted by the AEMC which underlie both the mechanism of direct attribution and the priority ordering within the cost allocation process. The proposals outlined above preserve the intent of these arrangements, while addressing some apparent anomalies that have emerged in the practical operation of the Rules in some limited situations. This Rule change does not seek wholesale change to the fundamental framework under the Rules relating to generators and entry services. For example, no changes are proposed to areas that deal with or impact the following:

- Network access - the level of physical or financial access of generators to the network is not impacted by the cost allocation issues addressed in this proposal;
- Compensation for loss of connection - the AEMC did not accept this in the Stanwell Rule change and this proposal does not revisit this issue;
- Regulatory Test – this is the subject of the AEMC's review of the National Transmission Planner;
- Complexity associated with historic 'causation' approach – the AEMC dismissed this approach due to practical issues, and this Rule change does not revisit this issue;
- Generator driven projects – all new or expanded connections requested by generators remain treated and funded as negotiable services, given such projects are triggered by the generator;
- Cost sharing – both negotiated connection services and prescribed connection services contain scope for connection charges to be reallocated in the event that another party subsequently utilises those assets on an attribution basis, under clauses 6A.19.2(8) and 6A.19.2(3) respectively. The current Rules therefore treat all generators consistently in this respect, and allocates costs to the benefiting parties. This proposal does not alter these arrangements.

Rather, this proposal only concerns the efficiency of allocation of connection costs and the efficiency of the treatment of un-requested reconfigurations, which are undertaken for the benefit of network users generally.

5.1. Application of grandfathering provisions

The services to which clause 11.6.11 applies are currently open to interpretation, particularly in the situation where the use of a particular asset changes over time, for example as a result of a network reconfiguration driven by customer reliability requirements. This is a threshold issue, which must be resolved before cost allocation issues can be addressed.

It is essential that connection services can be classified on a clear and unambiguous basis - either as prescribed transmission services because of clause 11.6.11 or as negotiated transmission services. This classification will determine the principles that apply for the purposes of allocating costs to that service.

The current lack of clarity in clause 11.6.11 can be shown by the example of an historically shared network asset which, following a reconfiguration undertaken for the benefit of the shared network, now provides dedicated connection services (as illustrated in diagram 2 below). There are two possible interpretations of clause 11.6.11 in this situation:

- Connection services provided by that asset at any point in time are grandfathered, so that if the nature of the services provided by that asset subsequently changes from shared network to dedicated entry services, those entry services will be prescribed transmission services; or
- The clause only grandfathers the services being provided by that asset at a particular point in time. In a situation where the reconfigured asset provides a different service, that "new" service is therefore not grandfathered and, being a connection service, is therefore classified as a negotiated transmission service.

The NGF considers that the second interpretation is correct, since it is consistent with the apparent intent of clause 11.6.11 and with the underlying purpose of grandfathering, which is to ensure that matters treated in a particular way before a regulatory change continue to be treated in the same way after that change. Under this interpretation, a subsequent change in the use of an asset cannot result in new prescribed entry or exit services being provided by that asset. "New" services will be negotiated transmission services and so cannot be the subject of a reallocation of costs which have previously been allocated to prescribed shared transmission services. The possibility of alternative interpretations introduces unnecessary ambiguity and uncertainty as to the application of clause 11.6.11, and consequently as to the treatment of connection services in terms of cost allocation. The following discussion of cost allocation issues assumes that clause 11.6.11 has been clarified to reflect the preferred (second) interpretation.

5.2. Cost Allocation

Allocation of costs is not an exact science but rather involves judgment on a myriad of factors and drivers. Whilst there is no single correct approach, the most efficient process of cost allocation is to allocate transmission costs in a manner that:

- Is based on appropriate cost drivers;
- Is just and reasonable;
- Encourages both increased transmission investment and clear and efficient pricing; and
- Avoids inappropriate and unpredictable cost shifts.

A change to the allocation mechanism that leads to a large and unexpected cost transfer between parties is an unreasonable outcome. Further, the transfer of costs to the more competitive generation market has the potential to detrimentally affect price and market signals.[3]

The two main issues relating to the cost allocation process in the current Rules are:

1. Existing connection services may be subject to inefficient cost reallocation from historically shared assets;
2. There is a lack of consistency, in terms of cost allocation, between new and existing connection services. That is, new or reconfigured connection services cannot be liable for costs from historically shared assets whereas existing connection services can.

5.2.1. Existing Connection services may be subject to inefficient cost reallocation from historically shared assets

The current Cost Allocation Principles prevent historically shared costs associated with prescribed transmission services from being reallocated to negotiated transmission services, where negotiated transmission services are defined to include generator entry services. The aim of this is to prevent inefficient cost shifting from historically shared assets to dedicated new generator connection assets. This principle was adopted by the AEMC following the transmission pricing and revenue review and is supported by the NGF.

However, costs from historically shared assets can be shifted to generator connection assets that existed prior to 9 February 2006, as they sit within the RAB and are therefore grandfathered as prescribed transmission services as described above. A TNSP's costs are now allocated to each category of prescribed transmission service in accordance with the attributable cost share over time, meaning that within the category of prescribed transmission services, costs from historically shared assets can be reallocated to grandfathered connection services. Entry / connection services therefore continue to attract costs that were associated

[3] These issues are explored further in the section relating to the facilitation of the NEM Objective.

with fully dedicated entry assets but can now also attract some cost from historically shared assets.
Hence, under the new cost allocation rules, some generators face the threat of increases in connection / entry charges due to changes in the shared network beyond their control, whereas other generators are protected from this risk. The size of the increases facing generators will vary but are likely to be material. There are two main outcomes from this:

a) Generators will face price shocks even though there is no efficiency gain from imposing increased costs and pricing signals to these “sunk” investments:

   The generator’s placement decision has been made and hence there is no efficiency gain from imposing increased costs and pricing signals to these “sunk” investments. The additional costs that generators will be liable for will not provide any locational incentive to the generators, whose assets are established and hence whose costs are sunk.

b) The market setting will be one of regulatory uncertainty:

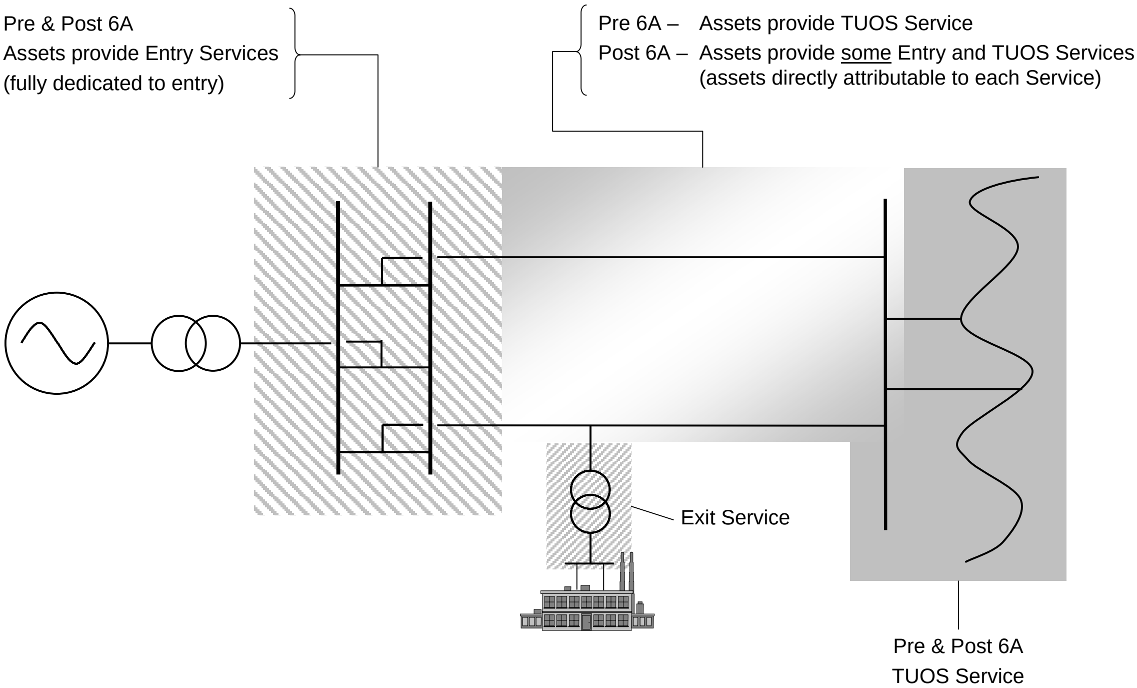
   As the network evolves and develops over time, network reconfiguration can lead to the creation of radial elements which could be treated in the future as connection assets. This leads to uncertainty because it could give rise to a material increase in generator connection charges. This uncertainty is factored in to market investment decisions by the addition of an added element of risk such that investors require higher returns. The additional costs resulting from this can increase the barriers to entry and will also have a detrimental impact on productive efficiency. Furthermore, due to the additional uncertainty for generators relating to network reconfiguration – a risk not faced by other market participants - the productive efficiency of the generation sector of the market is more affected. This additional risk does not appear to be applying any useful economic incentive, as it is not a risk that generators are in any position to manage or mitigate. This unnecessary uncertainty therefore gives rise to a loss of market efficiency.

5.2.2. There is a lack of consistency, in terms of cost allocation, between new and existing connection services.

Consistency of treatment of market participants produces a simple, easily understood market environment. Historically generators faced a decision to either negotiate their charges or accept the regulated charges. Many generators *chose* the latter - accepting the regulated charges. However this choice has now led directly to the entry assets that service those generators being grandfathered as assets providing prescribed services and hence being liable to the reallocation of costs from other prescribed services. Existing generators are therefore facing locational pricing signals which they do not have the ability to respond to, as a consequence of a decision made in different regulatory circumstances. This situation is inequitable and engenders a degree of regulatory uncertainty – harmful for any market as described above.

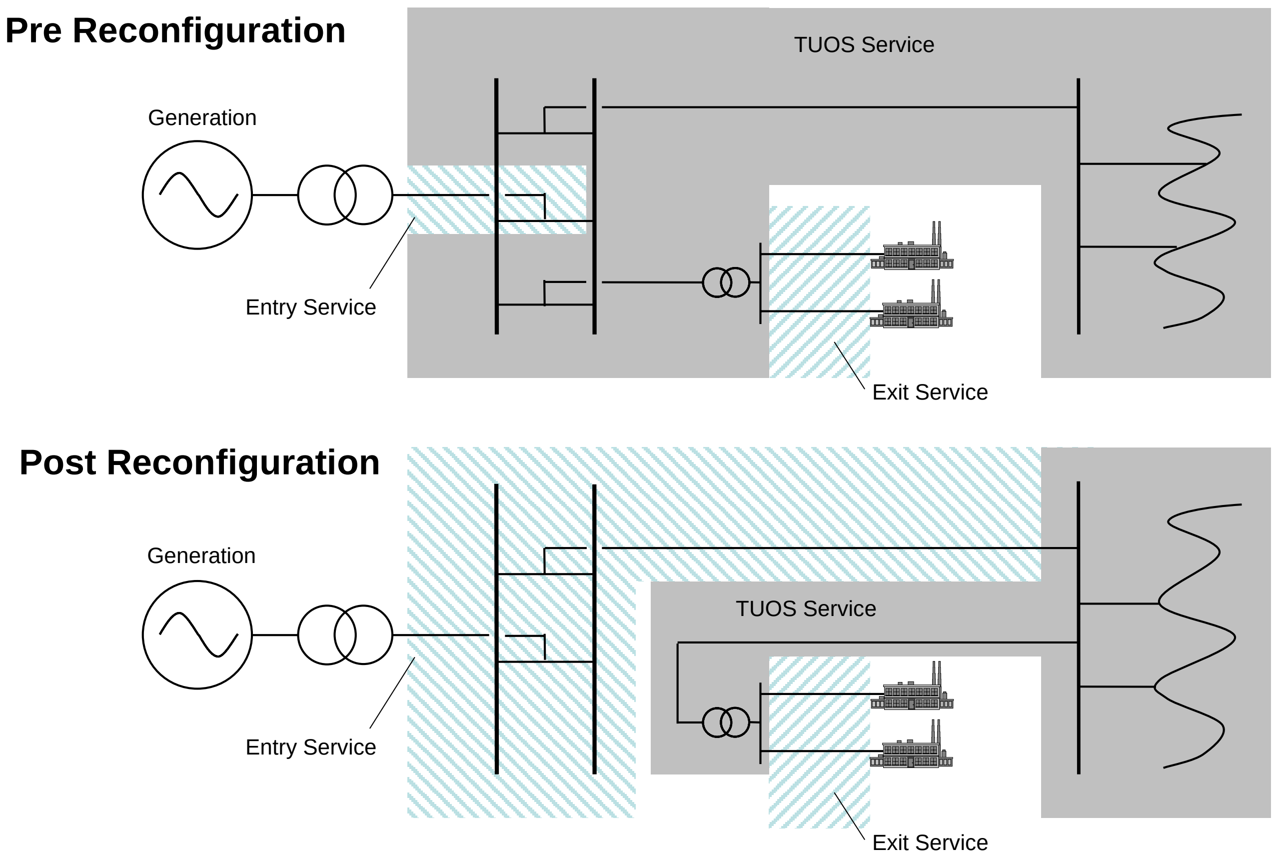
The diagrams below depict the different situations that can lead to inefficient outcomes according to the current Rules.

Diagram 1: The cost allocation rules for a generator whose network environment remains unchanged, pre and post implementation of Chapter 6A.



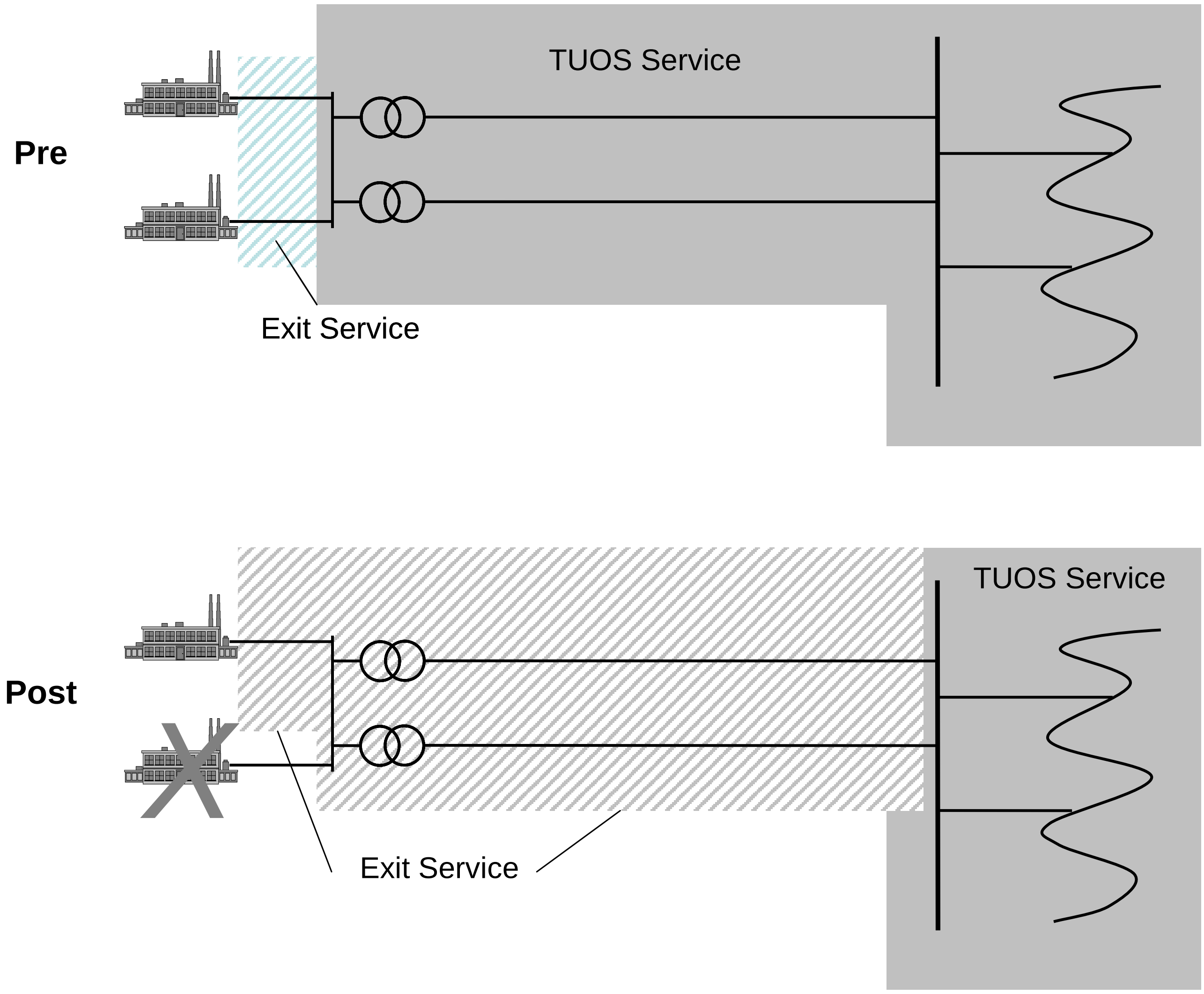
This diagram shows the assets characterised as providing entry services before Chapter 6A was implemented. The same diagram also demonstrates the additional assets characterised as providing entry services post Chapter 6A implementation. As can be seen the generator does not receive any change in service in the two scenarios, nor has there been any change in the physical network environment and yet a substantial increase in the level of deemed entry services can result.

Diagram 2: The cost allocation rules for a generator whose network has undergone reconfiguration



This diagram shows the impact of a network reconfiguration undertaken for the benefit of the shared network (which is in most cases due to reliability requirements) on a generator. Prior to the reconfiguration, only a small set of assets are characterised as providing entry services. After the reconfiguration, since the load has been shifted to a different substation, a very large set of assets are characterised as providing entry services.

Diagram 3: The cost allocation rules for an offtaker or exit service user whose network environment has changed



This diagram shows what could occur when two large consumers are charged for minimal exit services and one of these consumers shuts down or leaves. The remaining consumer is charged for an extended exit service as a result of this event which was beyond its control.

5.3. Removal of Assets from the RAB

The Cost Allocation Principles in the Rules prevent the reallocation of costs from prescribed to negotiated transmission services. The NGF supports this principle. However, it is still possible for such a reallocation to occur under the current Rules if assets are removed from the RAB by the AER on a regulatory reset, following a unilateral reconfiguration of the transmission system by the TNSP. This result would be inconsistent with the principles adopted by the AEMC in formulating the 2006 Economic Regulation Rules. The issue of reconfiguration of assets is a fairly recent one and is likely to be on the increase due to the aging nature of much of the network. The potential unintended operation and effects of clause S6A.2.3 of the Rules is described below.

A network user can be affected by a reconfiguration of the transmission system without having requested or otherwise given consent to the change. The service provided to the user may not change. Indeed, in the case of a generator, the reconfiguration may result in reduced service. However, if an asset that previously provided shared transmission services becomes a dedicated connection asset, the AER would have the discretion under clause S6A.2.3 to remove the value of that asset from the RAB (provided all other conditions for removal are also met). Once the asset value is removed from the RAB, the service provided by that asset would only be characterised as a negotiated service, leaving the network user liable to the full cost of the asset. This outcome appears contrary to the Cost Allocation Principles in the Rules.

Two main adverse effects result from this issue:

1. The investment decision of a generator is uncertain due to the potential for reconfiguration and subsequent removal of assets from the RAB; and
2. The shift of cost as a result of the reconfiguration does not align with the associated shift of benefit.

5.3.1. The investment decision of a generator is uncertain due to the potential of reconfiguration and subsequent removal of assets from the RAB.

Consistent with the sunk investment argument discussed above in section 5.2.1, this poses a serious disparity with economic incentives. A generator's locational decision and the corresponding network configuration and user location is taken at a fixed point in time. Subsequent changes to the network environment change the price signals that the generator's sunk investment receives. However, these cannot influence generator placement and hence cannot provide an increase in efficiency. On the contrary, the possibility of such changes increases the level of risk in the generation sector of the market and hence can provide an increased barrier to entry to the market and a decrease in the productive and allocative efficiency of the market. Greater connection cost certainty and stability would remove this unnecessary risk.

5.3.2. The shift of cost as a result of the reconfiguration does not align with the associated shift of benefit.

Reconfiguration of the network is undertaken by the TNSP to improve network performance and network conditions for the ultimate benefit of transmission system users and electricity end use customers. All network users share in this benefit, however a reconfiguration can result in large additional costs for connected parties. The generation sector of the market potentially bears a large portion of the cost and gains little of the benefit. The misalignment of the cost and benefit of a change is itself a cost to the market. Systematic misalignments can lead to deadweight losses. A distortion occurs if generators adjust their behaviour to increase prices to recover the risk associated with a potential network reconfiguration, rather than setting the price at the current cost of providing the service absent this risk. This will lead to a loss of productive and dynamic efficiency as prices will be inflated above the efficient equilibrium point.

5.4. Overlap of Cost Allocation Principles and Transmission Ring-Fencing Guidelines

In the course of reviewing the operation of the cost allocation principles, the NGF has noted that one of the Cost Allocation Principles (in clause 6A.19.2(6)) indicates that the method of cost allocation for transmission services should be consistent with Transmission Ring-Fencing Guidelines issued by the AER. Similarly, the drafting of rule 6A.21 does not clearly distinguish the functions of those Guidelines from the functions of the Cost Allocation Principles. Cost allocation between transmission services should be the exclusive province of the Rules through the Cost Allocation Principles rather than being dealt with in the Transmission Ring-Fencing Guidelines.

6. How the proposed Rule would address the issues

The proposed Rule would have the effect of providing that:

- The grandfathering provisions apply to services provided as at 16 November 2006 (date of the grandfathering clause) by relevant assets (not to services that may subsequently be provided by those assets themselves). As a result, where an asset that provided network services as at 16 November 2006 is subsequently reconfigured so that it provides entry services, those services will be negotiated transmission services. As such the TNSP could not reallocate prescribed transmission service costs to these negotiated entry services and so the relevant generator will not be subject to a price shock;
- Any other entry services are therefore negotiated;
- The initial cost allocation position for prescribed entry services as applied under the cost allocation rules pre Chapter 6A is carried forward into the new charging framework, while leaving unaltered the intent of the new cost allocation arrangements. Hence the costs allocated to prescribed entry services remain consistent and stable over time, thereby avoiding any unforseen price shocks;
- Costs that might remain after the cost allocation process (direct attribution and costs incurred) as a consequence of the limit on costs which may be allocated to prescribed entry services, are allocated to prescribed TUOS services and prescribed common transmission services, ensuring no revenue shortfall occurs;
- The AER may not remove an asset from the RAB without the (unanimous) consent of the relevant Transmission Network User(s) where the discretion to remove arises because a reconfiguration of the transmission system that has resulted in the asset becoming dedicated to (for example) a generator or group of generators, or ceasing to contribute to the provision of prescribed transmission services. This addresses the issue that a reconfiguration might result in an asset that has previously provided prescribed transmission services being re-categorised as an asset that provides negotiated transmission services and as such is subject to a different charging regime that might result in higher charges to the generator; and
- There will be no scope for the Transmission Ring-Fencing Guidelines to address the allocation of costs as between transmission services.

The proposed Rule successfully avoids exposing generators to excessive, unwarranted increases in connection charges from application of the current Rules, and the wider effects that such increases would have in the market:

- In so far as prescribed connection services are concerned, generators would only be charged costs associated with assets that were considered to be entry assets providing entry services as at 16 November 2006;

- All generators would be treated in an equitable manner in that historically shared costs could not be reassigned to them, and projects driven by customer reliability requirements would remain funded by network users generally;
- A barrier to market entry and the increased risk to those wanting to invest in the market would be removed since the regulatory uncertainty caused by this effect would have been removed; and
- This change would also ensure that the respective TNSPs would not have costs that cannot be allocated.

The amendment that prevents the removal of assets from the RAB in a reconfiguration situation without generator consent maintains certainty for generators in their investment decisions and hence increases productive and allocative efficiency. By contrast, increased uncertainty for generators adds a risk premium to their investment decisions and results in increased costs to generators. This leads to an increase in the price charged by generators and a subsequent decrease in production and correspondingly consumption. This decrease in efficiency is over and above that of a wealth transfer between parties. Additionally the proposed Rule ensures that the increased benefit received by transmission users as a result of a network reconfiguration undertaken to meet customer reliability requirements does not lead to the cost resting solely on the generator, a party who not only does not benefit from, but did not request, the reconfiguration.

Expedient implementation of the Rule change, prior to any application of the cost allocation and pricing principles to any individual TNSP's methodology under the new Chapter 6A, will therefore assist in the stable maintenance of this operating environment.

7. How the proposed Rule would contribute to the National Electricity Objective (NEO)

The Rule Making Test requires the AEMC to be satisfied that a Rule that it proposes to make will contribute to the NEO objective. The NEO is:

> *"The National Electricity Objective, as stated in the National Electricity Law is:*
>
> *to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to–*
>
> *a. price, quality, safety, reliability, and security of supply of electricity; and*
>
> *b. the reliability, safety and security of the national electricity system.."*

The potential increase in costs to a specific generator is likely to lead to a loss in economic efficiency. Specifically the Rules result in a reduction in productive efficiency and consequently lead to a loss in both the allocative and dynamic efficiencies in electricity related markets.
. As outlined, economic efficiency is commonly defined as having three elements[4]:

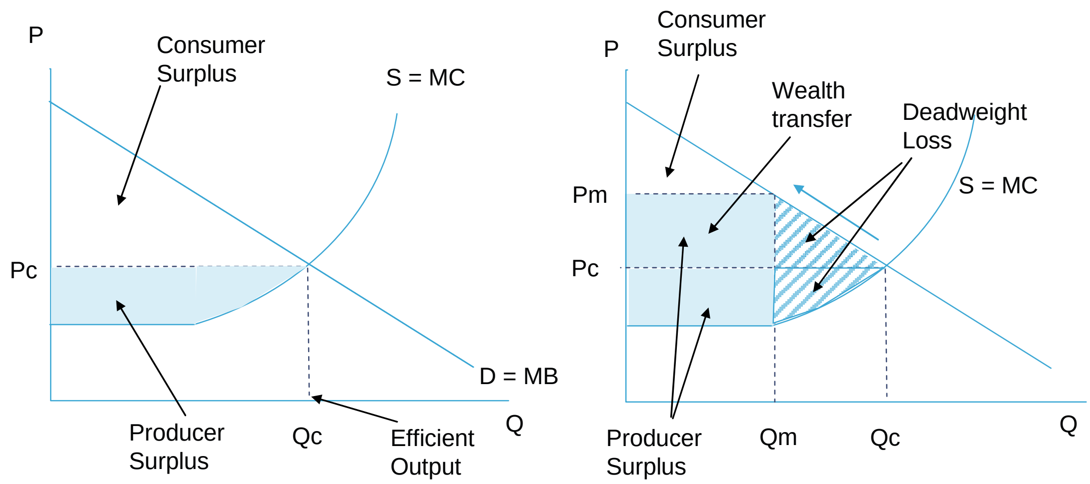
- Productive efficiency – meaning the electricity system is operated on a "least cost" basis given the existing and likely network and other infrastructure. For example, generators should be dispatched in a manner that minimises the total system costs of meeting consumers' demands;
- Allocative efficiency – meaning electricity production and consumption decisions are based on prices that reflect the opportunity cost of the available resources; and
- Dynamic efficiency – meaning maximising ongoing productive and allocative efficiency over time, and is commonly linked to the promotion of efficient longer term investment decisions.

[4] These definitions have been extracted from the AEMC's Congestion Management Review Draft Report (27 September 2007).

The reduction in efficiency extends beyond wealth transfers between participants in the energy market (i.e. producers and consumers). Essentially, the current Rules result in increased investment risk in the market, especially for generators, and so generators will produce electricity at a higher price. This ultimately leads to the marginal cost for each generator increasing and a corresponding contraction in the electricity supplied. This increase in the marginal price has the potential to introduce a new marginal generator which would decrease allocative efficiency by increasing the cost of resources which are needed to clear the energy market. The resulting increase in the price of electricity has important dynamic efficiency implications. Primarily this impact is as a result of the use of electricity in secondary markets as an input to production. The increase in the marginal costs in these markets, which are likely to have more elastic demand curves, will result in a decrease in consumer surplus and an increase in deadweight loss. This has further implications in the resources which are consequently unavailable for use as a result of the loss of allocative efficiency in the electricity market. This has flow on impacts in the economy as these losses are magnified by the fact that electricity is a ubiquitous cost in the production cycle.

This issue is most appropriately described conceptually by considering efficiency in the context of changes to consumer and producer surplus. The following two diagrams detail the shifts in consumer and producer surplus and changes in efficiency resulting from a change in producer behaviour resulting in an increase in price.

In the left hand diagram the market clearing price occurs at Pc and the quantity produced is Qc. The resulting consumer and producer surpluses are marked on the diagram. The right hand diagram outlines the impact of an increase in cost resulting from the price shock in the electricity market. This price shock results in price increasing from Pc to Pm and the quantity demanded contracting from Qc to Qm. This is a negative impact on the economy as there is less total surplus. That is, a consumer's response to a higher price is to demand less despite being willing to consumer more at the original price.



In this case an element of consumer surplus is transferred to producer surplus i.e. producers produce less than what would be required at the original equilibrium price. The higher price results in a reduction in the original consumer surplus. This is a wealth transfer between consumers and producers PLUS a deadweight loss which is lost to the market. Both the deadweight loss and the producer surplus accrued to consumer prior to the implementation of Chapter 6A.

The loss of surplus in all markets are as a direct result of the changes in the cost allocation methodology the NGF believes that this does not further the NEO and the proposed rule change would contribute to the NEO by:

- Reducing inefficiency,
- Reducing regulatory uncertainty; and

- Reducing inconsistency in the treatment of generators.

7.1. Reducing Inefficiency of Price Signals to Sunk Investments

Providing new price signals to existing generators cannot have any locational signalling function and hence cannot influence the future behaviour of the generator since the costs have already been incurred. In order to enhance both allocative and productive efficiency, sunk transmission costs should be recovered in a way that minimises impacts on production and consumption decisions. Recovery of such costs should occur as a fixed charge at a point where the elasticity of demand is lowest to avoid any potential dead weight loss in associated markets. Attribution of the sunk costs to generators would distort efficient energy production and dispatch whereas for consumers it is unlikely to impact consumption and utilisation of the network. The generator's costs would increase and hence price would increase, leading production to decrease. The increased cost will be paid ultimately by the consumer leading to higher input costs and a less efficient allocation of resources in secondary markets leading to a decrease in dynamic efficiency. Furthermore, the AEMC indicated in its Rule proposal report (February 2006):

> "The Commission recognises that assets that were once used as part of the shared network may over time become dedicated to one user, as demand patterns change. However, given that the user's locational decision has already been made, there is nothing to be gained by providing a price signal to that user via a negotiated charge, and requiring that user to pay for the entire cost of the asset, when it had not previously been doing so, would increase investment risk for the user.[5]"

The current pricing rules are inconsistent with this objective in that existing generators are potentially exposed to new locational pricing signals to which they are unable to respond since their investment is sunk.

7.2. Reducing Regulatory Uncertainty

Price shocks resulting from a regulatory Rule review promote regulatory uncertainty and as such are contrary to market interests. Regulatory uncertainty will not only affect specific generators or existing participants but will affect all market sectors – restricting new investment and acting as a barrier to entry for new market participants. Regulatory uncertainty results in increased costs in the market, since a higher rate of return for investments is required to counter the additional risk. This can distort investment signals and could result in sub-optimal investment patterns.

Following the earlier discussion of sunk investments, the previous stranding of assets via regulatory changes may impact current investment decisions, particularly if costs are sunk and there is an expectation that there will be further changes. This results in consideration of the impact of investments made under uncertainty, which can increase the value of delaying investments. With respect to network revenue and pricing, the regulatory change (new Chapter 6A) has largely provided an improved set of arrangements. However,

- The cost allocation approach may result in potential price shocks for some exiting generators; and
- For assets facing a change in transmission charges due to a network reconfiguration -, the current regulatory arrangements can result in increasing network charges over time (and alter the cost structure of a business). These changes are driven by the investment activities undertaken TNSPs (based on regulatory obligations).

[5] Australian Energy Market Commission 2006, Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006, 6.21(a)(7).

The price of production will therefore increase considerably. This has an effect on the productive efficiency of market participants and the increased costs are ultimately paid for by the consumer. Furthermore, the AEMC in its Rule proposal report (February 2006), acted to reduce regulatory uncertainty by removing the opportunity for periodic optimisation of the RAB. This outcome is analogous to that put forward in this proposed Rule change. Locking in assets reduces regulatory uncertainty by ensuring stability in the network environment of a generator.

In this Rule change we propose to lock in assets either by maintaining the status of entry services or maintaining the assets that make up the RAB, improving connection charge certainty and stability. This will reduce the risk of generators suffering a price shock and so enhance investment certainty and efficiency, and contribute to electricity prices being lower than they otherwise would be.

In addition to the issue of price shocks, when generators made the decision to take prescribed entry charges rather than negotiating their entry charges, they were unaware that this would in the future render them liable to costs reallocated from other historically shared assets. This Rule change would both reduce the price increase (and hence reduce productive and allocative inefficiency) and remove the existing regulatory uncertainty. In addition, changing connection costs present an unpredictable, unmanageable risk for generators, distinguishing the issue from other business and other investment risks.

7.3. Increasing Consistency in treatment of generators

The Rule change promotes consistency between classes of generators since as described above it would prevent inefficient cost shifting from historically shared assets to *any* dedicated generator connection assets whether constructed or reconfigured pre or post February 2006;

7.4. Providing Proportionate Response to Issue

The outcome sought by this Rule change is for generators and customers to avoid unnecessary price shocks. This is a proportionate response to that issue in that it ensures that generators are not charged with costs related to historically shared assets.

7.5. Increasing Stability and Predictability of Framework

The proposed Rule will thus maintain the stability and predictability of the regulatory framework which will otherwise be disrupted if the Chapter 6A rules currently in place are maintained.

7.6. Ensuring Robustness of Change

The outcome will be robust over the longer term since it provides increased certainty in the operation of the market.

The NEL requires the Commission to have regard to any MCE statements of policy principles in applying the Rule making test. We do not believe that any MCE statements are inconsistent with this proposed Rule. On the contrary, several policy principles support this Rule change as follows:

7.7. Price Stability

Price stability has been a ubiquitous policy for all regulators and policy makers in the area of transmission pricing - the MCE, ERIG, AEMC and the AER. The AEMC stated that one of its aims for the Rule review was:

> “Enhancing stability and predictability – that is, transmission prices should be stable and predictable enough to enable market participants to make long term decisions”

Indeed the AER in its transmission pricing methodology guidelines discusses the economic principles of transmission pricing. It discussed the importance for price stability of fixed charges to enable users to make investment decisions on the basis of predictable costs. It also recapped the economic theory that implies a preference to levy fixed charges on inelastic demands i.e. loads. The proposed Rule is consistent with economic theory since it allocates the fixed charges to loads / system users. This preserves the initial cost allocation position immediately prior to Chapter 6A implementation. The proposed Rule further promotes the principle of price stability. It ensures that, where there is an unrequested network reconfiguration, the price charged to generators does not change significantly. It also ensures that a reallocation of costs from shared services to entry services will not result in a significant price increase for generators.

7.8. Shallow Connection Charge

The proposal is consistent with the AEMC's current policy that generators pay only shallow connection charges, and seeks to address the current anomaly whereby (prescribed) connection charges may increase over time for existing generators as a result of network investment undertaken to meet the reliability needs of customers.

7.9. Flexibility of cost allocation

The AEMC, between the draft and final version of new Chapter 6A, revised the proposed Rules such that they required that costs be allocated to services where those costs are "directly attributable to the provision of that category of prescribed transmission service". This revised drafting clarified that cost allocation can be shifted over time to reflect changes in the use of services and assets. The AEMC further stated that it deleted the words "on a causation basis" proposed initially from draft clauses 6A.22.3 and 6A.22.4 for a number of reasons including:

- To ensure consistency between the manner of cost allocation for assets that provide both existing and new connection services;
- To provide scope for assets attributable to prescribed entry services to migrate to TUoS or common services over time in accordance with the approach in the Revenue Rule for new (connection) assets;
- That the costs of prescribed exit services can migrate to prescribed TUOS or common services.

It seems that the flexibility the AEMC envisaged from direct attribution was the migration of prescribed exit / entry services costs to prescribed TUOS or common services. This outcome remains possible under the proposed Rule. However, unlike the current Rules, the proposed Rule precludes the migration of prescribed TUOS or common service costs to entry services on a consistent basis across all generators, thereby supporting the NEM objective. In this way, costs will be correctly allocated to the benefiting parties in a consistent manner.

8. Conclusion

This Rule change proposal aims to make some minor adjustments to the transitional arrangements in the Rules as well as addressing some anomalies that exist in particular relating to reconfiguration.

The proposed Rule maintains a market environment of price stability, flexibility of cost allocation and productive, allocative and dynamic efficiencies. The proposed Rule also facilitates the achievement of the NEO by:

- Reducing the inefficiency of price signals to sunk investment;
- Reducing regulatory uncertainty;
- Increasing consistency in treatment of generators;
- Providing a proportionate response to an issue with the Rules;

- Increasing the stability and predictability of the regulatory framework; and
- Ensuring the robustness of the change.

The proposed Rule not only affects market participants who use entry and exit services but will also impact the efficiency of participants in the related electricity market and the wider economy.