Major Energy Users Inc.

Australian Energy Regulator

Transmission Guidelines

Comments on the Proposed Pricing Guidelines

by

The Major Energy Users Inc

September 2007

Assistance in preparing this submission by the Major Energy Users Inc was provided by Headberry Partners Pty Ltd and Bob Lim & Co Pty Ltd.

Major Energy Users Inc acknowledges the financial support provided by the Advocacy Panel in preparing this submission.

The content and conclusions reached are entirely the work of the Major Energy Users Inc and its consultants.

CONTENTS Page

Executive Summary

The MEU believes that the AER pricing guidelines must better reflect the new policy, the Rules and stated intentions of, respectively, the Ministerial Council on Energy and the Australian Energy Market Commission.

These intentions are, inter alia, a requirement that electricity network regulation (and the pricing that results form it) must be driven more so, by economically efficient pricing signals.

There are strong objections to the AER's consultants' advice, as it demonstrates a very odd view (or worse) of network economics.

The MEU considers that a TNSP's pricing approach must now provide a number of clear (and efficient) outcomes:-

- It must provide locational signals for both generation and loads
- The costs for the provision of services must be allocated to the "causer" of the need for investment in the network
- There must be a mechanism for equitable allocation of the cost of the transmission services amongst classes of users, which relate to the costs of providing the service
- Occasional users of assets must pay the costs associated with providing for that occasional use
- The resultant price signals from the allocation of costs must provide a clear signal to users of what actions they can afford to take and so minimize the user's impact on the operation and cost of the network

The MEU details its concerns with the draft AER pricing guidelines, especially with regard to the following:-

1. There is an inherent bias in allowing a user to pay postage stamped charges based on using the charges derived from the lower of demand (MW) and consumption (MWh).
2. The B-W range can be exceeded at the lower (avoided cost) end (ie allowing postage stamp based pricing to exceed the lower end of the B-W range.
3. There is no clarity on how a TNSP should address pricing when entry and exit assets are used for both purposes.
4. Clarity is required on the time when locational TUoS is to be developed.
5. Some generators are allowed free access to the network as a consumer when other generators have paid for not requiring this access.
6. Consistency across the NEM is needed (in definitional and allocatory approaches for assets, pricing structures, and bases of prices).

7. Providing pricing stability (ie no price shocks) in preference to equity and providing stronger price signals, is not stated as an AEMC goal.
8. The guidelines are based on deterministic approaches to cost allocation, rather than being principle based.
9. Price signals should encourage co-location and demand side responsiveness.

Each of the above concerns is detailed in the MEU's submission.

1. Introduction

At its most fundamental, the new transmission pricing Rules established by the AEMC highlight that pricing is of as much concern to consumers as is the establishment of revenue to TNSPs. The pricing approach by a TNSP must now provide a number of clear (efficient) outcomes.

- It must provide locational signals for both generation and loads
- The costs for the provision of services must be allocated to the "causer" of the need for investment in the network
- There must be a mechanism for equitable allocation of the cost of the transmission services amongst classes of users, which relate to the costs of providing the service
- Occasional users of assets must pay the costs incurred from providing for that occasional use
- The resultant price signals from the allocation of costs must provide a clear signal to users of what actions they can afford to take and so minimize the user's impact on the operation and cost of the network

The MEU pointed out to the AEMC that inappropriate pricing of services leads to inefficient outcomes. A user that is convinced that it is paying too much for the service will take a number of actions to reduce its costs, perhaps leading to nationally inefficient outcomes. The user that is not paying its fair share for the service undervalues it and makes inappropriate use of the facility.

To a degree, these outcomes resulted from the detailed input provided to the AEMC by the MEU during the review of the pricing Rules by the AEMC.

In May 2007, the MEU provided the AER with a comprehensive response to the draft pricing guidelines. The MEU followed up with a number of meetings with the AER at which it provided, inter alia, a number of actual examples of how the current approaches used by TNSPs failed to deliver the necessary efficient pricing signals to users of the networks.

The MEU also provided the AER with a detailed assessment of the advocacy it carried out with the AEMC prior to the AEMC finalizing the revamp of Chapter 6 of the Rules, especially section J which specifically addresses the decision of the AEMC with regard to pricing of transmission services.

The MEU had high expectations that the AER would embrace the Chapter 6A changes and develop a set of guidelines for pricing TNSP services that reflected both the wording of the changed Rules but also the intentions of the AEMC that formed the basis for the wording of the Rules – the AEMC provided a very detailed Final Determination that provides this insight into the changes the AEMC sought in relation to the pricing Rules.

A key aspect of the Final Decision is that there is to be a change from deterministic regulation to that based on principles, with increased rewards for more efficient performance and penalties for poor performance

Unfortunately it would appear that the AER and its consultants are still operating in the past, relying more on the superseded ACCC statement of regulatory principles (SRP) that the ACCC developed more than half a decade ago.

This is at odds with the new regulatory approach taken by the AEMC, which was given practical expressions in both of its Final Decisions on electricity transmission revenue and on the pricing rules. The AEMC's greater emphasis on incentive-based regulation (revenue rules) was accompanied by actions to ensure more economically efficient pricing outcomes (pricing rules). The AER's consultants and the AER have, thus far, failed to recognize, let alone accept, arguments presented by the MEU about the new regulatory approach. This is extremely disappointing, as on no occasion was there any disagreement with the MEU views at the meetings held, especially those involving both the AER and their consultants.

It should be obvious (from any reading of the AEMC pricing rules final decision) that the AEMC made a quantum shift in its approach regarding the pricing Rules. The first and most obvious change is that the AEMC accepted the MEU contention that pricing of TNSP services is not an issue to leave entirely with the TNSP (i.e. the AEMC did not accept the continuation of the status quo).. The AEMC made it patently clear that it considered that TNSPs have little incentive (if any) to ensure that the prices they use to recover their revenue reflect the real costs in providing the services. Despite this clear statement of intent by the AEMC in its decision[1] on pricing (page 15), viz

> "If a revenue cap is accompanied with low risk of regulatory stranding of redundant assets, TNSPs will have relatively weak incentives to set prices to promote high network utilisation as a means of reducing the risk of redundancy. If anything, under a revenue cap form of control, TNSPs have an incentive to formulate prices in a manner that is as mechanical and non-controversial as possible, in order to avoid payment disputes with their customers."

the AER has continued to approach the matter of pricing as if it were still a matter where it should consider the views of TNSPs as being paramount and given higher weighting than the views of the TNSP customers.

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

This is confirmed in a number of places (in the AER's drafting pricing guidelines decision) where the AER makes reference to the need for the AER to discuss further matters with TNSPs or to allow TNSPs to determine what is acceptable or appropriate. For example, on page 9 of the explanatory statement the AER states:-

> "In specifying permitted pricing structures that are based solely on demand at times of greatest network utilisation and minimising price shocks by allowing TNSPs to propose alternative pricing structures, the AER has struck a balance between consistency and stability."

There are no similar references made to any issue that the AER might actively seek to discuss with consumers to identify if the decisions to be taken by the AER met the needs of consumers.

The MEU contends that the AEMC determination makes it clear that pricing is not a matter to be established by TNSPs. The AER must ensure that its guidelines must reflect the principle based approach to TNSP price setting

The second driving principle embedded in the Rules by the AEMC is that it is pricing signals that will drive the actions of TNSP customers to minimize the need for large capital expenditure programs. Again the AEMC was quite clear that it considered the design of the transmission network is driven by the peak demands of the consumers connected to the network. The AEMC stated quite categorically that demand[2] (page 44) is the fundamental driver of network design:-

> "The Commission considers that demand provides a better and clearer signal to users of the network. Therefore, the Final Pricing Rule has been amended to reflect this position."

Pricing signals are the only tool available which will provide a driver to achieve a fundamental aim of the Rules – that of increasing the load factor on transmission services and by achieving this to reduce (unit) costs to users and to minimize the need for additional capital expenditure. Both of these aims are economically efficient and therefore deeply embedded in the Chapter 6A Rule formulation.

In the discussions with the AER it was stated by it that it had been "deliberately cautious" as it had little experience in pricing matters and that it "did not want to be radical".

The MEU takes issue with the AER on these statements.

---

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

Being radical

The AER is not being radical in developing a set of guidelines that reflects the Rules. In fact if the actions of the AER prevent the intent of the Rules not being achieved then it has not only decided that it is better positioned to identify what the needs of the NEM are rather than the AEMC (i.e. it is assuming responsibility for Rules determination), it has acted as a brake on the development of the NEM against the policy wishes of CoAG and the MCE who have noted the need to engender greater emphasis on incentive-based regulation and economically efficient outcomes.

The MEU does not consider that the AER will be "radical" if it follows the dictates of the Rules. In fact, it will be radical if it acts to prevent the changes that have been developed as a result of policy changes determined by CoAG and MCE backed up by extensive analysis and consultation undertaken by AEMC as it developed the Rule changes.

The MEU agrees that there are a number of aspects of the changed Rules which are considered to be less than ideal. The MEU has decided that it will address these in appropriate forums. Pending these changes, the MEU will work within the dictates of the Rules. It adjures the AER to do likewise.

Being cautious

The AER has commented that it had been deliberately cautious in developing the guidelines and its approach to pricing as it believed this would minimize the impacts of quantum step changes and the associated potential price shocks. It stated that it had this concern as it had virtually no experience in matters of TNSP pricing.

The MEU can understand the cautious approach but it is quite clear that the Rules do not permit this caution – the Rules require certain **outcomes and better formulated pricing signals are one of these outcomes.**

In this regard, the MEU points to the two applications from TNSPs that have been made since the AEMC made the Rule changes. Between the two applications, there has been a request for consumers to fund a prospective capital expenditure programme of nearly $3Bn over the next 5-6 years just in SA[3] and Victoria and much of this planned capex is related to matching the networks to meet new demand.

If the networks are planning this amount of capex to meet demand then it is incumbent on the AER to put in place clear and unequivocal (economically efficient pricing) signals for users of the networks to assess the impact their

[3] Includes contingent projects

decisions have in requiring the ever burgeoning demand for capital to augment the networks.

Bearing this in mind (consistent with the AEMC's Rules), the AER has a duty to put aside caution and put into place as quickly as possible pricing signals that will drive more efficient use of the networks and lead to actions which reduce the need to invest more in the networks.

This MEU response

In the following sections the MEU addresses its specific concerns in relation to the AER Pricing Guideline as developed.

The following issues are outcomes of the draft pricing guidelines:-

1. There is an inherent bias in allowing a user to pay postage stamped charges based on using the charges derived from the lower of demand (MW) and consumption (MWh).
2. The Baumol-Willig (B-W) range can be exceeded at the lower (avoided cost) end (ie allowing postage stamp based pricing to exceed the lower end of the B-W range.
3. There is no clarity on how a TNSP should address pricing when entry and exit assets are used in common.
4. Clarity is required on the time when locational TUoS is to be developed.
5. Some generators are allowed free access to the network as a consumer when other generators have paid for not requiring this access.
6. Consistency across the NEM is needed (in definitional and allocatory approaches for assets, pricing structures, and bases of prices).
7. Providing pricing stability (ie no price shocks) in preference to equity and providing stronger price signals, is not an AEMC goal.
8. The guidelines are based on deterministic approaches to cost allocation, rather than being principle based.
9. Price signals should encourage co-location and demand side responsiveness.

The AEMC makes it clear that consistency of pricing approach across the NEM is in the interests of consumers. This need for consistency by consumers must have a higher priority than the flexibility provided to TNSPs. Accepting this view requires the AER to determine the approaches that are to form the basis for pricing and to ensure the guidelines allow TNSPs little latitude to unilaterally decide on their own pricing approach (which can disadvantage particular classes of customers).

2. Specific areas of MEU concerns

The MEU has raised a number of issues with the AER in a number of discussions. As noted in the foregoing section, MEU takes issue on nine aspects, and considers that the AER, by following its "cautious" approach has failed to comply with both the letter and/or the spirit of the AEMC Rule changes. We reiterate our concerns:-

1. There is an inherent bias in allowing a user to pay postage stamped charges based on using the charges derived from the lower of demand (MW) and consumption (MWh).
2. The B-W range can be exceeded at the lower (avoided cost) end (ie allowing postage stamp based pricing to exceed the lower end of the B-W range.
3. There is no clarity on how a TNSP should addressed pricing when entry and exit assets are used for both purposes.
4. Clarity is required on the time when locational TUoS is to be developed.
5. Some generators are allowed free access to the network as a consumer when other generators have paid for not requiring this access.
6. Consistency across the NEM is needed (in definitional and allocatory approaches for assets, pricing structures, and bases of prices).
7. Providing pricing stability (ie no price shocks) in preference to equity and providing stronger price signals, is not an AEMC goal.
8. The guidelines are based on deterministic approaches to cost allocation, rather than being principle based.
9. Price signals should encourage co-location and demand side responsiveness.

2.1 Bias on postage stamp charges

The AER has accepted that in relation to postage stamp pricing for common services and non-locational TUoS, the historic approach to recovering these costs should prevail. This allows the TNSP to decide on whether it will allow payment of its postage stamped charges to be on the lesser of a demand basis or a consumption basis.

This exhibits a clear bias in favour of occasional users of TNSP services as it is noted by the AEMC that the TNSPs' assets are designed to address the peak demand imposed on the network at any location.

Implicit in the AEMC pricing charge, is that if a consumer requires an occasional peak demand of (say) 100 MW for one day in the year, it should pay for the provision of these assets based on 2400 MWh consumed rather than for the 100 MW really used.

The initial AER response to this matter is that locational TUoS accommodates this aspect, but this is incorrect – locational TUoS addresses the cost of the assets used in delivering power to a specific location, it was never the intention that locational TUoS would address equity in all aspects of cost allocation.

It must be remembered that non-locational TUoS (which is to be a postage stamp charge) is the "other half" of locational TUoS and reflects the cost of assets used to deliver power from generators to consumers. The size (and therefore cost) of these assets is such that they will deliver the peak demand required at any time, regardless of the amount of electricity that flows.

Thus there is no doubt that the cost to provide the non-locational TUoS is based on demand. To allow a user to pay for using the assets based on consumption, is to allow a "free ride". Pricing signals must be provided to be applied to constrain excessive use of the networks by occasional users,

As discussed at the meetings and the MEU/AER teleconference there is no doubt that the costs for non-locational TUoS are driven by demand. In the case of common services there is less justification of these costs being driven by demand. Equally, there is even less justification that common service costs are driven by consumption.

Equally, as every electricity consumer is impacted by these common services, there is a strong argument that the costs should be allocated on the basis of consumer numbers. Each consumer benefits equally from the provision of the TNSP service – regardless of the size of the demand or its consumption – as it is the provision of the entire service that is valued. Common services are by implication services that all users of the network require, and cannot do without, thereby supporting our contention that common services should be allocated based on the numbers of consumers benefiting from the services provided.

The AEMC states that TNSP costs are to be attributed on a "causer pays" basis. Each and every consumer "causes" the need for common services. The removal of one consumer (regardless of size) will not reduce the costs for providing the common service, and neither does a single consumer reducing its consumption or demand cause a reduction in common service costs.

On balance, the MEU is of the view that demand is the most appropriate surrogate for allocating common services. To allocate on the basis of consumer numbers does not reflect the value a larger demand consumer might get from the network, yet to allocate costs on a consumption basis clearly does not signal to any consumer that it is the demand for the service that drives the bulk of the costs in providing the network.

The AER consultants decided to recommend the current approach used by TNSPs (ie the lower of the cost resulting fro ndemand and consumption) as this would (see page 11):-

- "Promote consistency of pricing structures across the NEM.
- Provide signals to encourage users to manage their consumption so as to reduce their maximum demand and therefore reduce their demand based charges. NAS considered that this would encourage the efficient use of the existing network (i.e. static efficiency).
- Provide signals for TNSPs to invest efficiently in their networks to the extent that users are optimising their use of the existing network.
- Recognise that not all prices are intended to provide the same price signals and so avoid 'over-signalling' prices.
- Allow innovation by enabling a TNSP to justify an alternative pricing approach under the NER if the TNSP considers it warranted.
- Promote stability by allowing a TNSP to retain its existing pricing structure."

MEU considers these reasons strange in the extreme and demonstrates a very odd view of network economics or worse. Addressing each comment in turn:-

- Consistency in pricing structures can be maintained even if the basis of charging is changed – consistency is about using the same approaches to developing pricing structures, rather than retaining current approaches

- It is demand that sizes TNSP assets; assuming (as NAS has argued) that managing consumption will address demand is absurd. Managing consumption might address demand in limited but very few circumstances.. For example, using an air conditioner on a hot summer day maximizes demand. Turning off pool pumps in winter reduces consumption but does nothing for the peak demand experienced in summer. What does influence the limiting of demand on the summer day, is having to pay the cost to provide the assets needed for what might be an occasional demand.

- What drives investment by TNSPs is peak demand – it only needs a quick review of a TNSP application for a reset to see this. Already, the load factors[4] on TNSP assets are quite low (usually in the 50-60% range). Reducing consumption, but not demand, will only exacerbate this already poor load factor (where is NAS's efficiency argument?). What is required to increase load factor is for consumption to increase (or demand to be

[4] Load factor is a term which relates the actual amount of power that can be carried in a a system to the total amount of power that can be carried in the system. The higher the load factor, the more efficient is the use of the assets provided for the transport of power. A low load factor is usually cause by occasional use of a high carrying capacity network. A low load factor network has a higher unit cost ($/MWh) than a high load factor network.

reduced). Addressing consumption does nothing for TNSPs to invest efficiently.

- The purpose of postage stamping is to allocate costs on a non-locational basis, as there is concern that by allocating all costs on a locational basis will provide over-signalling of consumer location.

  At a pragmatic level, if all TNSP costs were allocated to a location, the signal to consumers would be to all congregate around generators. This approach would result in a total concentration of consumers at a few locations in a region, and this would not meet other sensible criteria for population and industry locations. Postage stamping of some costs reduces this locational signal by smearing the costs over all consumers.

  The purpose of using demand rather than consumption as a postage stamping tool recognises the actuality behind the provision of assets by TNSPs, and sends signals to all consumers that limiting demand is the best way of reducing the need to pay for the additional assets needed to meet increased demand.

- Innovation will not just occur by allowing TNSPs to impose the lesser of costs based on demand and consumption. An innovative pricing approach should be explained by the TNSP and assessed by the AER. If this results in improvements then the AER can permit its use (and both TNSPs and consumers benefit). Innovation will result from the AER permitting a TNSP to suggest changes, not be allowing approval to use the lesser of cost based on consumption and demand

- Stability will be achieved by not changing anything. The AEMC's Rules decision does not accept the status quo and has required a number of changes to both revenue and pricing. This puts the lie to an assumption that stability is the driving concern. The AEMC wants to drive change in order to get more efficient outcomes.

It has also been stated that because the majority of consumers are connected to the distribution network, and that distribution networks then allocate transmission costs to suit themselves, there is no real purpose in attempting to provide transmission pricing signals. In this way, any bias that might arise from an allocative process is effectively eliminated. Distribution businesses do not have the ability at this time to implement locational signaling based on demand, as most metering is still of the accumulation type and does not record demand.

The MCE and CoAG have indicated a preference for all metering to be able to record half hour demand, and most large users of power have such meters. It is therefore appropriate to set Rules now so that Rule changes are not required in the future to match emerging trends.

If there is an assumption that transmission prices need not be reflective of costs due to the distribution businesses not passing transmission signals through to embedded consumers, then the same argument applies to power supply. It is recognised that retailers average electricity supply costs, so using the same argument then there would be no need to have half hourly prices to send signals, and the market would revert to the traditional peak/shoulder/offpeak pricing that applied prior to the NEM introduction.

The fact that the AEMC does require distribution networks to provide transmission costs incurred on behalf of embedded large consumers supports the contention that transmission pricing should be accurate, even if some consumers do not directly see these costs.

The AER has a responsibility to ensure that charges should be cost reflective and equitable. By the AER permitting TNSPs to implement pricing approaches which are demonstrably biased in favour of one class of consumer, is incorrect. The AEMC requires costs to be allocated on a "causer pays" basis, and this is most equitably achieved by allocation of TNSP charges based on demand alone.

2.2 Exceeding the Baumol-Willig lower range

The AER has commented that it has addressed the Baumol-Willig range of prices (where prices must be between stand alone and avoided costs) with regard to its assessment of postage stamp prices being based on the lower of that derived from consumption and that derived for demand. In particular the AER assessed the upper range of stand alone pricing and is convinced that its draft approach complies with this requirement. The AER commented during the teleconference that it had not addressed the lower bound – that of avoided cost. The MEU stated that this lack of rigour exposes the potential of the proposed approach of allowing the lower of postage stamp charges to be less than the avoided cost.

This can be best demonstrated by an example. Consider the 100 MW load used in 2.1 above and assume that it is located in Victoria. The following is an extract from the VENCorp table of tariffs for year 07/08. The General charge is the non-locational element of the TUoS and is therefore directly related to the cost of assets. Further, it must be assumed that VENCorp has developed its charges on a cost reflective basis, otherwise it has not complied with the Rules.

Issue Date: 15 May 2007

TUOS General Prices

(either one of the following)	TUOS General		
	TUOS General Price plus	GST	Total Price
Energy Price ($/MWh)	1.48	0.15	1.63
Capacity Price ($/MW pa)	6,033	603	6,636

Source: VENCorp website

Thus if the load operated continuously for 12 months, then the General charge would be the lower of $603,300 and $1,296,480 pa. The consumer would pay the lower amount based on its demand, and as demand is more reflective of the costs of providing assets, then $603k is seen as being a cost reflective assessment for providing the assets.

However, an air conditioning load might operate for 60 days in a year for the hours for the time period of 10 am to 6 pm or 480 hours which is about 5% of the time. The General charge would be the lower of $603,300 and $71,040.

If this was the only load being provided at the connection point, then the General charge to provide the 100 MW service is $603k pa. If the demand was not there then the cost would reduce by the amount of $603k – this would be the avoided cost. However, if the service is provided and paid for on the consumption basis, then the amount paid by the consumer is less than the avoided cost.

It is not until the operating time exceeds 46% of the hours in a year, does the cost based on consumption match the cost based on demand. Thus, if there is no demand for nearly half the year, then the avoided cost is greater than the cost to provide the service.

The Common service calculation provides the same outcome as does the General charge calculation.

Whilst this is a simplistic example, the principle is consistent, and demonstrates how the lower level of the B-W range can be transgressed.

2.3 Addressing entry and exits when assets are used for both purposes

The Rules state quite clearly that where the same assets are used for both entry and exit services, there has to be some sharing of the costs for their provision. Entry and exit assets are used for connections and are therefore excluded from the general principle that generators do not pay deep connection costs.

The AEMC was very specific about allocating costs where the connection assets are shared between users. On page 39 of its Final Determination, the AEMC states:-

> **"For Prescribed Entry and Exit Services**
> The Proposed and Draft Pricing Rules required the ASRR for Prescribed Entry Services and Prescribed Exit Services to be allocated to individual connection points in a similar way to how the AARR is allocated to different Prescribed Transmission Service categories.58 As with the allocation of the AARR to categories of Prescribed Transmission Services, the Rule sought to accommodate existing practice by allowing TNSPs to continue allocating the ASRR based on the relative ORCs of the assets that provide each Prescribed Entry/Exit Service.
>
> That is, it was considered that the allocation should be based on the 'attributable cost share' of each individual Prescribed Entry and Exit Service. The 'attributable connection point cost share' would then be based on the relative asset costs and/or operating and maintenance costs directly attributable (on a causation basis) to provide the service *to that network user* as a proportion of *total* asset costs and/or O&M costs directly attributable (on a causation basis) to provide *all* Prescribed Entry and Exit Services. The emphasis to be given to relative asset costs as compared to relative O&M costs was considered to be a matter for the TNSP to determine."

There is no doubt that the same assets might be shared by users providing both and entry service and an exit service at different times, and the AEMC identified that this was a possibility. The AER must provide guidance to TNSPs as to how a sharing arrangement must be developed.

Currently, there is no guidance provided in the guidelines as to what principles should be used by a TNSP in developing a method of allocating costs for assets that provide more than one service.

In its submissions the MEU provided its views on how this might be equitably addressed

2.4 Clarity on the times used for setting locational TUoS

The MEU had difficulty in understanding the basis for determining when the transmission assets were to be assessed for setting TUoS, bearing in mind that the AEMC requires allocations to be based on peak system demand times.

During the discussions with the MEU, the AER stated that the allocation must be based on power flows occurring on the ten peak system days in the previous

year. The AER further stated that for the purposes of the analysis, the flows that would be used would be those that occurred in the half hour on the peak system day where the system demand was the highest. The import of this approach is that 10 sets of half hourly flow data would be used for setting the flow data implicitly required for setting TUoS charges.

In its submission, the MEU had suggested that a longer period (ie all half hour periods between 11 am and 7 pm) on the system peak days might be used.

The MEU accepts that the concept proposed by AER meets the requirements of the Rules but queries whether the longer period the MEU suggested (ie over an eight period) might be more representative of peak flows than a single half hour in one day.

We suggest the AER might reconsider this issue.

2.5 Generator as a consumer

The MEU observed that there are times when generators are consumers of power, rather than being assumed to be consistent injectors of power into the network. Currently, generators do not pay for any “Use of System” charges, regardless whether they import or export power.

The MEU has pointed out that a number of generators in the NEM have expended considerable costs in order to provide a “black start” capability. A black start capability allows a generator to start up its auxiliaries without the supply of power that would otherwise be provided from the network in the event of total loss of the supply system. This generator would be scheduled by NEMMCo to synchronise with the network and provide power to other generators which need supply to restart.

One way of providing a signal to generators for off setting the costs of not having black start capability, is to require them to pay TUoS and other charges as if they were a consumer, for the periods that they import power.

The AER has stated that this is outside their terms if reference, as generators are not required to pay deep connections costs. The MEU points out that the concept does not fall outside the Rules as costs are to be attributed on a causer pays basis. Thus if a generator elects not to provide black start assets, then it has elected to use the network as an occasional supply service and therefore it should pay costs as it has caused the need.

The MEU sees that this concept is fully consistent with the Rules which specifically state that costs must be allocated to the party that causes the need for the service.

2.6 Consistency across the NEM

The AER and its consultants appear to have assumed that consistency across the NEM implies continuity of existing practices, particularly with regard to cost allocation for postage stamped pricing and to specify what assets are in each service. This is not the case at all.

The concept of consistency is much broader than this. The outcome of consistency will be that tariff schedules will be of the same structure and appearance, but consistency goes much further.

Consistency in approach requires that all TNSPs will use the same approach to:-

- Assess which assets are in the shared service, which are in negotiated services and which are in competitive services.
- Determine which assets are included in each service (This is further discussed in section 2.8).
- Allocate costs to each service.
- Use the same approach to setting the flow basis for TUoS and recognising the importance of identifying where seasonal implications might affect equitable allocation of costs.
- Allocate costs common to each service offered (eg HO costs).
- Develop a similar tariff structure.
- Set the point in the network where common service and non-locational TUoS are to be measured and charged for (this is discussed further in section 2.9).
- Discuss with AER and implement what might be innovative approaches to pricing.

The AEMC has made it clear that it sees consistency as being a worthy goal, and took extraordinary steps to ensure that this approach to consistency was implemented in the Revenue setting parts of Chapter 6A. The MEU supports this goal of consistency in pricing as its members have had direct experience of the outcomes of this lack of consistency between the different TNSPs in the different NEM regions. Indeed, this was a point made to the AEMC by the MEU and it was accepted.

The AER guidelines are an essential part of ensuring this NEM wide consistency to TNSP pricing is achieved, as it is the guidelines which will provide TNSPs with the guidance of what is expected of them. The MEU

considers that the guidelines must be quite explicit so that consistency is achieved.

2.7 Stability vs signals

As noted above in section 2.1, providing costs signals are an essential part of the regulatory approach used in the NEM, whether this is for the commodity (half hour prices) or for transporting power from generators to consumers.

At the behest of MCE, the AEMC has changed the Transmission Rules significantly as there was a perception that signaling (be it for investment, demand side responsiveness, generator location) must be made stronger. It is interesting to note that the MCE which is currently addressing the Rule changes for distribution and retailing, is using a similar approach developed by the AEMC for transmission, to strengthen the market signals being provided to consumers embedded in the distribution networks.

One over-riding concept being used by the MCE and the AEMC is that the only way to address the burgeoning demands for more capital investment in networks to meet the ever increasing growth in demand, is to provide stronger and more clear signals to consumers as to the financial impact of the way they use power. As noted above, regulators and Rule makers have seen demand levels increasing faster than consumption levels, resulting in ever decreasing load factors on networks, with associated increases in unit costs (eg $/MWh).

With this in mind, the AER has a responsibility to ensure that transmission pricing does provide adequate signals:-

- **For TNSPs (regarding their investments),**
- **To generators to prevent export congestion that is occurring more frequently as more distributed generation (especially wind farms) are developed, and**
- **To consumers to modify their usage patterns to reduce the demand growth, and to use more power at periods of low demand so that network load factors improve with the resultant that overall transmission prices will reduce.**

Unfortunately, the AER and its consultants have addressed these guidelines in terms of making change slowly – creating stability (it is stated) – effectively dampening development of the signals that the AEMC and the MCE see are essential.

The NEM has been in full operation for eight years, and before that for three more years in NSW and Victoria. Prior to the recent AEMC and MCE

reviews, TNSP pricing has been static, and has failed to provide the requisite signals. The AER has the responsibility to put into practice the policy goals of MCE and AEMC.

By professing to put stability ahead of providing strong signals, it is acting as a drag on the reform process and is therefore at odds with policy makers and rules makers.

2.8 Cost allocation – deterministic or principle based

The AEMC has developed the new Chapter 6A Rules based on principles rather than being deterministic as were the previous Rules and Code. The MEU accepts this is the basis of the Rules. However it appears that the AER (on the advice of its consultants) considers that determinism is better than using principles, again putting themselves at odds with policy and Rules makers.

The approach to allocating assets for entry and exits and to common services exemplifies this approach to determinism.

The MEU proposed a principles-based approach for allocating assets to entry and exit, and to common services. This approach is consistent with the explicitly stated AEMC approach to the Rules in its Final Decision on Pricing (page iii):-

> "This [change] has been achieved through a recasted regulatory framework incorporating codification in the Rules of the key design features of the regime including:
>
> - principles for prescribed transmission service pricing methodologies (arrangements for the pricing of negotiated services have been dealt with in the Revenue Rule);
> - …."

The MEU had suggested that one principle be used to define what assets are used for entry/exit and another for what is used as a common service. The AER consultants advised against this, and stated (page 15):-

> "NAS considered that the AER should specify the types of transmission assets that are directly attributable to each category of prescribed transmission service having regard to a number of general principles, including the need for consistency, stability and innovation.
>
> NAS referred to the AEMC's pricing rule determination and its discussion that the development of part J of the NER was based on '…confirming the broad acceptability of the approach to pricing in the existing Rules.' NAS

> stated that it had not been able to assess the merits of the MEU's alternative asset allocation proposal and therefore was unsure about its practicality, cost and impact and could not recommend it for use in the proposed guidelines.
>
> NAS recommended retaining the approach the AER detailed in its issues paper which was based on schedule 6.2 of the old rules unless a TNSP proposed an alternative approach which could be justified under the NER. NAS considered that the current approach reflected the AEMC's view about the broad acceptability of the current pricing arrangements and promoted stability and predictability by allowing TNSPs to continue to apply their current asset allocation approach. However, NAS considered that allowing TNSPs to propose an alternative asset allocation approach would provide for innovation."

This is misguided advice.

Firstly the same types of assets are used for multiple purposes and could be easily found in a number of different services. For the AER to have to develop an exhaustive listing of every type of asset used in each service would require a massive undertaking. Then the AER has to provide guidance to the TNSP as to how it should assess how each asset of the same type should be allocated. This approach is quite deterministic, and defeating of the very observation made by the consultant that the TNSPs be allowed to determine their own allocatory approach as this "… would provide innovation."

It is important to note that different TNSPs will have different design approaches to their networks – some driven by the historic approach used, and others because of the unique features of the region in which they operate. The exhaustive listing approach recommended by the consultant makes no reference at all to this aspect of developing the assets listing.

The AEMC determined that TNSPs have little incentive to provide cost reflective pricing and would attempt to carry out pricing in a mechanical fashion. The AEMC also considered that consumers need to have accurate price signals in order to drive efficient outcomes. Despite this the AER consultants consider that the AEMC's outcomes would be achieved "… by allowing TNSPs to continue to apply their current asset allocation approach." **In fact this is the antithesis of what the AEMC states as its expected outcomes of the pricing review and what the changes proposed are intended to achieve.**

The AER consultant comments that it is unable to "…assess the merits of the MEU proposal… was unsure of its practicality … and could not recommend it." Effectively it considers itself unable to assess a principles based approach, and has doubts on the practicality of using a principles-based approach. Somewhat

surprisingly, the consultants did not object to this issue when discussions were held.

The AER consultants comment that the existing Rules can be used as a basis for determining how to allocate assets into each category. This is in total contradiction to the AEMC stating that a principles-based approach is the basis for its approach to Rule setting and development of outcomes

In counterpoint, the MEU approach clarifies exactly what should be included in entry and exit services, and creates consistency with the new approach to connection services which are now required to be “negotiated services” rather than “prescribed services”. The AER must recognise that there is a need for consistency between what is now to be a “negotiated service” for connection of new users, with what is still retained in the “prescribed services” (the costs for providing “entry and exit” connections) which allocate the costs to existing users for their connection.

Consistency dictates that as far as possible, there should be little difference between the detail which defines new connections when classed as a negotiated service, and what existing users have to pay for when categorized as a prescribed service.

The MEU approach was designed to ensure, as far as possible, to create equity between new connections and existing connections.

The simple MEU description of what assets are needed to create a connection does not need to create any derogation as to what might have to be addressed as historic anomalies. Simply put, assets that comprise an entry or exit are those assets which can be removed without impacting the operation of the shared network except to those users at connected by the entry/exit assets. The value of this definition is that it is identical to the assets that will be incorporated at any new connection point as a negotiated service. The MEU approach provides equity for all users and does not lead to inefficient outcomes that might arise by new users “shopping” for the lowest cost option of using or not existing or new assets based on perceived historic inclusions or exclusions of assets at the connection point.

The MEU proposal for allocating assets to common services is based on the principle as to what is a common service. **Effectively, a common service is a service that every user of the network requires to be supplied, regardless of demand or consumption.** To the MEU, a common service is costed based on the assets that must be present so that all consumers can benefit from the network.

The MEU approach is based on principles, identifying what it is that determines what is needed to provide the service, rather than attempting to dictate to the TNSPs what the AER considers should be included in the asset.

The MEU contends that the AER should use a principle based approach and then have each TNSP advise how each will address the principle. Such an approach allows the AER to provide input into the allocation for each service, and the TNSP to use innovation in a controlled way. Again, both the TNSP and consumers will benefit from such actions.

The AER has commented that it is inexperienced in pricing of TNSP services. For it then to determine that it proposes to provide a detailed listing of assets to be allocated to each service, appears to be contradictory in the extreme.

2.9 Encouraging co-location and DSR

Pricing signals are the accepted mode of encouraging desired outcomes in the NEM. The AEMC (and MCE) have determined that there are two desirable outcomes of the NEM transmission services – the first is that there be less "prescribed" services and the second is that consumers should be encouraged to manage their affairs so that there is less need for augmentation of prescribed services.

Neither of these outcomes will be achieved in the absence of signals to co-locate demand with supply (ie locate generation and demand near each other to reduce the need for long and complex transmission systems) and for consumers to see the outcomes in terms of price of their actions which will lead to increased augmentation and lower load factors. Equally, consumers must also see that actions they do take will result in lower costs for the provision of the transmission service, and this enables them to examine the cost savings to identify the extent they can expend capital internally to manage the sought after action.

The AER must address the need to provide strong price signals so that consumers can identify the savings they can make by co-locating and/or acting to reduce demand when the system is under its greatest pressure. It is only by these actions that greater efficiency in asset utilization will occur and so minimize the need for large capital expenditure to manage short term high demands.

To provide muted signals will not achieve the outcomes required by the AEMC and the MCE.

3. Conclusion

The MEU strongly believes that the AER has badly erred with its draft pricing guidelines.

There is a need for stronger pricing signals in the NEM. The need for these stronger pricing signals must be see against the background of emerging ambit claims by TNSPs for vast amounts of network expenditures (in current regulatory revenue resets), and the new policy and Rules determination intentions of, respectively, the MCE and the AEMC.

Taking a cautious and conservative approach is not a practical, let alone an appropriate, position.