

Loy Yang Marketing Management Company Pty. Ltd.

AGL Hydro Pty. Ltd.

International Power (Hazelwood, Synergen, Pelican Point and Loy Yang B)

TRUenergy Pty. Ltd.

Flinders Power

Snowy Hydro

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Dr John Tamblyn
Chairman
AEMC
Level 16, 1 Margaret St,
SYDNEY NSW 2000

By email: submissions@aemc.gov.au

Dear Dr Tamblyn

AEMC Review of the National Transmission Planner Function

Thank you for the opportunity to provide some comments at this very early stage of the Review.

This is a joint submission made by a group of generators in the National electricity Market. It includes Loy Yang Marketing Management Company Pty Ltd, AGL Hydro Pty Ltd, International Power Australia, TRUenergy Pty Ltd, Flinders Power and Snowy Hydro (the Group). We have a combined generation capacity of 11,650 MW, which accounts for approximately 25% of all registered generation capacity serving the National Electricity Market. As a result, we have a large stake in the outcome of the Review, and we will be contributing our collective views throughout the process.

General

Members of the Group are all strong supporters of the policy decision to establish a national transmission planning function within the proposed AEMO. It has the potential to deliver



substantive benefits to the market and its participants; however, it also brings with it considerable risks for generators. If implemented badly, the National Transmission Planner (NTP) function and its associated planning processes will cause a further deterioration in what is already an extremely tough political, regulatory and market environment for future investment in generation capacity expansion.

Investment in transmission both complements and competes with investment in generation within the overall electricity supply chain. On the one hand, without certain or adequate transmission capability, a generator's access to the market can be unduly constrained. On the other hand, uneconomic investment in excessive transmission capability can, at least in the medium term, undermine market prices and depress generator values. The threat of excessive transmission investment, if considered material, will be a major deterrent to much needed new generation investment into the future.

Adequate supply reliability is a product of adequate investment in both generation and network infrastructure. As the scoping paper notes, at a high level the role of the enhanced planning process is to "promote more strategic and co-ordinated development of the transmission network and to assist in optimising investment between transmission and generation across the power system".

The Group supports this objective and is seeking an NTP process that will also contribute positively to the creation of a sustainable, commercially acceptable investment climate with appropriate risk allocation for both of these important forms of electricity infrastructure, thus promoting optimum economic efficiency in the industry in line with the statutory NEM objective.

Role of the Scoping Paper

The stated purpose of the Scoping Paper is to "seek comments from all relevant stakeholders on the scope of the issues that should be considered as part of the review."

The task given to the AEMC by the MCE is indeed a very challenging one. The MCE has adopted policy settings for the NEM market design and transmission access that in large part immunize the TNSPs from the adverse impacts of their decisions and actions on the market or network users.

The challenge facing the AEMC is to somehow devise a commercially robust national transmission planning process that will drive appropriate investment in the network while at the same time ensuring it:

- Creates adequate opportunities and a level playing field for non-network investment substitutes; and
- Does not create undue regulatory risk of asset stranding for generators through uneconomic investment in the network.

In addition, it must do this in conjunction with a network access regime that provides no clearly defined access rights for individual network users other than those directly related to network connection facilities.

In these circumstances, the Group believes it is far too early in the review process to be attempting to restrict the scope of the review or to be focusing in on matters of detail such as the potential alignment of TNSP regulatory periods.

We see no valid justification for constraining the review at this early stage. The COAG decision itself imposes very clear constraints on the AEMC and the matters that it can deliberate on and resolve within the review process. In our view, no further constraints should be applied until the AEMC has published a comprehensive Issues Paper that, as a minimum:

- Describes at a high level the manner in which the current regulatory arrangements for transmission investment and competitive market arrangements for generation investment operate to optimise investment between generation and transmission ;
- Identifies the strengths and weaknesses of the current framework to assist in defining the role of the transmission planning function in relation to these arrangements;
- Clearly identifies all of the subject matter for which the AEMC is required to make major decisions and recommendations in order to comply with the MCE Directive;
- Identifies and discusses all of the key issues it believes it should consider in reaching its decision or recommendation in each case; and
- Puts forward a range of high level options for each and identifies the inter-dependencies across separate decisions and recommendations.

Only then would it be appropriate for the AEMC to propose to limit the scope of the review and give reasons for its proposed exclusions. This would provide stakeholders with a much more informed basis on which to consider the AEMC's proposals in this respect.

With this in mind, this submission focuses on a range of matters that the Group would like to see the AEMC address in more detail in its upcoming Issues Paper, some of which are not referred to in the Scoping Paper. These are each briefly discussed below. In addition, we have provided some very brief answers to the specific questions raised in the Scoping Paper. These responses, which at least in part, repeat some of the comments made below, are shown in Attachment 1.

VENCorp Transmission Planning Function

The Group understands that consideration is being given by the MCE to the possible transfer of VENCorp TNSP functions including its electricity network planning responsibilities to AEMO. While we recognize that this is outside the current Terms of Reference provided to the AEMC by the MCE for this Review, if there is any likelihood of this transfer of responsibilities occurring, the Group would be keen for the AEMC to consider its implications as part of this Review.

From the Group's perspective, even though it may be desirable for the Victorian TNSP function and the NTP function to share specialist technical resources within AEMO, the Group would expect the management and corporate governance arrangements for each function would be quite separate of one another, and there would be an "arms-length" relationship between them that parallels the relationship between the NTP and the TNSPs in other States.

Therefore, the Group requests the AEMC to seek further clarification in respect of this matter and, if appropriate, seek MCE endorsement to include consideration of this issue as part of the Review. The outcome of this work may well assist the MCE in its deliberations on this policy issue.

Competitive Neutrality between Generation and Network Investments

Over the past few years, there has been considerable debate amongst stakeholders about the short-comings of the current access model for electricity transmission and its potentially adverse impact on the investment climate for new generation projects. The MCE has reconfirmed its commitment to the current model. It is now up to the AEMC via the ruling making process to address its main weaknesses.

From a generator's perspective, the two primary requirements in this respect are:

- Creating competitive neutrality between all generation and transmission investments; and
- Enhancing the network access arrangements for generators.

Competitive neutrality between all generation and transmission investments requires, as a minimum:

- Long term economic transmission pricing signals to encourage efficient generation investment by ensuring transmission costs are considered along with all the other locational signals for new generation investments;
- Alignment of the reliability criteria used for transmission investment decision-making with the level of reliability the market can support via new investment in generation taking into account the prevailing price capping arrangements in the wholesale market; and
- Proper recognition in the transmission planning process of the dynamic nature of investment decision-making for new generation in response to market signals, such that transmission investment decisions neither pre-empt nor crowd out efficient investment in new generation.

While the first requirement is a transmission pricing matter, the latter two are matters that are germane to either or both of the AEMC Review of the national transmission planner function and the Reliability Panel's Review of transmission reliability standards. There are a range of issues arising out of these requirements that the AEMC should be addressing in its Issues Paper that include at least the following:

- The interrelationships between the AEMC Review and the Reliability Panel Review and, in particular, the potential for outcomes from the AEMC Review process to require changes to be made to the Terms of Reference for the Reliability Panel Review.
- Reconciling the MCE's requirement for a long term transmission development plan with the commercial reality of generation investment decision-making where there are very strong drivers to minimize the time between a commitment to proceed with the investment and its initial commercial production.
- Developing and implementing prudent network planning principles and procedures that take proper account of future risks and uncertainties in much the same way as prudent generation investors must do. Arguably, current planning procedures and planning criteria used by the majority of TNSPs fall short of this ideal.

From the Group's perspective, these latter two requirements are arguably the most important issues for the AEMC to address in its deliberations throughout this Review. Current transmission planning methodologies have evolved very little since the days of the vertically integrated utilities that had monopoly control over almost the entire supply chain from primary fuel source to consumer. With the advent of the competitive market, the dispatch of the power system involves a considerable amount of decentralized decision-making by individual market participants in response to the ever-changing dynamics of the market.

In these circumstances, and in the absence of clearly defined transmission rights for network users, the transmission planning process needs to define on behalf of network users what is in effect an optimal economic expansion plan for the network in accord with the NEM objective taking into account a plausible range of potential future market dynamics to the extent that they can be defined without distorting the competitive neutrality between competing generation investments. This definition of the planning problem facing the NTP is quite different to that faced by utilities before the advent of the competitive market, and, arguably, the traditional planning methodologies still being used by most TNSPs are no longer appropriate.

Scope of the Functions & Responsibilities of the National Transmission Planner

The basic thrust of the COAG decision, the MCE's response to the ERIG recommendations on transmission, and the MCE's directive to the AEMC all point towards introducing a national transmission planning function that results in more cohesiveness and consistency in transmission planning across the NEM whilst still leaving the ultimate responsibility and accountability for actual network investment decisions with the TNSPs.

Within this broad framework, the role of the NTP function could be restricted to merely the introduction of a rather limited transmission planning and reporting process, thus delivering only marginal improvements on the existing ANTS process. However, the Group believes that there may be considerable benefits for the market and other stakeholders generally if the NTP function:

- Took on a much stronger leadership role in national transmission planning, with the outcomes of the NTP process playing an important role in the economic regulation of the TNSPs; and
- Included a range of other functions and responsibilities that are currently addressed by ad-hoc coordination arrangements between TNSPs; by NEMMCO's system operator function, and in some cases, they are not being done at all.

This latter group of functions includes a range of matters that directly impact on either the overall design capabilities of the network or its operating performance, and include at least the following:

NCAS planning and procurement: - network control ancillary services play a vital role in complementing and supporting the network infrastructure provided by TNSPs to ensure that the level of network services required by the market are indeed met. NCAS planning and procurement is therefore an integral part of the network development process, and the extent to which externally sourced NCAS

is to contribute to the overall performance of the network is a network planning decision.

Coordination of cross-boundary TNSP project planning and network operations issues: - The NTP could be given the powers necessary to act as an independent broker in coordinating cross-border planning studies and individual cross-border project assessments. In addition, it could also play an important role in protection coordination, establishing and maintaining operational communication protocols between all network operators, and maintaining consistency between the assumed capability of the network in system operations and its assumed design capability as applied in the network planning process.

Monitoring the technical performance of TNSPs and their networks: - One of the real dangers of establishing an NTP function is that its knowledge base of the details of each of the State-based transmission networks and their design and operational peculiarities will not be comparable with that of the resident TNSP. This could be at least partially addressed by giving the NTP a TNSP monitoring role which both requires it to develop such a knowledge base and gives it the means of acquiring it. This would have the added value of bolstering TNSP accountability and it would give other stakeholders added comfort about the quality of the service being provided by TNSPs.

Generic constraint equations for use in the NMDE: - Arguably, it should not be the role of the system operator to define the technical envelope of the power system. This is essentially a network design function best undertaken by those with an intimate knowledge of the network and its design capability.

The Group is proposing consideration of the transfer of some of these functions from System Operations to the NTP within AEMO because it expects the corporate governance arrangements for each of these functions will be different, and the relationship between them within AEMO will be quite transparent to external stakeholders. The Group therefore considers these potential internal transfers within AEMO are just as important as potential division of responsibilities between TNSPs and the NTP.

Transparency of Network Technical and Planning Data

As a general principle, the Group believes that there should be enough information in the public domain to enable third parties to fully replicate NTP and TNSP detailed network planning studies and, if they so desire, extend those studies by exploring other network and non-network solutions to meet the needs of the market.

The current levels of transparency of both the technical parameters of the network and the detailed planning data used by TNSPs in their network studies are insufficient to satisfy the above requirement. The Group believes the AEMC Review should consider making it the responsibility of the NTP to collect, validate and publish all of this information and provide, on a fee for service basis, support to third parties in their interpretation and use of that information in independent planning studies.

To be able to undertake this role, the NTP would probably need access to statutory discovery powers, either directly or via one of the existing regulatory institutions which already has such powers.

Generic planning studies and their role in the planning process

One of the primary criticisms of the current transmission planning processes within each of the TNSPs is that they focus on State-based needs only. The NTP function is expected to overcome this by applying a national perspective to the ever-growing needs of the market. An integral part of this role could well be to undertake background generic studies on a whole range of topics that would both educate stakeholders and provide basic input into the preparation of the national transmission development plan.

The following list is not intended to be exhaustive, but merely provide an indication of the broad range of subject matter which the NTP could investigate and then publish relevant information for the market:

- Differential cost of generation by location versus the costs of transmission
- Optimization of the value of transmission easements – their procurement and use
- Long term grid development and use of AC versus DC
- The potential for the cost effective use of NCAS in the NEM
- Trends in Flexible AC Transmission System (FACTS) devices and their potential application in the NEM
- Security issues and network topology
- Non-network solutions and their potential to contribute to a reliable network service

Through this process, the TNP could set a very clear direction for grid development that the TNSPs would be expected to follow in their grid expansion plans.

Network investment as a form of market intervention

As previously stated, the Group expects the new NTP process to result in a more or less level playing field for future generation and transmission investment, and this principle of competitive neutrality should also be extended to network operations decisions, particularly where these are made by AEMO and not the relevant TNSP.

Where AEMO overrides the wishes of the TNSP on a planned network outage for example, this is akin to a security direction by AEMO and it should have all the same consequential pricing and compensation effects as a security direction to a generator.

A less obvious but nevertheless equally valid application of the same principle should also occur where “uneconomic” investment in the network is triggered by security or reliability standards that are more stringent than those implied by the prevailing market price capping arrangements.

The Group requests the AEMC to consider how this principle can and will be applied in the NEM in the future and the role the NTP function should play vis a vis the system operations function in AEMO and the TNSPs.

Scope of the “Main Transmission Network” & “Regulated Transmission Network Services”

Both the scope of the “main transmission network” and the scope of each TNSP’s “regulated transmission network services” play a role in defining what should come

under the purview of the NTP in the preparation of its national transmission development plan.

In some areas of the network, sub-transmission is deemed to be part of the "main transmission system" that is subject to NEMMCO operational control. If the amount of scheduled generation embedded in the sub-transmission or distribution networks or scheduled demand side response grows over time, the boundary of the "main transmission system" for centralized network planning and/or system operations may need to be modified. The Group believes this may be an opportune time to give some consideration to this issue, and to decide what role if any role the NTP should play in maintaining a watching brief on this into the future.

We would be pleased to discuss any of the matters raised in this submission with you or your staff in more detail at your convenience if you wish, and if you have any questions regarding this submission, please contact the undersigned on (03) 8628 1280.

Yours faithfully,



Ben Skinner
Regulatory Manager, Wholesale Markets
TRUenergy Pty Ltd
(on behalf of the participants listed)

<p>.....</p> <p>Ken Thompson General Manager Loy Yang Marketing Management Company Pty Ltd</p>	<p>.....</p> <p>Alex Cruickshank Manager NEM Development AGL Hydro Pty Ltd</p>
<p>.....</p> <p>Ben Skinner Regulatory Manager, Wholesale Markets TRUenergy Pty Ltd</p>	<p>.....</p> <p>David Hoch Regulatory Policy Manger International Power</p>
<p>.....</p> <p>Kevin Ly Manager Market & Regulatory Strategy Snowy Hydro</p>	<p>.....</p> <p>Reza Evans Manager Energy Policy & Regulation Flinders Power</p>

AEMC Scoping Paper: Questions for Consultation

The Commission is seeking general comments on the issues identified by COAG, the approach to assessing the enhanced arrangements for network planning against the NEM objective, and the basis for identifying and selecting between options for the implementation of those enhanced arrangements.

COAG has made its policy decision and the AEMC must comply with the MCE's instructions in this respect. The required long term nature of the planning arrangements (not less than 10 years) however can only be satisfied properly if the planning process appropriately addresses future uncertainty. Current transmission planning processes and cost benefit analyses of specific network investment proposals focus almost entirely on the initial 10-years or so of the economic life of the proposed investment, but assume a residual value at the end of the planning period that ignores the risk of asset stranding due to changes in market conditions, technology advances and so on.

The Commission is seeking respondents' views on the appropriate governance, consultation and communication arrangements for the National Transmission Planner.

Governance should be addressed as part of the overall governance arrangements for AEMO, and the consultation and communication arrangements for the NTP are more issues of detail that can be readily addressed when the fundamentals of the NTP planning process have been resolved. As a general principle, the Group favours governance arrangements that provide for more direct stakeholder participation such as those currently employed by VENCorp.

The Commission is interested in views on the appropriate scope of the review with respect to planning arrangements within jurisdictions, and their interaction with national planning arrangements.

As a general principle, if the NTP's findings and recommendations are to displace the role of the Regulatory Test, then clearly there is no longer any room for separate State-based planning processes or investment criteria that are inconsistent with the national planning arrangements. Therefore, ideally, all State-based arrangements should be scrapped and all TNSPs should transition to the adoption of planning principles and procedures that comply with the NTP process. One possible exception to this could be the treatment of connection assets, the access agreements for which are quite specific, directly tied to the connection assets in place, and are contract-based.

The Commission is interested in respondents' views on whether the principles for identifying the national transmission system have been resolved and correctly applied, or whether there is further work to be done to identify the appropriate area of focus within the transmission network for the National Transmission Planner.

The issue is not the scope of the "system"; it is the scope of the network services or their equivalent that are deemed to be the obligation of the TNSPs and which are subject to economic regulation by the AER. This has never been properly defined because it potentially extends beyond network facilities to include services provided by both generators and

consumers that are integral to the overall performance of the network and the delivery of network services that comply with mandated standards.

For example, the current approach to economic regulation of the transmission network allows TNSPs to seek cost recovery for non-network solutions to augmenting network capacity if they so desire. However, it remains unclear as to whether or not it is the responsibility of the TNSP to ensure the more cost effective non-network solution in fact proceeds on a timely basis when such an option has been identified.

The relevance of an aspect of the network should be considered on the basis of whether it has had, or might reasonably be expected to have, an influence on the operation of the National Electricity Market.

The Commission is interested in comments on the appropriate institutional arrangements for the last resort planning power, and the implications for the functions of the National Transmission Planner.

As a general principle, the LRPP should be fully integrated into the NTP planning process. From our perspective, there doesn't appear to be any justification for creating what would be in effect two separate national transmission planning functions.

The Commission is interested in respondents' views on how best to ensure effective interaction between TNSPs and the National Transmission Planner, while also ensuring that the National Transmission Planner adds value through a stronger focus on the national network.

Firstly, a fundamental principle of the national planning process should be absolute transparency of both the planning data and the planning methodology so that independent parties can duplicate the process and verify the outcomes. Only then are third parties in a position to explore other network and/or non-network solutions to satisfy the growing demand for network related services.

Secondly, the NTP should coordinate and oversee all aspects of network planning, design and operation that require coordination between two or more TNSPs, and the NTP should have total control over those arrangements.

Thirdly, the NTP should be given responsibility to oversee and report on TNSP implementation of "good industry practice" in all technical aspects of network planning, design, operation and asset management. This is not intended to be part of the economic regulation of the network; its aim is to provide an independent technically-focused assessment of TNSP's competencies and practices that is accessible by market participants, whilst also ensuring the NTP has a very comprehensive knowledge base of the State networks and the TNSPs that operate and manage them.

Fourthly, all TNSPs should be required to give detailed reasons if they make planning decisions that are at odds with those of the NTP as defined in the national transmission development plan.

Determining the appropriate approach to alignment will entail consideration of both the costs and benefits of alignment. Respondents' views are sought on the costs and benefits which should be considered within the review.

See below

The Commission is interested in respondents views whether simultaneous revenue resets would assist the AER in forming views on efficient investment requirements from a national perspective. If so, what approaches to the conduct of the review would best realise that benefit?

The Group remains to be convinced that aligning TNSP revenue resets has any real merit. Circumstances are continually changing and there's no guarantee that the investment outlook for interconnections at the time of the revenue reset will remain valid for the duration of the regulatory period. If the outlook were to be as stable as this, then there should be no problem with staggered revenue resets in any event.

The Commission is seeking views on where the greatest synergies may arise, and whether these are likely to be material enough to justify modification to the timetable for reviews. The Commission also seeks views on what disadvantages may arise from aligning the timetables.

See above

The Commission is seeking respondents' views on the problems in the definition of market benefits, or the application of that definition, which lead to a failure to consider broader market benefits. The Commission is also seeking views on the responses that should be considered.

Until we have a better understanding of how the AEMC proposes the regulatory test fits into the national planning process in the future, we would like to reserve our position on this issue.

The Commission is interested in views on how the review should address the interaction between the new National Transmission Plan, the institutional arrangements for the transmission last resort planning power, and the institutional arrangements for the new network planning and consultation process.

They should all be integral parts of a single national transmission planning process.