NATIONAL GENERATORS FORUM

26 May 2011

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Lodged via www.aemc.gov.au

Dear Mr Pierce

**NGF Submission to Transmission Frameworks Review Directions Paper**

## Introduction

The National Generators Forum (NGF) welcomes the opportunity to respond to the Directions Paper released by the Australian Energy Market Commission (AEMC) as part of its Transmission Frameworks Review (the Review).

Our submission reflects our significant expertise and experience as National Electricity Market (NEM) participants, our detailed discussions with other market participants, transmission bodies and regulatory agencies, and independent economic analyses.

While this submission supports our previous consideration of these issues in related reviews and pursuant to our participation in the Transmission Frameworks Review Consultative Committee, the NGF's position reflects the fact that the AEMC is yet to propose detailed options for consideration.

We look forward to your consideration of the attached submission and the formulation and consideration of a broad range of options in the second stage of the review process, and through our representation on the consultative committee.

## Discussion

### The role of transmission

The NGF notes the AEMC's view that "the objective for transmission frameworks should be to ensure that investment and operational decisions across generation and transmission are optimised in a manner that minimises the total system costs faced by consumers". However, given the AEMC's acknowledgement that the focus of the review is looking at a narrow aspect of total system costs – namely the interaction of transmission and generation – it is not clear whether this perspective is particularly informative.

While the reference to total system costs sounds suitable, without reference to an appropriate context and timescale the AEMC's narrow interpretation could support recommendations which seek to direct private generation investment for the sole purpose of reducing transmission investment (for example

G-TUOS). This would be regardless of generator needs and actual total system costs which go beyond the interplay between transmission investments required as a consequence of a singular investment. Hence, the AEMC analysis here causes us some concern.

We agree that minimisation of total costs faced by consumers is central to any analysis and ensures application of the National Electricity Objective. However, we suggest that such an objective is also met in part by ensuring that the transmission frameworks meet generator and loads' cost-reflective needs, and that those needs, which reflect business and investor requirements, should drive transmission investment.

*Multiple roles of transmission and the role of TNSPs*
The NGF supports the perspective of Grid Australia that transmission fulfils multiple roles and the view expressed by International Power that there exists conflicts between the various roles played by TNSPs.

The NGF notes that there is some tension between TNSPs' role as asset providers and the NGF's desire for TNSPs to act as service providers. The Review needs to conclude whether the current structure of TNSPs within the existing frameworks is able to accommodate the multiple roles played by individual TNSPs, or whether a TNSP's responsibilities could be better defined and in some instances alternatively managed.

We support the AEMC's initial view that the role of transmission is to "provide services to competitive and regulated sectors of the electricity market in a manner that is in the long term interests of consumers of electricity."

**Nature of access**
*Differing interpretations of the current arrangements*
The NGF notes the AEMC's interpretation of the current level of transmission service to generators and agrees that it is important to approach the issue from a first principles perspective. Nevertheless, in doing so, it should be noted that current interpretations, which differ across the market, are the basis of existing business arrangements.

Furthermore, even those market participants that do not believe they are entitled to an explicit level of service, either in principle or in contract, rely on an implicit level of access to the network. In essence, there is an expectation that NEM frameworks will ensure that congestion does not materially increase and hence generators will not be constrained off to a level which undermines the financial viability of their assets. This should be recognised by the AEMC in its analysis.

*Potential reliability standards for generation*
The issue of a reliability standard for generators is a topic of interest to the NGF. While there is no broad agreement within the NGF on the appropriateness or preferred form of a potential standard at this stage we support further analysis based a number of criteria outlined below.

1. Generators would need to have a significant say in the form and setting of any potential standard.
2. The risk of over- or under-building assets needs to be carefully considered, including ensuring appropriate allocation of costs.
3. The benefits to generation investors need to be central to the analysis including the consequential benefits for consumers of such a model, whether an Alberta type policy or otherwise.
4. The option should to the extent possible allow for a generator by generator approach to transmission reliability given: the differing business and financing models; the varying operational profiles; the economic efficiency associated with encouraging use of existing transmission capacity; and the fact a reliability standard may be highly desirable for some generators but an unnecessary burden for others.

*Selective negotiated or enhanced rights for generators*
The NGF supports an investigation of enhanced rights for generators. Like a reliability standard for generators, such a right would only be valuable if it meets the needs of the individual generator seeking an enhanced right.

A notable concern with a selective approach to rights is that the AEMC's analysis, in assuming current generators have no guaranteed level of service, implies that if a number of individual generators negotiate enhanced rights then this will degrade the level of service relied upon by the other incumbents. The framework should not allow the negotiation of enhanced rights for a generator(s) at the expense of existing users of the transmission network.

As previously stated, while the NGF agrees the issue of explicit rights is problematic, and entities disagree over whether they have or don't have some level of protected transfer capability based on the National Electricity Rules and their contracts, what is not debateable is that all generators have a general expectation that the system will be built in a manner that minimises inefficient congestion overall while not partially stranding existing assets.

This is further reflected in the view held by those generators who do not consider congestion a problem in the NEM, as they argue the NEM frameworks will recognise the economic benefit of keeping a competitive generator unconstrained through investing in new transmission assets. This absence of concern is built on the expectation that has not been fully accounted for by the AEMC, that an implicit right already exists, which guarantees a minimal level of congestion and hence risk to their businesses.

*The potential for a financial access rights regime*
The NGF agrees that it is prudent to investigate a financial access rights regime. However, the NGF has two points to make in relation to financial transmission rights.

One, the model of rights or defined levels of service proposed from time to time by some NGF members, is not, in our view, a fully fledged financial rights model but is a model seeking to provide a defined level of service protected in the planning domain.

Second, the issue of financial rights is particularly complicated, the NGF is concerned that implementation of a fully fledged financial rights model may be disproportionate to the issue at hand and may not satisfy some concerned generators whose primary issue is the degradation of existing service to individual generators due to new connections and poor investment.

**Network charging**
*Access and cost*
The NGF believes the issue of access is a burdensome debate amongst industry participants and with the AEMC as a consequence of the issue of cost. On many occasions, and across a series of reviews, a principled holistic debate about the benefits and costs of altering access standards or defining levels of service has not occurred because of the spectre of cost allocation.

Quite simply generators are concerned the AEMC will develop a bureaucratic approach to defining access that is burdensome in terms of cost and compliance and may ultimately not deliver the desired efficiencies. The experience during the *Review of Energy Market Frameworks in light of Climate Change* confirmed these concerns. Likewise, the historical aspect of who paid for what and when is unduly problematic and taints the debate from examining what is economically beneficial, to what is appropriate on equity grounds.

To this end, the NGF suggests that before the AEMC consider cost allocation in any further detail it should answer the fundamental question: <u>will a defined level of transmission service for incumbents</u>

and/or new entrants, whether in the form of explicit access or a standard which provides implicit protection, enhance the NEM?

This could be via: ensuring incumbents assets are not partially stranded by congestion; encouraging investment and providing new entrants with greater revenue certainty; ensuring greater use of existing spare capacity and thereby improving locational decisions; reducing finance costs; providing better signals for transmission investment; and providing stronger incentives for TNSPs.

Answering this question first, and thereby giving the Review clearer direction, is preferable to the AEMC unleashing a preferred model at the time of its First Interim Report. Additionally, if the AEMC concludes that there is no case for change, it will minimise the need for detailed discussion on issues of cost and implementation.

Once such an analysis, at a higher order, has occurred, matters of detail and then cost should be progressed. The second stage of such analysis would therefore be about ensuring that any model proposed is proportionate, meets participants needs and provides appropriate cost and risk allocation. At this juncture the AEMC would need to determine: (a) can a form of explicit or implicit rights/service/access be implemented; and (b) what will it cost and how can that cost be recovered?

Answering the initial question in the affirmative does not mean the secondary questions of implementation and cost will definitely be resolved. It may be concluded that the benefits, while demonstrable, are not proportionate to the costs or difficulties with implementation. Or that realising the benefits is only justifiable in limited circumstances.

The NGF notes this is not to prejudge the outcome, as NGF members' views differ notably, but because we seek to encourage an honest debate of the issue that goes beyond the repetitive dialogue which has gripped the industry and focuses on issues on implementation, cost and equity not economic benefits and efficiency.

Notwithstanding the above, and our belief that discussing charging design issues is premature, our comments on the AEMC's analysis thus far are set out below.

*Cost imposed by generators under current frameworks*

The first point the NGF would like to make is that the efficiency of the AEMC's earlier recommendation to impose G-TUOS as an ongoing variable charge has not been tested and was a surprise last minute recommendation as part of the *Review of Energy market Frameworks in light of Climate Change*, which had not been canvassed with market participants. It was an example of poor policy practice.

In that light, we remain highly concerned by the AEMC's suggestion that a significant period of time is "perhaps one year". The alternative, "for the life of a power station" is indeed a long-term signal, but we suggest it is inconceivable to consider one-year a long-term signal. These sorts of suggestions are highly disconcerting in isolation without a countervailing point explaining why one-year is by no means suitable should one even conclude a new long-term price signal is necessary.

While NGF members hold differing views on the implications of cost imposed by generators our chief concern at this stage is that the AEMC's analysis in this area is poorly articulated with scant detail underpinning the AEMC's premises and a conclusion which seems to suggest the only available options to deal with locational decisions, and the costs they impose, would be a bureaucratic charge like G-TUOS that enables a centralised entity to balance transmission and generation costs on a centralised ledger removed from the market.

*Design issues for generator charging*

The NGF understands the issues surrounding design of any potential charges. Notwithstanding our earlier views we suggest that in the circumstance where there is already a relatively high level of

access implicitly expected by generators (notwithstanding the significant risk that remains to individual generators), it is up to the AEMC to make a strong case for introducing a charge for incumbents given no such charge currently exists.

The basis for such a charge needs to be strongly correlated to economic efficiency within the context of a deregulated market, especially direct, measurable and desired benefits to incumbent generators. To date, we do not believe the AEMC has turned its mind to this criterion, neither in the Directions Paper nor the *Review of Energy Market Frameworks in light of Climate Change*.

*Transmission charging for load*
The NGF believes significantly greater work needs to occur in this area before any conclusions or hypothesis can be developed on the interaction between transmission charges for load and a non-existent transmission charge for generation. Given no case for charging generation has been made, this area of investigation appears an unnecessary diversion at this time.

**Congestion**
*Materiality of congestion*
The NGF notes the issues associated with congestion and the inefficiencies that may arise from congestion in the NEM. We also note that while views on the existing impacts of congestion differ, both across the NEM versus individually, attempts to predict the implications of future congestion would appear to be even more problematic.

Clearly, while interesting, any studies of long term future congestion will be inaccurate as it is imponderable to calculate how congestion will arise in a dynamic system which will be impacted by unknown connections, unknown usage and demand, and unknown levels of transmission investment. Such a forecasting exercise can only be wrong. This is not to suggest such an exercise has no value, in particular in the shorter term (less than 3 years) horizon, but that such an exercise is not authoritative enough to justify action or inaction in its own right.

Furthermore, assurances or assumptions about congestion moving forward, in the absence of a defined level of service or generator reliability standards, are not firm enough to avoid potential discounting of revenue streams to account for the risk of congestion. Hence, the fear of unforseen material and persistent congestion arising and causing a financial cost, even during periods of time when material congestion is actually absent, would remain the material measure and continues to be the case under the current frameworks.

*Network availability (and TNSP incentive arrangements)*
The NGF supports the position that TNSP incentive regimes support better management of network availability. We welcome Grid Australia's position which supports further analysis in this area.

One area where the NGF believes that additional attention is warranted is around network outages and maintenance. It is our experience the Network Outage Schedule, administered by AEMO, is not well used by all TNSPs, and that greater incentives around planning of network outages is warranted. Improved notification of outages, and management of outages, would allow generators to better manage the risk associated with an outage, increase network availability and minimise business disruption. The NGF supports ongoing analysis in this area with a view to the creation of better incentives for TNSPs to adopt better outage planning practices.

*Generator behaviour*
The NGF believes these issues require further articulation and discussion with industry before the AEMC concludes on a preferred approach. As it stands, the Directions Paper provides limited direction on the AEMC's thinking in this area.

*Congestion management mechanisms*
The NGF position on congestion management regimes, to manage congestion in the short-term, is that any such regime would need to be proportionate to the problem at hand and not be overly complex.

While some NGF members are supportive of a congestion management regime, and note that it may give rise to market efficiencies, other members are of the view that such an outcome would introduce a large degree of complexity into the market for minimal added benefit.

There is an alternate view that if the transmission frameworks appropriately account for new entry and provide some level of defined service to existing and new generators than managing short-term congestion through a congestion management regime is a second order issue.

Nevertheless, should a scheme be considered it would need to be appropriately structured and would need to apply to the entirety of the market. Therefore, until such time as a more fulsome suite of options are presented by the AEMC, the NGF is unable to comment any further.

**Planning**
The NGF:

- supports the AEMC's current views in this area and its ongoing work in relation to transmission reliability standards for load;
- welcomes further analysis around the RIT-T but notes the potential for this issue to involve a considerable amount of effort for little change given the purpose of the RIT-T is particularly narrow, and likely appropriately so, and the fact the RIT-T is in its infancy; and
- awaits the AEMC's further consideration of issues surrounding inter-regional augmentations.

*Planning information and proactive planning*
The NGF shares the AEMC's caution regarding proactive planning preferences of some stakeholders and maintains a view that in the main such approaches are likely to be uneconomic from a total system perspective.

*Institutional arrangements*
The NGF understands the ideological attractiveness of a central planning body for transmission networks but believes the case to justify change has not been made.

The NGF has greater interest in the appropriate carriage of the existing responsibilities held by TNSPs and planners. Planning, connections, asset management, infrastructure development, service delivery and coordination with other market participants are all issues which can be managed at a regional level – this is not to suggest they have to be managed regionally. However, whether those responsibilities should all be managed by TNSPs or managed in the existing manner is not yet clear to the NGF.

One point that seems to be behind the debate on national planning is the desire for all consumers to be exposed to the same reliability standards. While we understand this sentiment, and the general trend towards harmonisation in Australia, we can see no strong economic case for identical planning or reliability standards across the NEM. As long as individual standards are clearly articulated and understood by both load and generation then divergent standards would not seem inappropriate so long as they are economically justifiable. Notwithstanding this view, we maintain support for the AEMC's work in this area.

In that regard, the issue with Victoria's planning arrangements is not its divergence from other regions but its suitability in its own right. The use of a probabilistic standard is concerning as under the current institutional arrangements some market participants feel it is very difficult to justify a transmission augmentation even when those participants feel there is an economic case for proceeding.

While the apparent higher level of economic rigour in Victoria arguably will reduce the risk of over-building, an overly high threshold is problematic if it is not matched by the arrangements needed to operate the network. If this concern is not addressed, then the Victorian arrangements will continue to be criticised as unresponsive to participants and customers' needs. This includes the view that a greater level of blackouts should be expected by customers in Victoria, as opposed to other states where a deterministic standard is used, and there will be less transfer capacity in real time than anticipated to service customer load.

*Load forecasts*

The NGF endorses the view that load forecast are a critical component in the planning process. We also understand the AEMC's conclusion that it is predictable that forecasters are likely to be conservative, and hence overestimate demand, due to the asymmetric risk associated with forecasting.

The issue the NGF has with this outcome is that the political consequences, and pressures, associated with an expectation that demand will be higher, and capacity shortages may arise, are also asymmetric. In these instances, it is market participants who bear the brunt of such concerns that there is under-investment in either transmission or generation and that community needs are not being meet. And it is generators who will be most affected by any concern regarding further interventions.

The NGF notes that there is an argument that this high level of conservatism in load forecasts could result in overbuilding of aspects of the transmission and distribution networks and result in upward pressure on network prices which are passed through to consumers. The NGF notes that a less conservative estimate in load forecast could lessen forecast retail price increases.

On that basis, concluding that conservatism is expected is not in itself an indicator that more realistic forecasts are not required. A historical analysis of AEMO forecasts demonstrates that the level of overestimation is beyond conservative to the point where it raises unnecessary alarm, indicates a false need for investment and distorts the calculation of marginal loss factors. We contend this is not appropriate and must be countered either by an improved process or a countervailing set of numbers.

**Connections**

The NGF supports the AEMC's conclusion that there is a need to revisit current connections arrangements. We comment on three key areas identified in the Directions Paper, including:

1. Negotiating issues
2. Chapters 5 & 6A
3. Complexities with the Victorian regime

<u>Negotiating issues</u>

*Negotiating process and framework*

The past few years have identified some practical limitations of the existing connections negotiating framework set out in the NER. In some areas, the incentives for NSPs may not deliver sufficiently commercial outcomes for the market. This may due to the lack of detail or direction around how to interpret or apply these framework elements. Identifying ways to strengthen those incentives and make the framework work practically can greatly improve the efficiency of the connection process.

One example is to look at the amount of time it takes to progress through the connection process. The timing for the various stages of the process is lengthy, ranging from 12-24 months to 36 months and longer, though there does not appear to be consistency in timing between jurisdictions.

Under NER rule 6A.9, NSPs and connection applicants are required to negotiate in good faith and in accordance with reasonable timeframes (NER cl.6A.9.5). The NGF considers there is a lack of clarity in the NER around what constitutes a "reasonable" timeline. It does not help that the incentives of

counter-parties negotiating a network connection may not share a common definition of "reasonableness" either. While it is important for the NER not to be overly prescriptive, having a clear guideline on how to interpret "reasonable" could help reduce the connection timelines from repeatedly slipping.

This is important as connecting parties can have very strong commercial incentives to obtain a timely and economic Connection Agreement; it is a key step in the overall investment process, with other commercial decisions hinging off this decision point. The NGF recognises that delays to the connection process can arise for a variety of reasons, including commercial negotiations, technical parameters, and plant specifications. However, the consequences of delay for an NSP are likely to have different commercial implications. It is important for the framework to recognise any differences and ensure that the commercial drivers on both counter-parties are well-matched.

The NGF therefore encourages the AEMC to identify and investigate incentive options for NSPs to help ensure the timely processing of Connection Applications and Offers to connect, as well as negotiating new connection agreements and progressing contract variations.

*Connection process*
Both generators and NSPs find steps in the current NER connection process challenging. Here are some of the challenges at the different stages.

*Pre-feasibility stage*
Connection applicants may be able to assess potential generation sites more efficiently if they could undertake pre-feasibility assessments on the transmission network. However, NSPs are often reluctant to release information to a prospective connection proponent without executing a Connection Investigation Agreement; the negotiation of which can take a significant amount of time.

While the AEMC has previously considered a Rule change related to the Confidentiality Provisions (Grid Australia Rule change proposal on "Confidentiality Provisions for Network Connections", 2009), prospective connecting parties still face difficulties when trying to access network information. The AEMC did not support the earlier Grid Australia proposal, concluding that the existing NER already allowed NSPs to disclose basic generation information regarding the size, location, completion date, primary technology and broad functions in respect of an application to connect. It determined a new clause was not required.

However, the existing challenges to access information suggest that there may be more practical problems than previously considered by the AEMC. It appears that the current NER provisions still restrict the flow of information. This is an important issue for the AEMC to consider in the context of the Review. At the very least, there may be value in publishing a guideline that provides both NSPs and prospective generators with sufficient comfort that the information they seek is accessible in a timely and economic manner.

This is an important issue because the treatment of confidential information is a broader problem that just accessing information at the pre-feasibility stage. Parties can face similar challenges throughout the connections process, though they seem more prominent at this early stage.

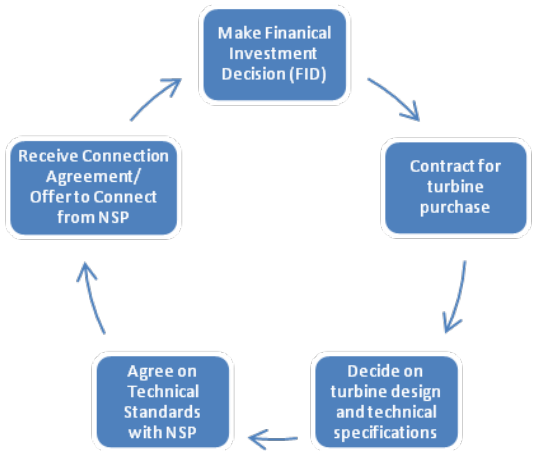
*Application stage*
The NGF finds the primary challenges at this stage relate to information provision and cost classification and allocation. These are discussed below.

*Information provision*
Under the current connection process, there is a misalignment between the data requirements at this stage and the underlying commercial realities of connecting parties. The NER require a substantial amount of commercial and technical information from the prospective generator at the Application

Stage. Chapter 5 of the NER (in particular clauses 5.3.3 and 5.3.4) requires the Connection Applicant to provide a list of technical data, commercial information and an application fee. However, the connection may not be in a commercial position to provide or negotiate such detailed information, e.g. the specific Technical Standards. This can create challenges for both connecting parties and NSPs.

The decision-making cycle set out in Figure 1 below illustrates one of the main difficulties investors face trying to finalise a new generation project. In order to get a Financial Investment Decision (FID), a generator can require a Connection Agreement. In order to finalise a Connection Agreement, the connecting generator and NSP need to agree on Technical Standards. To set the Technical Standards, the generator needs to select a turbine design and model. However, in order to purchase the turbines and confirm the make and model and obtain the detailed technical specifications, the investor requires FID. Here in lies the challenge for both connecting parties and NSPs to agree on technical specifics at the Application Stage.

**Figure 1 – Example of a generic generator investment decision-making process**




These information requirements can delay the connection process and affect the costs on both sides of the negotiation. For example, if a connecting party has a couple of possible turbine models, the NSP may need to undertake concurrent transmission modelling to test the system implications of each turbine design. Finding ways to reduce redundant system modelling can improve the efficiency of the connection process for both the connecting parties and NSPs.

The NGF encourages the AEMC to look at specific data requirements at the Application stage and investigate options to make them more realistic and constructive.

*Costs classification and allocation*

Allocating costs to a connection can be an opaque process. The NGF considers that connecting parties can have little visibility as to how NSPs calculate connection costs. This lack of transparency can make it challenging for a generator to link costs allocated by the NSP to the costs incurred (as required under the NER clause 6A.9.1). From experience, costs can also escalate beyond original estimates. A connecting party has little recourse to object to new costs in the middle of a connection process, given the commercial viability of the project is conditional on a successful network connection.

The NER (see at 5.3.3(c)(5)) also provide little guidance as to what constitutes "reasonable costs". NSPs can charge an application fee to cover:

> the reasonable costs of all work anticipated to arise from investigating the application to connect and preparing the associated offer to connect; and meet the reasonable costs anticipated to be incurred by AEMO and other Network Service Providers whose participation in the assessment of the application to connect will be required.

This broad definition gives way to different interpretations and applications across the NEM. For example, each NSP has its own approach for setting application fees.

The NGF supports options to improve information disclosure, including better transparency and clarity around cost calculations and allocations. This includes a realistic upfront disclosure of all expected costs in an easy to understand form, including information that substantiates forecast (and actual) expenses as well as any underlying assumptions.

*Connection stage*

Arriving at a Connection Agreement can be a long process. Delays can inefficiently increase connecting party and NSP costs. The NGF has found that a connecting party can spend a disproportionate amount of time negotiating standard ("boilerplate") terms and conditions, which are found in all connections contracts. Experience has generally shown that significant time and cost is necessary to bring the NSP's starting terms and conditions down into the range of what could be considered "commercially realistic". Given in most cases, the connecting party is negotiating with a natural monopoly, taking a more pragmatic approach to contract terms and conditions could result in more efficient outcomes for all counter-parties. However, the existing incentives in the NER do not appear to support such an outcome.

If the AEMC can find a way to improve these incentives, both NSPs as well as connecting parties benefit from the more efficient negotiation process.

Chapters 5 & 6A

The NGF agrees with the AEMC's conclusion that there is a lack of clarity and at times inconsistency with the connection arrangements set out in Chapters 5 and 6A. It is apparent that the related provisions do not always work together in a clear coherent manner. Problem areas include classification of transmission services, contestability, and augmentations and extensions.

*Classification of transmission services*

Across jurisdictions, there is a lack of clarity and consistency around the classification of transmission services. The current NER definitions for transmission services can be confusing. The NGF considers that the NER can greatly benefit from further guidance and clarification on both the definitions of various transmission services as well as the process for their classification.

In addition, there are further benefits available from clarifying the treatment of construction assets that are required to provide connection or shared network services. The NGF understands there is a distinction between the provision of a transmission service and the transmission assets that deliver that service; the construction of assets is not a transmission service in and of itself. This is not necessarily a consistently held view across the market, however. As such, the treatment of construction assets and transmission services is not uniform across the NEM. Investigating and clarifying this distinction in the NER can improve the operational efficiency of these rules.

*Contestability*

The NGF agrees with the AEMC's position that contestability is not a criterion for determining whether a transmission service is prescribed, negotiated or non-regulated. However, this principle is not applied consistently in the market place. For example, Grid Australia presents a different interpretation in its *Categorisation of Transmission Service Guidelines*. Paragraph 3.2 states:

> Extensions to connect a Transmission Customer or Generator would generally be offered as non-regulated transmission services, as these works are usually fully contestable.

This is particularly relevant in the context of separating the transmission service from the transmission asset. As discussed above, there is an important distinction between the provision of a transmission service and the assets that deliver the service. If the construction of assets is contestable, that does

not automatically mean the service delivered using those assets is also contestable. The position presented in Grid Australia's Guidelines does not appear to recognise this distinction.

The NER needs to provide greater clarity around determining contestability. The current provisions give rise to confusion, which makes negotiating a connection more challenging than it needs to be. Improvements to drafting can make the connection process more efficient for all counter-parties.

*Augmentations or extensions - obligation on TNSPs to connect*
There is confusion amongst market participants over NSP obligations to augment or extend the shared network to facilitate a connection. The AEMC's paper is not that clear on this issue either.

The NGF notes there is general agreement that under the NER, NSPs have a regulatory obligation to offer to provide a connection, or modify an existing connection, on fair and reasonable terms.[1] There is widespread confusion, however, over the scope of NSP obligations to augment or extend the shared network.[2] The relevant NER drafting on this subject matter is particularly confusing, particularly NER clause 5.3.6(k).[3]

With regards to augmentations or extensions, Grid Australia's *Categorisation of Transmission Services Guideline*[4] puts forward the view that under 5.3.6(k), NSPs are not obliged to extend their systems beyond existing limits in order to provide a connection.[5]

There are alternate interpretations of NER clause 5.3.6(k), however. NER clause 5.3.6(k) could confirm that an NSP will be obliged to extend its network if a Connection Agreement is in place. This clause could be interpreted to merely confirm that there must be a Connection Agreement in place before a connection can be effected, e.g. an NSP cannot be forced to augment the network without a Connection Agreement.

That there are different interpretations around the meaning of this particular clause contributes to the confusion around NSP obligations to provide connection services. Clarifying the purpose and meaning of this clause and investigating ways to improve the overall rules drafting in this area could greatly improve the operation of the connections process.

<u>Complexities with the Victorian regime</u>
The NGF supports the AEMC's review of the Victorian connections regime and in particular into Victorian contractual arrangements; third party liabilities; and obligations on generators in the shared network. The NGF notes that AEMO has commenced its own connections review, the AEMO Connections Initiative.

There are risks, however, with running parallel consultation processes on transmission, with substantially different timetables. The AEMO review and the AEMC's Review overlap in many areas. Having inconsistent recommendations between the reviews is likely to create greater confusion rather than deliver improvements to the connection processes in Victoria and the rest of the NEM. In addition, there is a risk that recommendations in Victoria may mean the connection process in that state may deviate even more substantially from the same process in the other NEM jurisdictions. Greater complexity in the Victorian connection arrangements could result in less effective locational signals for new projects.

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[1] See further NER clause 5.1.3, NEL s157, NER clauses 6A.1.3(1), 6.1.3(a)(2), 5.3.5(a) and 5.3.6(c).
[2] See further Grid Australia, *Categorisation of Transmission Services Guideline* at paragraph 3.1.
[3] 5.3.6(k) - Nothing in the Rules is to be read or construed as imposing an obligation on a Network Service Provider to effect an extension of a network unless that extension is required to effect or facilitate the connection of a Connection Applicant and the connection is the subject of a connection agreement.
[4] Grid Australia, *Categorisation of Transmission Services Guideline,* available at: http://www.gridaustralia.com.au/index.php?option=com_content&view=category&layout=blog&id=114&Itemid=230
[5] Grid Australia, Categorisation of Transmission Services Guideline, paragraph 3.1.

AEMO held a Victorian Connection Initiatives Industry Workshop on held on 28 April 2011. Here are some comments in response to that workshop that the NGF considers are relevant for the AEMC's TFR. The comments relate to the:

- context of the AEMO Connections Initiative;
- cost impacts of the proposed terminal station proposal; and
- schedule impacts of the proposed terminal station proposal.

*Context of AEMO Connections Initiative*

The context of AEMO's Connections Initiative is to document its current practices based on its interpretation of the current Rules. However, the NGF considers the matters being canvassed are broader than a simple interpretation of the current NER. In our view, key elements of what AEMO is contemplating, particularly the proposed approach to new terminal stations triggered by generator connection enquiries, appear to be inconsistent with the NER. We do not believe that the Rule changes AEMO is considering address those inconsistencies. Further, to the extent that material aspects of the NER are open to interpretation, we believe that the TFR process is the more appropriate means to address any such shortcomings.

A key observation is that significant elements of the Connection Initiative effectively re-open matters that have recently been the subject of significant and lengthy debate under the proposed SENE rule change process, and which have ultimately been met with strong resistance from various quarters. This is an example of an initiative in Victoria that may be at odds with concurrent AEMC processes. Progressing with the Victorian change at this time is inefficient, can create significant market uncertainty and expose participants to increased risk.

Close cooperation between the AEMC and AEMO during the Connections Initiative and the AEMC Review is critical to ensure consistency between the two processes.

*Specific Issues relating to the proposed terminal station proposal:*

We have grouped a few of our concerns under the two following categories, cost impacts and schedule impacts, discussed below.

<u>Cost Impacts</u>

*Cost Burden*

AEMO's proposal for new terminal stations has material and immediate cost impacts compared to a connection proponent's stand-alone alternative. The proposal is for any new terminal station to cater future connecting parties, being sized to accommodate forecast growth. There are some very real cost impacts for the initial connecting party however.

For example, the first party needs to acquire sufficient land to meet the future requirements, significantly increasing the reservation cost. Similarly, if the terminal station design also required easements to accommodate any potential future connections, land requirements could grow along side increasing costs accordingly. Additional costs also include any incremental civil works and earthing grids to facilitate future expansion. There is also currently a lack of clarity over what permitting obligations the initial connection proponent would need to bear. Finally, the first mover may need to investment in equipment to allow for future expansion; for example installation of busbars with higher ratings than required for their initial connection.

*Cost Allocation*

An equitable cost allocation methodology for AEMO's proposal needs to ensure that the allocation of pre-investment neither: makes the first mover worse off (including as to cost, schedule and certainty); nor imposes unacceptable stranding risk on consumers.

In relation to contributions by parties affecting subsequent connections, our preliminary observations include the following:

- to the extent that subsequent parties only contribute a proportion of payment profiles, and such payment profiles reflect declining charges over time (which is typically the default approach), those contributions do not reflect the true economic cost of the assets utilised by those subsequent parties; and
- to allow subsequent parties to "free ride", or otherwise contribute less than the true economic cost of the assets they utilise, can distort locational signals and potentially limit the ability to capture fully available efficiency gains.

In addition, the NGF notes that the negotiated transmission service principles embodied within NER clause 6A.9.1 essentially require that the price for such services should be based on the costs incurred in their provision, being no less than the avoided costs and no more than the stand-alone cost. To the extent that AEMO's terminal station proposal results in a proponent's costs exceeding those of its stand-alone alternative, it may be considered inconsistent with the current NER principles.

Schedule Impacts

As highlighted earlier in this submission, the connection process can easily become a lengthy one. The NGF would be reluctant to support a connection proposal that could further draw out the connection process. In particular, permitting (as noted above) and obtaining cost-benefit analyses, as provided for under AEMO's proposal, may add to the connection timeline.

Under AEMO's terminal station proposal, it is currently not clear when the TNSP would provide sufficient definition as to the location and ultimate arrangement for a new terminal station, triggered by a connection proponent's enquiry. The longer this process takes, the greater the uncertainty and potential for impacts on that proponent's development schedule, with potential consequences for project viability. Factors that prolong development schedules inevitably result in higher costs, whether directly or indirectly.

**Conclusion**

We look forward to your positive consideration of this submission and the formulation and the joint consideration of a broad range of options in the second stage of the review process through our representation on the consultative committee and other forums.

For further information please contact Mr Jamie Lowe of Loy Yang Marketing Management Company, telephone 03 9612 2236, or for connection issues Ms Hannah Cole of Origin, telephone, 02 8345 5500.

Yours faithfully

Malcolm Roberts
**Executive Director**