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7 September 2007

Dr John Tamblyn  
Chairman  
Australian Energy Market Commission  
PO Box A2449,  
SYDNEY SOUTH NSW 1235

Dear John

**VENCORP RESPONSE ON THE AEMC SCOPING PAPER FOR THE  
NATIONAL TRANSMISSION PLANNING ARRANGEMENTS**

VENCORP welcomes the opportunity to make a submission on the Australian Energy Market Commission's (AEMC) Scoping Paper regarding the implementation arrangements for the new National Electricity Transmission Planning function to be undertaken by the new Australian Energy Market Operator (AEMO).

The focus of VENCORP's submission is on the following matters:

- **Governance** – The governance arrangements for the National Transmission Planning function must be established by the AEMO. It will therefore clearly be accountable to the AEMO Board. It should not be established as a separate organisation under the National Electricity Law (NEL) or National Electricity Rules (NER)
- **Roles and Functions** – One of the primary roles of the AEMO is to plan the National Energy Grid (NEG) incorporating both the electricity and gas transmission systems.
- **Approach to Planning** – The AEMO must plan the NEG on an economic basis having regard to specific reliability requirements.

VENCORP believes that this matter is extremely important and the AEMC must ensure that its Issues Paper focuses on the Principles that the AEMO must consider when fulfilling its obligations.

Should you have any questions on anything contained within the submission please do not hesitate to contact myself on (03) 8664 6545 or Louis Tirpcou on (03) 8664 6615.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'M. Zema'.

Matt Zema  
**Chief Executive Officer**  
Att.

# VENCORP SUBMISSION TO THE AEMC SCOPING PAPER FOR THE NATIONAL TRANSMISSION PLANNING ARRANGEMENTS

## Executive Summary

On 3 August 2007, the Australian Energy Markets Commission (AEMC) published a Scoping Paper seeking comments on the scope and content of a Ministerial Council on Energy (MCE) directed review of the National Transmission Planning Arrangements. The intent of the Scoping Paper is to assist the AEMC refine its approach to the review which will be incorporated in its Issues Paper to be published in October.

The review is aimed at developing a detailed implementation plan for the national electricity transmission planning function, including the most appropriate legislative amendments and National Electricity Rules (NER) changes to implement Council of Australian Governments' (COAG) response to Energy Reform Implementation Group's (ERIG) transmission planning recommendations.

VENCorp performs a number of key roles and functions in the national energy market and therefore has a unique insight into the workings and operations of both electricity and gas markets (the energy market) including

- Planning and procuring the Victorian electricity transmission network;
- Planning the Victorian gas transmission network;
- Operating the Victorian wholesale gas market and system;
- Supporting the gas wholesale and retail markets in South Australia and Western Australia; and
- Administering the gas retail markets in Queensland and Victoria.

The main focus of this submission is on the following:

- **Governance** – The governance arrangements for the National Transmission Planning function must be established by the Australian Energy Market Operator. It will therefore clearly be accountable to the AEMO Board. It should not be established as a separate organisation under the National Electricity Law (NEL) or National Electricity Rules (NER);
- **Roles and Functions** – One of the primary roles of the AEMO is to plan the National Energy Grid (NEG) incorporating both the electricity and gas transmission systems. This means that the AEMO will be:
  - Undertaking power system analysis and market benefit estimation, rather than relying upon asset owners; and
  - Planning across the whole of the national transmission network and all augmentation projects, rather than arbitrarily portioning the network into 'national' and 'local' and projects into 'reliability' and 'market benefits'.

- **Approach to Planning** – The AEMO must plan the NEG on an economic basis having regard to specific reliability needs and requirements. Therefore, the test that it should adopt would be:
  - Maximising the net market benefits; or
  - Where part or all of the reason for the project is to meet an objective and identifiable reliability obligation, to maximise the net market benefits or minimise the net market cost.

# Introduction

## *Background*

On 3 August 2007, the AEMC published a Scoping Paper seeking comments on the scope and content of a MCE directed review of the National Transmission Planning Arrangements. The intent of the Scoping Paper is to assist the AEMC refine its approach to the review which will be incorporated into its Issues Paper to be published in October.

It is noted that the AEMC has been directed by the MCE to:<sup>1</sup>

Conduct a review into the development of a detailed implementation plan for the national electricity transmission planning function [within NEMO], including the most appropriate legislative amendments and Rule-changes to implement COAG's response to ERIG's Electricity Transmission and Planning Recommendations ... The AEMC's advice must be consistent with COAG's response.

COAG's response notes that, as part of this task, the AEMC should review:

- Development of a strategic National Transmission Network Development Plan (NTNDP);
- Amalgamating the Regulatory Test criteria of reliability benefits and market benefits and broadening the latter's definition to include national market benefits; and
- Consideration of alignment of regulatory periods to further reinforce the national character of planning arrangements.

COAG also noted a number of constraints to the planning function, including that:

- Where possible, the new regime must at a minimum be no slower than the present time taken to gain regulatory approval for transmission investment;
- Provision for urgent and unforeseen investment to be made, when required;
- The NTNDP must not be binding on transmission companies;
- The AER is to have regard to the NTNDP when making revenue determinations, but the AER is not to be bound;
- Preservation of the jurisdictional roles of VENCORP and ESIPC; and
- Leaves accountability for transmission investment, operation and performance with transmission service providers.

The AEMC has divided the task into three sub-issues – the design of the planning function, the form of the regulatory test and the matter of whether Transmission Network Service Provider (TNSP) revenue cap reviews should be aligned to improve the national character of transmission planning. These matters are addressed in turn below. First, however, two matters that provide important context to the AEMC's review are addressed, namely the likely future role of the AEMO and the objective of the planning reforms.

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<sup>1</sup> The AEMC has also been directed to conduct a review into reliability standards, but this is the subject of a separate consultation process.

### *The roles and functions of AEMO*

While the AEMC's has been asked to report upon the AEMO, it is limited to the implementation arrangements for the new National Transmission Planning arrangements and associated matters. It is important for the design of these arrangements to take account of the full set of functions that the AEMO is likely to perform in the future. COAG has already agreed that AEMO:

- Will take responsibility for operating the national electricity market, taking over the role that is currently performed by NEMMCO;
- Will perform the role of the Gas Market Leader's Group as the proposed Gas Market Operator, and as part of this function is expected to subsume the gas market and system operation functions currently performed by VENCORP and the retail market functions performed by GMC and REMCO; and
- Will have planning responsibilities in relation to both the national electricity market and the national gas market.

In the Victorian context, it is envisaged that where VENCORP performs gas market and system operation alongside electricity and gas transmission planning functions, all these roles will be performed by the AEMO.

This issue was raised during VENCORP's statutory review, conducted in 2006. It noted that it is necessary to ensure functions currently performed by VENCORP remain within a single organisation that has a sufficient critical mass to attract and retain the necessary expertise. On this point the Allen Consulting Group, who conducted the abovementioned review, concluded that:<sup>2</sup>

This review of the functions of the Victorian Energy Networks Corporation (VENCORP) has found that the Victorian energy industry and the community generally value its key current functions. Overall, VENCORP is considered to undertake these functions effectively and efficiently.

In relation to VENCORP's independent network planning function, it identified that:<sup>3</sup>

Importantly, we also note that the major network users in Victoria are strongly supportive of VENCORP retaining its current role as TNSP and hence function as network planner.

The Allen Consulting Group recommended that the Victorian Government consider transferring VENCORP's functions to a new national institution, if an appropriate institution emerged from the national energy reforms. However, it also cautioned the transfer of only some of VENCORP's functions to another entity – such as its gas functions – but retention of others within a Victorian entity – such as the electricity transmission planning functions – may leave the latter organisation with insufficient critical mass to undertake those functions in an efficient and effective manner. It also noted that any transfer of functions needs to be carefully managed to minimise the loss of expertise from VENCORP.

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<sup>2</sup> Allen Consulting Group, 2006, Statutory Review of Victorian Energy Networks Corporation, Report to the Minister for Energy Industries, November, p.v.

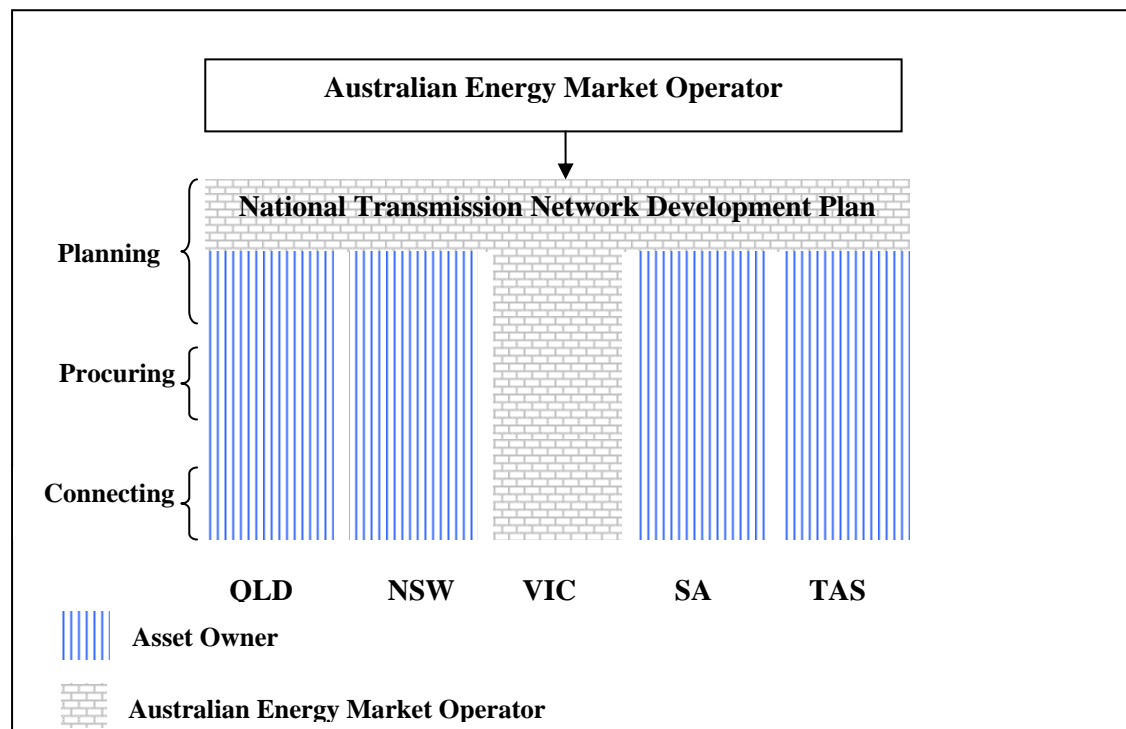
<sup>3</sup> Allen Consulting Group, Op. Cit., p.40.

Given the Victorian Government's strong support for the continuation of independent electricity planning in Victoria, and the expectation that VENCORP's gas functions would transfer to the AEMO, the most appropriate outcome would be for VENCORP's electricity transmission planning functions to also transfer to the AEMO. In addition, maintaining an organisation that has critical mass it will eliminate the unnecessary duplication in planning activities that would have occurred if there were an independent planner at the Victorian level and a second national independent planning entity.

It is likely, therefore, that the AEMO will have varying levels of responsibility for planning across the different jurisdictions, being the National Transmission Planner in all jurisdictions but also undertaking additional responsibilities in others.

In summary, this diagrammatic representation of how these transmission planning related functions of AEMO will differ between jurisdictions is set out in Figure 1.

Figure 1 – Roles and Functions of the AEMO and Asset Owners



### *Objectives of the planning reforms*

VENCORP also considers it important for the AEMC's review to adopt, at the outset, a clear view of the objectives of the transmission planning reforms that COAG have agreed to, and ensure that the implementation plan that is derived meets those objectives. VENCORP believes that it is clear that COAG intends the new planning functions to represent a material improvement, and hence a material change, to the current planning arrangements, with COAG noting that:<sup>4</sup>

COAG has agreed to establish an enhanced planning process for the national electricity transmission network to ensure a more strategic and nationally coordinated approach to transmission network

<sup>4</sup> COAG Communique, Attachment A.

development, providing guidance to private and public investors to help optimise investment between transmission and generation across the power system.

COAG's considerations in this regard were informed by the ERIG's recommendations and findings, which documented a number of concerns with the current planning arrangements. A key concern to ERIG was that a number of factors combine to limit the likelihood that the transmission network will be developed on an efficient, national basis, namely:

- The tendency for the TNSPs to focus on the impacts only within their own networks by adopting an overly restrictive definition of what is a material inter-network effect (pp.172-175), with ERIG noting its consultant's advice that not all augmentations will be mutually beneficial to adjoining TNSPs (pp.175-176);
- That the combination of mandated reliability obligations applying to many TNSPs and the circumscribed process that exists at present under the regulatory test for reliability augmentations has provided an incentive for such TNSPs to focus on reliability-only projects, to the exclusion of so-called 'market benefit' projects or even enhancements to reliability projects that may meet the relevant minimum reliability requirement but also deliver other market benefits that justify a higher cost; and
- The absence of clear accountabilities on any party to plan and develop new interconnectors since that role was taken from the Inter Regional Planning Committee (IRPC) as a result of the Network and Distributed Resources code changes of March 2002.

A second concern noted by ERIG was that the lack (or perceived lack) of transparency planning and planning decisions in many jurisdictions were creating uncertainty for investors in the competitive sector, which may stifle investment. It observed:<sup>5</sup>

As noted in the discussion on the Regulatory Test (above), TRUenergy considers that commercial certainty is undermined when the transmission planner is not independent of asset ownership and/or may not be seen as fully independent (TRUenergy 2006).

Snowy Hydro is of the opinion that separation of the transmission planning function from transmission asset ownership and control would deliver market benefits through increased quality and transparency of the information that forms the basis on which investors make investment decisions. In its submission to ERIG, Snowy Hydro expressed the view that information asymmetry between TNSPs and the rest of the market exacerbates this risk.

ERIG agrees that there is a conflict of interest issue where the proponent of a project is also responsible for project assessment and the application of the Regulatory Test. This is compounded where the planning criteria applied to the project are open to a variety of interpretations, the data to analyse the project is not fully available to the market and there is limited specialist expertise to make an independent assessment.

ERIG's concern about the perception of a conflict of interest in transmission decision was particularly strong where the relevant TNSP and generators were owned by the same government (p.169-170).

Clearly, ERIG did not consider the existing Annual National Transmission Statement (ANTS) process as undertaken by NEMMCO to remedy these concerns. It observed that NEMMCO is heavily reliant upon information from the TNS Annual Planning Reports to produce the ANTS (p.148). The key change to existing arrangements envisaged by ERIG (and COAG) is that the

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<sup>5</sup> ERIG, p.169.

degree of planning activities that would be undertaken by the national planner (AEMO) would increase substantially compared to the current model, and hence create the environment of transparency and accountability sought:<sup>6</sup>

In addition to the independent and transparent provision of information, the [National Transmission Planner] model would strengthen national co-ordination through allocating a broader set of responsibilities and resources to the National Transmission Planner.

...

Allocating responsibility for actually undertaking network analysis and planning in the development of the longer term plan will increase the resources required by the National Transmission Planner when compared to the coordination role in the modified status quo discussed above. It will, however, ensure a clear focus on integrating national network development and remove any difference in the assessment of intra- versus inter-regional investment and investment aimed at providing reliability versus market benefits. This body would also have the capability to provide a credible, independent source of advice to the market and the regulatory regime.

More specifically, fundamental to the reforms are that AEMO would have the necessary information and resources to undertake its own independent network studies. This would identify future augmentation options independently (albeit subject to consultation requirements), and hence create an environment where the TNSPs' planning decisions are open to public scrutiny. This end point has implications for how the functions of the AEMO are defined, the ability or power for AEMO to gain the information that it requires and the resources necessary to complete the task. These matters are discussed further below.

One of the AEMC's apparent concerns is to ensure that the AEMO activities not duplicate the planning activities of the TNSPs.<sup>7</sup> It may be the case that, where TNSPs choose to continue to undertake their own planning activities (rather than relying upon the AEMO for this purpose), then there may be a degree of duplication of the planning activities of the TNSPs and those of the AEMO. However, this may serve a useful purpose – which is to ensure that the TNSPs' decisions are able to be subject to public scrutiny, hence improving the market's confidence in planning decisions as well as encouraging better planning decisions.

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<sup>6</sup> ERIG, pp.191-192.

<sup>7</sup> See, for example, Scoping Paper, p.10 ('substantial duplication of planning work with little added value') and p.11 ('it would add little value if it simply replicated or duplicated that work').



## Governance

The governance arrangements for the National Transmission Planning function must be established by the Australian Energy Market Operator. It will therefore clearly be accountable to the AEMO Board. It should not be established as a separate organisation under the National Electricity Law (NEL) or National Electricity Rules (NER)

The AEMC has sought comments on the appropriate governance arrangements for the National Transmission Planning function.

VENCorp notes that COAG has decided that AEMO will perform the National Transmission Planning role and that the governance arrangements of AEMO (including the composition and appointment process of its board, and its legal structure) are the subject of a separate work stream. Accordingly, the Board of AEMO formally will be the entity that decides on form of the National Transmission Network Development Plan.

Therefore the governance arrangements for the National Transmission Planning function must be established by the Australian Energy Market Operator. It will therefore clearly be accountable to the AEMO Board. It should not be established as a separate organisation under the National Electricity Law (NEL) or National Electricity Rules (NER);

It is expected that the Board of AEMO may benefit from committees or advisory boards to advise it on matters that are of importance to its role, such as on technical matters related to the development of the National Transmission Network Development Plan. However, as it is the board that is ultimately accountable for the Plan, it is appropriate for the Board to determine whatever committee or advisory board structure would best assist its decision making.

As an example, the Board of VENCORP has established a number of advisory panels that include market participants to advise on various matters and so assist its decision making, but where the structure and composition of these panels was a matter for the Board. Accordingly, VENCORP does not consider it appropriate to include in the NEL or NER provisions relating specifically to governance of the National Transmission Planning function.

However, the AEMC should ensure that the NEL or NER enshrines the obligation for the National Transmission Network Development Plan to be open to consultation with interested parties. In common with like processes elsewhere, it would be expected that the NER set out some form of consultation requirement or process.

## AEMO's National Transmission Planning functions

The primary role of the AEMO is to plan the National Energy Grid (NEG) incorporating both the electricity and gas transmission systems.

### *Planning the National Transmission System*

As noted previously for COAG's objectives for the National Transmission Planning functions to be achieved, the AEMO's functions will need to be sufficiently broad, and it will need to be provided with sufficient powers in information gathering for it to be able to undertake the planning-related analysis.

As the AEMC's Scoping Paper has highlighted, there are a number of issues that need to be addressed when designing this function, which are:

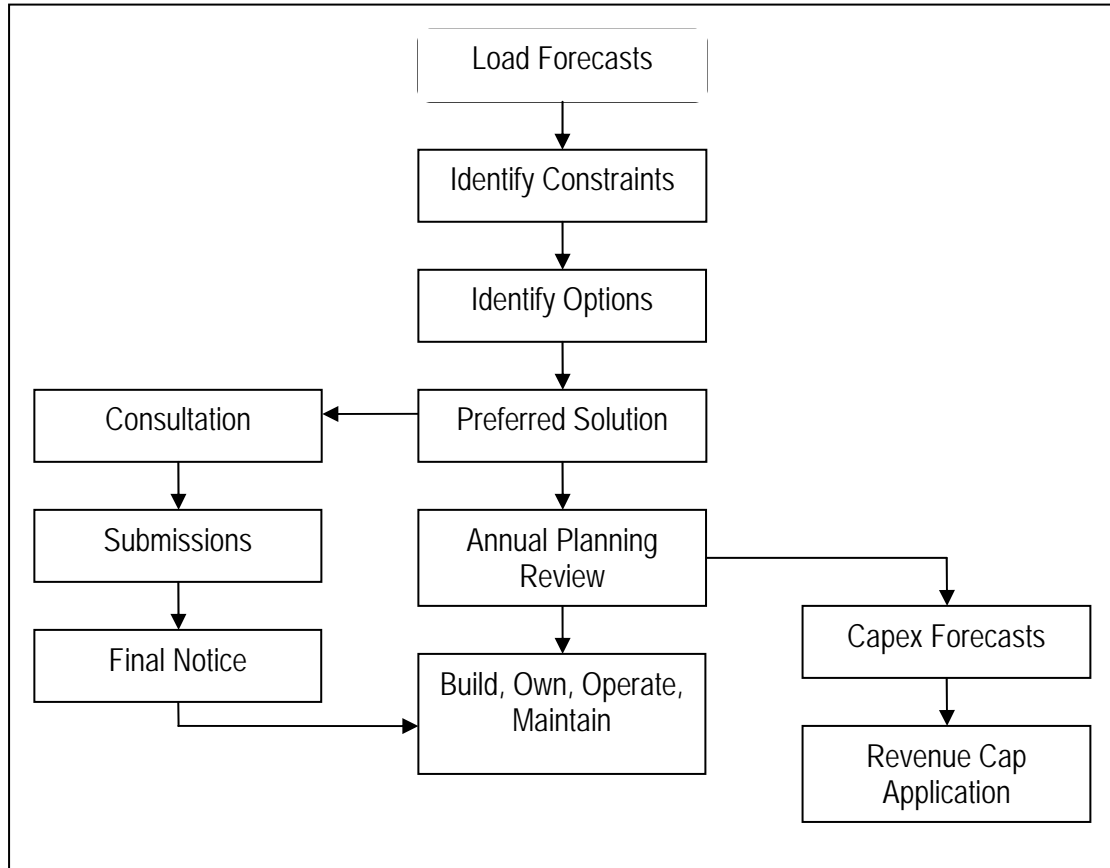
- The detailed specification of the relative roles of the AEMO and the TNSPs when developing the National Transmission Network Development Plan, including the classes of projects and/or parts of the network that are to be covered in the Plan;
- The information that the AEMO will require when undertaking such analysis, the information gathering powers and processes that may be required; and
- What functions ancillary to AEMO's planning activities would it be appropriate for AEMO to perform?

The role transmission planning role of the AEMO needs to be understood in the context of what constitutes transmission planning. Figure 2 is a representation of the complete planning process. It typically entails forecasting demand growth, usually for a ten year period, under high, medium and low economic growth scenarios and for 10%, 50% and 90% probabilities of exceedance (P.O.E) maximum demands. From this it is possible to identify the likely timeframe that a constraint will emerge and its increasing impacts over this period. A number of options to address the constraint are then considered and from these alternatives it is possible to identify the most economic solution using appropriate criteria. This solution is then consulted on with the market.<sup>8</sup> Following the completion of the consultation process the business would build (or at least contract the building), own, operate and maintain the asset. This information is then used by the business in support of its application to the regulator for regulated revenue.

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<sup>8</sup> Currently, the consultation occurs either through an annual planning report (for assets less than \$10 million) or via a separate consultation process (for assets greater than \$10 million). In the discussion of the National Transmission Planner's role below, it is assumed that the TNSP will continue to make decisions about small assets, but no longer through an annual planning process (the responsibility for producing the annual plan passing to the National Transmission Planner).

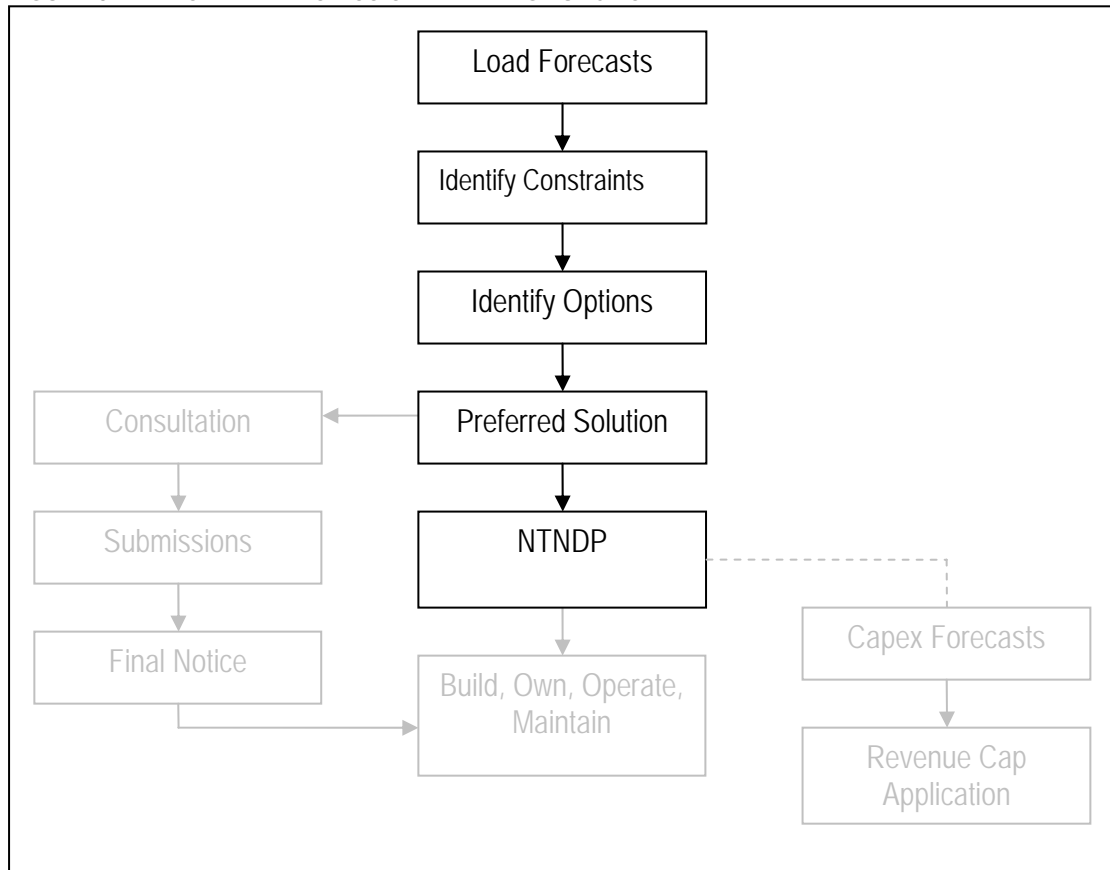
FIGURE 2 - PROCESS FOR IDENTIFYING AND ADDRESSING CONSTRAINTS



As VENCORP understands it, in line with the COAG recommendations the AEMO will be responsible for undertaking load forecasting; and identifying constraints and options, which will be incorporated into the NTNDP. The asset owners will remain responsible for making the investment decisions on individual projects whether they are augmentations or renewals or refurbishment.

This approach will also apply to the role performed by the AEMO in relation to the gas transmission system. This function is shown in Figure 3.

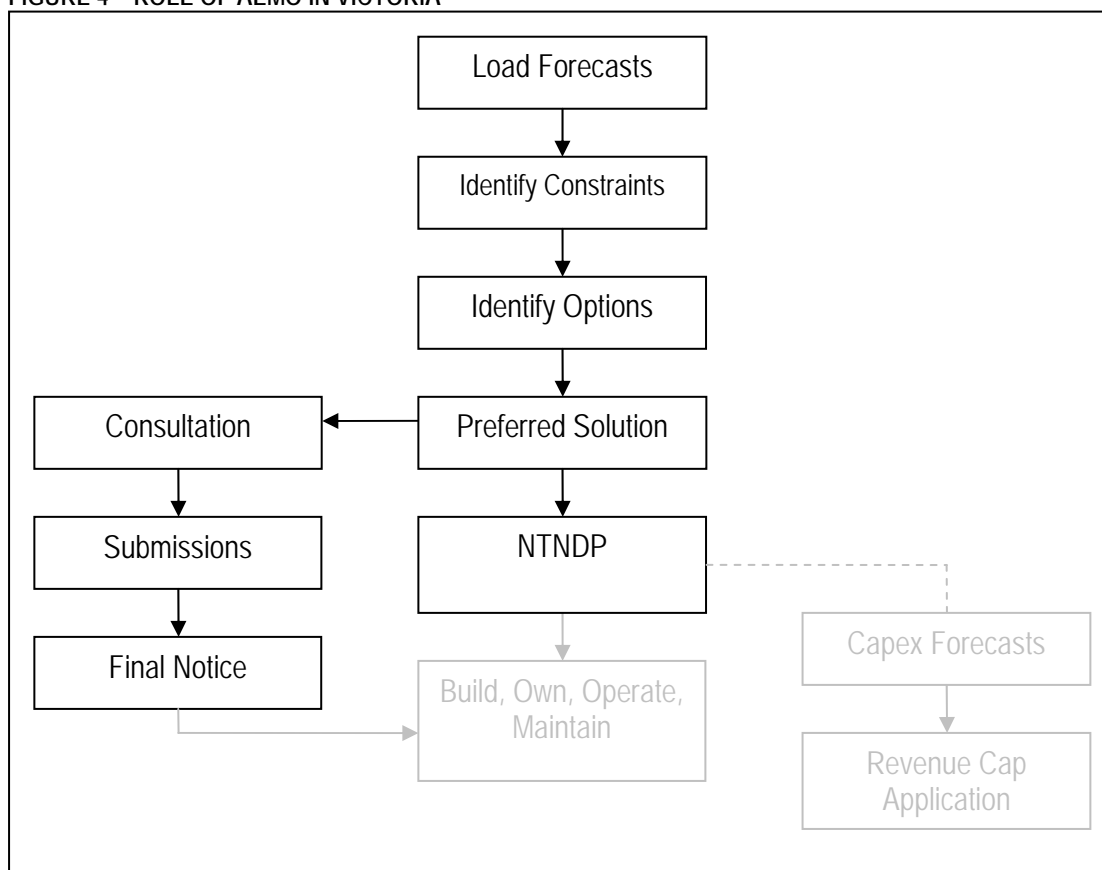
FIGURE 3 – NATIONAL TRANSMISSION PLANNING FUNCTION



However, in Victoria,<sup>9</sup> it is expected that the AEMO will also make decisions about specific projects, with the asset then procured from an asset owner/manager. A representation of the role of that the AEMO will perform in Victoria is set out in Figure 5.

<sup>9</sup> As noted above, the AEMO is also expected to have additional responsibilities in South Australia (that is, if it takes over the role of ESPIC), but which would not change the allocation of responsibilities from those set out in Figure 2.

FIGURE 4 – ROLE OF AEMO IN VICTORIA



There are a number of implications of the likely full functions of the AEMO discussed above for the AEMC's design of the National Transmission Planning arrangements.

The fact AEMO will have the in-house technical expertise and information necessary to undertake the analysis noted above, and will also operate the electricity network and market, will place AEMO in a position to undertake a number of other valuable functions that will improve the certainty and transparency of the national electricity market and assist the AER with its decision making processes. These are discussed in more detail later.

### *Interactions between the AEMO and Asset Owners*

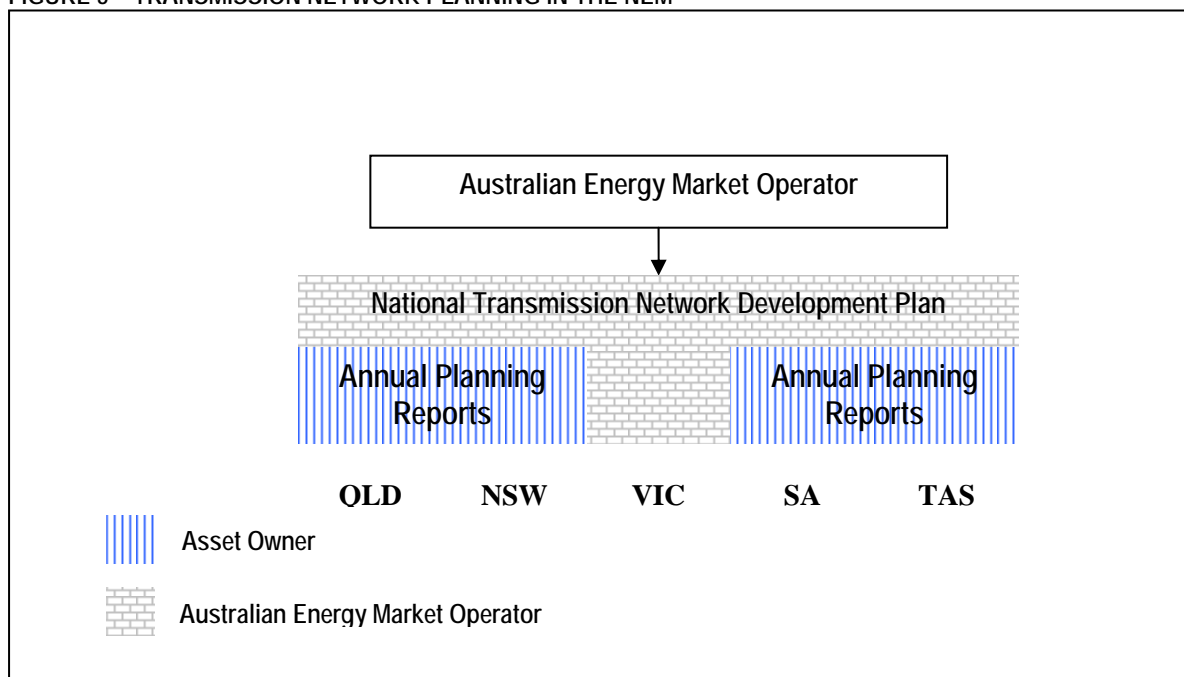
It follows from the discussion above that it is considered that the AEMO should have the responsibility for producing a plan for the national transmission network that identifies emerging constraints and then developing projects to a conceptual level for addressing those constraints. It also follows from the discussion above that the AEMO should have the expertise and capacity to undertake the analysis necessary for the plan independently of the Asset Owners. That is, the role of the AEMO would encompass:

- Producing demand forecasts for the planning horizon for the national transmission system;
- Undertaking power system modeling of the national transmission system to identify when constraints are expected, where a constraint is taken to include situations where:
  - Generator dispatch is affected;
  - Load is placed at risk; and

- Where relevant, a deterministic planning standard is breached;
- Producing conceptual augmentations to address the constraints identified above, and a likely cost range for such projects and estimating a likely range for the market benefits associated with such projects, which would require, amongst other things:
  - Undertaking power system modeling with the new projects assumed to be in place to assess the effect on power flows;
  - Undertaking market simulation modeling to predict the impact of the project on generation dispatch, spot prices and generation entry; and
  - Modeling the effect of the project on reliability (expected unserved energy);
- Provide a set of conceptual augmentations and required commencement dates across the national transmission system.

The National Transmission Network Development Plan would therefore replace the ANTS. However, as the Asset Owners are still responsible for making the investment decision, the NTNDP will compliment the state based APR's, however these documents may not be produced with the same information that they currently contain. This relationship is outlined in Figure 5.

FIGURE 5 – TRANSMISSION NETWORK PLANNING IN THE NEM



The AEMO would require substantial information to undertake the analysis set out above. This information, and the likely powers that AEMO would require as a result, are described below.

#### ***Information requirements for the National Transmission Network Development Plan***

The role described for the AEMO would require it to be in a position to undertake power system analysis across the whole of the national transmission network. While AEMO will need to have the expertise and capacity to undertake such analysis, it will need substantial information from the relevant asset owners to undertake this task. In particular, the AEMO would require a

complete data set of for the transmission assets, such as asset ratings. Moreover, the AEMO's data set would need to be updated on an ongoing basis to take account of new assets, asset retirements and changes to asset ratings.

It would be appropriate for the NEL or NER to provide the AEMO with a right to compel the provision of information required for its functions in order to ensure the prompt provision of information, and reflecting the importance of the AEMO's activities. It may also be appropriate for the NEL or NER to codify the ongoing process through which the data set would be updated, such as by placing a continuing obligation on asset owners to notify AEMO of any non-temporary changes to plant ratings and new or retiring assets.

A second piece of information that the AEMO would require to undertake its activities is the detailed planning criteria that are applied by each of the TNSPs for reliability investments. It is noted that a desired outcome of the AEMC's parallel review of reliability standards would be to create transparency in the planning standards adopted by each of the TNSPs.

### ***National Flow Paths***

One of the matters upon which the AEMC has sought comment is whether the AEMO's role should be restricted to only parts of the network (such as 'national flow paths') or types of projects (such as to exclude reliability projects). In VENCORP's view, it is artificial and would be counterproductive to attempt to divide the national transmission network into 'national' and 'local' parts or to distinguish between 'reliability' and 'market benefits' projects. The AEMO would consider the NEM as one network, not a series of interconnected networks. One of the key findings of the ERIG report was that presumed local projects can affect generation dispatch, and the many reliability projects produce both reliability and other market benefits.

It is noted that one of the concerns of COAG was to ensure that planning decisions take account of local and regional requirements. One means of ensuring that local and regional requirements are taken into account is to ensure that the AEMO is appropriately resourced, preferably with an office in each jurisdiction. In addition, a number of elements of the proposed arrangements will ensure that local and regional requirements are taken into account, including:

- Subject to the outcomes of the AEMC's other consultation, the potential for reliability standards to differ across jurisdictions, regions or network types; and
- The fact that the local TNSP will remain as the decision maker in relation to transmission investments.

### ***Last Resort Planning Power***

The AEMC has correctly observed that the newly created last resort planning function is closely related to the functions that will be exercised by the AEMO, and has sought views on the appropriate institutional arrangements for that function in the future.<sup>10</sup>

At present, the last resort planning function essentially is the scope for the AEMC to direct a party to undertake a regulatory test assessment of a particular project. However, if an option

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<sup>10</sup> AEMC, Scoping Paper, pp.10-11.

satisfies the regulatory test there is no power for the AEMC to direct the projects construction, or to procure the relevant assets, with 'moral suasion' being relied upon instead to encourage efficient investment to take place.

Under the new arrangements, in all states except Victoria, the asset owners will continue to be responsible for undertaking regulatory test assessments of individual projects and then deciding upon whether projects should proceed, and so the justification for the last resort planning function as a tool of oversight of the asset owners' investment decisions remains.

That said, VENCORP agrees with the view implicit in the Scoping Paper that the AEMO, rather than the AEMC, will be the appropriate entity to perform the last resort planning function in the future.

It is noted that, in Victoria, the AEMO is expected to absorb VENCORP's functions and hence to assess specific projects using the regulatory test and to make investment decisions. The last resort planning function in this context would just mean that interested parties would have the ability to ask the AEMO to consider a project that it may not otherwise have considered.

In the Victorian context the AEMO will already have the power to direct an augmentation to the Victorian Transmission network, even when the beneficiaries are in another state. Therefore it is important that the AEMC address the question of how the cost of augmentations to the transmission system will be allocated, and by implication address the existing transmission pricing arrangements.



## Approach to transmission network planning

The AEMO must plan the NEG on an economic basis having regard to specific reliability needs and requirements. Therefore the test that it will adopt should be:

- Maximising the net market benefits; or
- Where part or all of the reason for the project is to meet an objective and identifiable reliability obligation, to maximise the net market benefits or minimise the net market cost.

VENCorp notes that COAG have agreed that there should be two changes to the regulatory test, namely:

- For the two limbs of the test – the reliability and market benefits limb – to be amalgamated into a single limb; and
- For the definition of market benefits to be broadened to include national market benefits.

### *Amalgamating the two limbs of the regulatory test*

Turning to the first of these issues, it is noted that whether collapsing the two limbs is a material matter depends upon the planning criteria that are adopted by the relevant TNSP in relation to reliability projects. In Victoria, VENCorp plans to a probabilistic planning standard, that is, comparing the improvement in expected unserved energy associated with a potential project to the cost of that project. As a result, projects in Victoria are analysed under the 'market benefits' limb of the test.

However, it is noted that reliability standards are the subject of a separate consultation, and that an outcome of that review may be to retain deterministic (i.e. n-x) planning criteria for some TNSPs. In this situation, it is reasonable for the regulatory test to be passed by a project that meets the deterministic planning criteria without the need to demonstrate a project that meets the mandated criteria is justifiable on economic grounds. At the same time, however, COAG's reasons for requiring a change to the test is to remove the bias that currently exists towards considering only the reliability obligation, and not investigating at the same time whether a different project that also meets the minimum reliability requirement may deliver additional market benefits that exceed the differential in costs of the project.

VENCorp agrees with the third option suggested by the AEMC,<sup>11</sup> which is that the logical way to combine the two limbs of the regulatory test – while at the same time allowing for the possibility that deterministic planning criteria may continue – is for the objective of the test being expressed as:

- Maximising the net market benefits; or

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<sup>11</sup> Scoping Paper, p.15.

- Where part or all of the reason for the project is to comply with an objective and identifiable reliability obligation, to maximise the net market benefits or minimise the net market cost) across the set of projects that meet the deterministic reliability obligation.

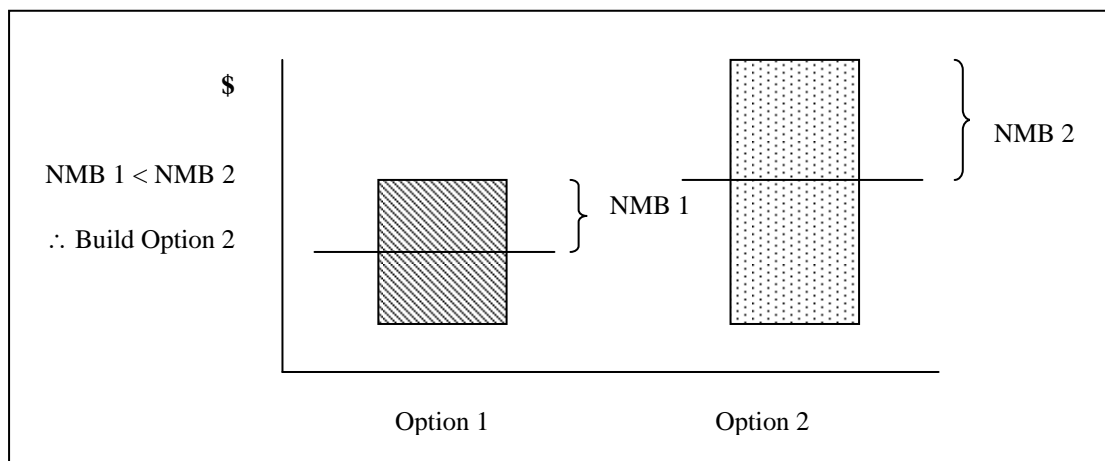
By restructuring the objective of the test in this manner, TNSPs would be obliged to:

- First establish the set of alternative projects that meet the minimum requirements of the reliability obligation, but which may also provide other market benefits;
- Quantify the market benefits associated with each of the projects, which may derive from increased reliability (expected unserved energy),<sup>12</sup> changes to generation dispatch, losses, impact on new generation entry, etc) and compare this to the difference in the cost of the projects; and
- Select the project from the set above that maximises the net market benefit or minimises the net market loss.

The result would be that TNSPs would be required to investigate whether an enhancement to a reliability project (or a different project that met the same reliability need) would provide market benefits that justified a higher cost, and select such a project if one is found.

This is expressed diagrammatically in Figures 6 and 7 below. Under the current market benefits test where the benefits exceed the cost of an option and the net market benefits of an option exceeds the net market benefits of an alternative option then, that option is deemed to satisfy the regulatory test. In the example given in Figure 6, option 2 is preferred despite the fact option 2 has a higher cost than option 1.

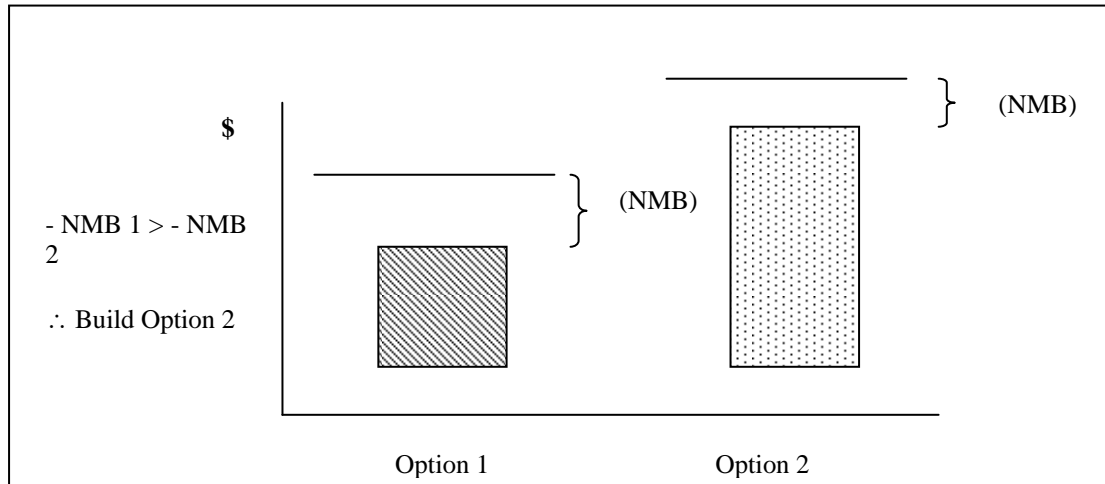
Figure 6 – Market Benefits Assessment



<sup>12</sup> The market benefit associated with the reliability improvement need only be calculated as the value of the reliability improvement that is in addition to what would have been delivered by a project that was the minimum required to meet the relevant reliability obligation. VENCORP disagrees with the AEMC's statement that the decision criterion described above 'would leave unclear any trade-off between projects with differing reliability (or similar) benefits'. Changes in the level of reliability (measured as expected unserved energy) are a market benefit that can be estimated, as indeed VENCORP does when applying the regulatory test.

However, where the option is required to meet an objective and definable reliability obligation it may not satisfy the market benefits limb of the regulatory test. Therefore by adopting what is effectively the same test, and hence the same approach, the option which minimises the net cost to the market, taking into account both the benefits and the costs, will be constructed. In the example in Figure 7 it will be Option 2, again, despite option 2 having a higher cost than option 1.

Figure 7 – Scenario 2



*Incorporating 'national market benefits' into the test*

COAG has sought investigation of whether the definition of market benefits needs to be enhanced to ensure that benefits of a national character are incorporated fully into the analysis. While such an analysis clearly must be undertaken, it is not clear that the definitions of market benefits contained at present in the regulatory test is not sufficiently wide to permit all such benefits to be considered.

However, as discussed above, ERIG found that there were barriers to market benefits that are national in character being considered. Rather than being caused by the definition of market benefits in the regulatory test, it was noted above that ERIG found the barrier to arise from a combination of:

- The propensity for TNSPs to focus only on the impacts of augmentations within a particular jurisdiction;
- The propensity for the TNSPs that are subject to deterministic reliability obligations to focus only on the reliability aspects of projects to the exclusion of other possible market benefits; and
- The absence of any party with the direct responsibility for planning augmentations to interconnectors (indeed, a lack of responsibility for planning market benefit augmentations within a particular network in most jurisdictions).

The creation of the National Transmission Planning arrangements is the intended means of addressing these barriers, which underscores the importance of establishing the Planner with functions that are sufficiently wide and appropriately resourced.

### **Aligning the review of TNSPs' revenue caps**

While aligning the reviews of the TNSPs' revenue caps may achieve some efficiency in regulatory effort (as the Victorian ESC achieves by undertaking its distribution price reviews simultaneously), it is not clear that the national aspects of planning would be advanced by such an alignment. The AEMO will be required to produce an updated National Transmission Network Development Plan annually, with each Plan considering needs across the whole national transmission network. Accordingly, the AER will always be in a position to assess investment needs in a national context, assisted where necessary, by the AEMO, irrespective of whether revenue cap reviews are staggered.

An alternative reform which is likely to deliver significant enhancements to the setting of revenue caps that the AEMC should consider, in light of the creation of the AEMO is, to broaden the scope for projects to be considered as 'contingent projects'.

As the AEMC itself has acknowledged during its recent review of Chapter 6 of the NER, the application of revenue cap regulation provides an incentive for TNSPs to defer investments to the end of a regulatory period, may cause inefficiencies by deferring those projects. The large cost of some transmission assets also exposes the TNSPs to material risk where the optimal timing of investment is uncertain. Superior incentives would be created in this situation by including an allowance for such projects to the TNSP's revenue cap as the need for the projects arise, and to include in the revenue cap only a forecast of renewals capital expenditure and capital expenditure on minor items..

It is observed that the administration of a regime whereby new augmentation projects are added to the revenue cap over time, previously may have implied a large and difficult workload for the AER. However, it is envisaged that the AEMO would perform an important advisory role to the AER on whether the proposed projects are necessary, which would make the administration of the regime feasible.