25 November 2010

Mr John Pierce
Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW 2000

Via website: www.aemc.gov.au

Dear John,

Transmission Frameworks Review Issues Paper – Supplementary Submission

This submission is provided in response to issues and comments raised in the submissions from the Australian Energy Market Operator (AEMO) and Victorian Department of Primary Industries to the Commission's Issues Paper for the Transmission Frameworks Review. It seeks to clarify a number of misconceptions about the content and operation of the existing transmission regulatory regime.

While Grid Australia acknowledges that there are complex matters in scope, and is keen to assist the Commission to refine the regime where that would advance the National Electricity Objective, it is essential to commence with a sound understanding of the regime as it presently stands.

Grid Australia also notes that:

- some issues raised, such as the responsibility for transmission investment decision making, are strictly beyond the scope of this review as determined by the Ministerial Council on Energy (discussed further in section 2 of this submission); and
- in the context of the AEMC's stated intention to adopt an evidence-based approach to the review, the misconceptions raised largely comprise unsubstantiated assertions.

One important issue is the respective roles of incentive regulation and central planning. Grid Australia supports a model where reliability standards are determined independently of TNSPs and where AEMO (through its national transmission planner role) provides a national strategic perspective to transmission planning and coordination.[1]

[1] This is set out in Grid Australia's policy statement on Transmission Arrangements in the NEM that can be found at: www.gridaustralia.com.au.

However, that independent oversight can and should coexist with incentive regulation being applied to the fullest extent practicable to encourage efficient transmission investment and operating decisions.

Grid Australia notes the widespread support for incentive regulation in stakeholder submissions and concludes that central planning by a 'not-for-profit' entity is inconsistent with incentive regulation, given the inability for such an entity to respond to financial incentives.

Grid Australia looks forward to continuing to work with the AEMC and stakeholders through the further stages of the review. If you require any further information, please do not hesitate to contact me on (08) 8404 7983.

Yours sincerely,

Rainer Korte
Chairman
Grid Australia Regulatory Managers Group

grid australia
BACKBONE OF THE NEM

Transmission Frameworks Review

Supplementary Submission in response to AEMC Issues Paper

25 November 2010

Powerlink Queensland · TransGrid · ElectraNet electricity transmission · TRANSEND · SP AusNet A member of Singapore Power Group

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1. Introduction and Summary

1.1 Purpose

This submission is provided in response to issues and comments raised in the submissions from the Australian Energy Market Operator (AEMO) and Victorian Department of Primary Industries to the Transmission Frameworks Review Issues Paper. It seeks to clarify a number of misconceptions raised about the content and operation of the existing transmission regulatory regime. While Grid Australia acknowledges that a number of complex matters are in scope, and is keen to assist the Commission to refine the regime where that would advance the National Electricity Objective, it is essential to commence with a sound understanding of the regime as it presently stands.

Grid Australia also notes that:

- some issues raised, such as the responsibility for transmission investment decision making, are strictly beyond the scope of this review as determined by the Ministerial Council on Energy (discussed further in section 2 of this submission); and

- in the context of the AEMC's stated intention to adopt an evidence-based approach to the review, the misconceptions raised largely comprise unsubstantiated assertions.

This submission first provides a summary of Grid Australia's main concerns in relation to these misconceptions. A more detailed discussion of the issues and Grid Australia's response to these follows.

1.2 Summary – the operation of current incentives

Grid Australia's principal concern is with the characterisations of the incentive properties of the existing revenue and pricing regime. These are either incorrect or do not properly reflect the different components of the framework. Incorrect characterisations of the incentives include:

- That TNSPs have a financial incentive to overspend capital expenditure in order to 'inflate the regulatory asset base' (RAB).

  – This is factually incorrect. The revenue cap framework is actually designed to have the opposite effect where the cost of capital is set at a level where the TNSP is indifferent as to whether it invests or not. TNSPs have a financial incentive to minimise their capital expenditure during a

regulatory period, and face unfunded financing costs for any overspend above the revenue cap allowance.

- That it is inappropriate for a revenue cap review to focus upon the assets that TNSPs must install or costs that should be incurred, but rather the regime should focus upon the services that the TNSPs should deliver.

  – First, a starting point in any revenue cap review is to establish the levels of service that are expected or required over the period ahead. Moreover, while Grid Australia is keenly aware of the importance of service delivery to customers, a fundamental component of incentive-based building blocks regulation is that regulated businesses be provided with an opportunity to recover the efficient costs of meeting regulatory (service) and other obligations, which is reflected in the Revenue and Pricing Principles in the National Electricity Law.

  – Providing the opportunity to recover efficient costs is essential to ensuring that an incentive is provided for adequate and prudent investment over the long term to deliver the required levels of service.

- TNSPs have a bias towards network solutions and no incentive to employ non-network solutions.

  – TNSPs effectively retain unused financing costs as a result of reducing or efficiently deferring within period capital expenditure. As a result they do have an incentive to employ non network solutions where this is demonstrated to be more efficient, contingent on the solution addressing the identified need and providing the required level of reliability within the required timeframe.

  – The new Regulatory Investment Test for Transmission (RIT-T) also ensures transparency of this decision making framework by requiring that non-network solutions are explicitly evaluated and consulted on with respect to the identified network need.

  – In the context of an evidence based approach, it is noteworthy that the adoption of network support agreements is more prevalent in NEM states other than in Victoria.

- That there is no reward for TNSPs for taking operational actions which minimise market impacts and that TNSP actions do not take account of such impacts.

  – This assertion overlooks the operation of transmission service incentive schemes. There are incentives to minimise the number and duration of plant outages generally. More recently a 'market impact of transmission congestion scheme' has been applied to a number of transmission

network service providers. This scheme exposes TNSPs to the effect on the market of transmission outages. TNSPs are therefore encouraged to identify measures that may reduce the potential market impact of transmission outages (although Grid Australia acknowledges that this particular scheme does not provide an incentive to reduce congestion that is not associated with outages). This scheme currently applies to two TNSPs and is expected to apply to all TNSPs within the next four years.

Grid Australia welcomes AEMO's support for the use of financial incentives (incentive regulation) to encourage efficiency improvements and notes that a clear majority of submissions strongly expressed similar support. This support is also in line with the provisions of the NEL. Grid Australia also welcomes the opportunity to work closely with the Commission, the AER and, where appropriate, AEMO, to refine some of the incentives faced by TNSPs where material deficiencies and opportunities for improvement can be shown to exist.

Against this background, however, Grid Australia notes that strong support across stakeholders, including AEMO, for incentive regulation is inconsistent with advocacy that some form of national planning body should take over the responsibility for all transmission investment decision making outside of Victoria.

While AEMO did not explicitly recommend itself for undertaking this role, the Victorian Department of Primary Industries' submission did discuss whether AEMO's role should be broadened to include responsibility for national network planning and investment decisions.

In any event, assuming that the national planning and investment body referred to is a 'not for profit' entity, as operated in Victoria, then such a body would have no capacity to respond to financial incentives.

For there to be a finding that transmission planning and investment decision making should be assigned to a not for profit entity, it must first be concluded that incentive regulation has no role to perform in encouraging efficiency in investment decisions and that there is no alternative but to rely upon central planning for efficient investment decisions.

In Victoria, where the investment planner for the shared network is a 'not for profit' body, the scope of economic incentives to encourage the efficient provision of network services is much narrower than in the remainder of the NEM. Specifically:

- There is no scope for incentive regulation to encourage innovation in augmenting the network to meet network service objectives. These are central planning decisions that are made by AEMO.

- There is no ability for incentive regulation to encourage an optimal trade-off between network and non-network options. While AEMO would be expected to

consider such matters, these trade-offs, are again central planning decisions made by a not-for-profit entity. Indeed, given the separation of responsibilities in Victoria between investment decisions and network operation and maintenance, it is questionable whether an efficient trade-off between capital and operating expenditures should be expected.

- There is no scope for incentive regulation to encourage small investments or other schemes to improve the transfer capability of the current network assets. These are central planning decisions that are made by AEMO.

Indeed, when considered against the widespread support for incentive regulation in other submissions, a logical conclusion is that any future model based on central planning by a non-commercial entity is inappropriate as it is inconsistent with incentive regulation, given the inability for the planner to respond to incentives.

To be clear, Grid Australia supports a model where reliability standards are determined independently of TNSPs and where AEMO (through its national transmission planner role) provides a national strategic perspective to transmission planning and coordination.[1]

However, that independent oversight and strategic perspective can and should coexist with incentive regulation being applied to the fullest extent practicable to encourage efficient transmission investment and operating decisions.

Grid Australia also notes that, consistent with COAG's agreed principles, TNSPs should retain responsibility for transmission investment, operation and performance.

1.3 Summary – misunderstandings of other key framework elements

AEMO's submission also includes a number of other comments or assertions that are either incorrect or not justified with evidence. Grid Australia has taken the opportunity to identify and respond to these here. Examples include:

- That the inclusion of reliability in the application of the new RIT-T prevents consideration of 'more encompassing assessments'.
  - The new RIT-T, specifically requires each investment to be chosen on the basis of the highest net benefit and explicitly requires the consideration of both network and non-network options to address an identified need. Moreover, AEMO itself has a formal role in applications of the RIT-T and

[1] This is set out in Grid Australia's policy statement on Transmission Arrangements in the NEM that can be found at: www.gridaustralia.com.au.

the consequent opportunity to address any shortcomings it considers to exist on a case by case basis. Furthermore, the RIT-T process also establishes clear and longer consultation timeframes, which provide significant opportunity for the market to be informed of, and participate in, responding to emerging limitations identified.

- That there are no standards imposed on a TNSP to give effect to a transmission connection.
  - In addition to the open access design of the transmission framework an extensive range of obligations in respect of TNSPs' facilitation of connections, including detailed technical requirements (refer to Section 4.3 of this submission).
  - To this end, Grid Australia has also published Connection Guidelines to provide guidance to potential connection applicants about the process for connecting to NEM transmission networks.
  - Grid Australia has also published a Categorisation of Transmission Services Guideline, which provides practical guidance on how transmission services definitions in the NER are applied (both guidelines are available on the Grid Australia website at www.gridaustralia.com.au).
  - Grid Australia is also in the process of engaging with AEMO in its role as the Victorian TNSP to develop additional guidance on connection requirements for proponents seeking network connection.
- That TNSPs may focus on providing negotiated services at the expense of prescribed services as negotiated services provide a higher return.
  - First and foremost, Grid Australia disagrees with this assertion. However, even if this unbalanced commercial incentive did exist, there are clear service standard obligations in relation to prescribed services, which cannot simply be ignored for commercial reasons. TNSPs will only provide negotiated services where a willing counter-party exists, since the costs of the relevant assets are recovered directly from the recipient of the service.
  - Further, any potential for unbalanced commercial incentives is effectively removed through regulation, with negotiated services subject to Rules-based requirements, including a negotiating framework approved by the AER and access to commercial arbitration. Under the Rules requirements, returns higher than the WACC may only be charged where a TNSP takes on more risk than that for prescribed services.

The remainder of this submission addresses:

- The role of incentive regulation;
- How it is provided for within the current transmission regulatory framework; and
- A number of other issues and inaccuracies in the AEMO submission.

2. Scope of review

Grid Australia notes that the MCE terms of reference provided to the Commission require it to give consideration to the COAG agreed principles. One of these principles is that accountability for transmission investment, operation and performance is to remain with transmission service providers. Given this requirement, Grid Australia considers that the responsibility for transmission investment decision making is strictly beyond the scope of this review.

It is important to note that this principle was a key component of the guidance provided to the Commission on the development of the National Transmission Planning function. In that instance, the terms of reference from the MCE, which referred to COAGs response to the final report of the Energy Reform Implementation Group, stated with respect to the National Transmission Network Development Plan (NTNDP) that:

> *"The NTNDP, however, will not replace localised transmission planning, bind transmission companies to specific investment decisions, override TNSP performance obligations, or constrain the timeframes for the revenue approval process of the transmission companies. Accountability for transmission investment, operation and performance will remain with the transmission network service providers." National Transmission Planner Terms of Reference, p5.*

Given these statements from the MCE and COAG, Grid Australia considers that policy makers are clear in their intention for transmission network investment decisions to remain with TNSPs.

3. Role of incentive regulation and implications for governance arrangements

3.1 Benefits of incentive regulation

As a general principle, Grid Australia supports the provision of sustainable commercial incentives for TNSPs to take actions that promote the National Electricity

Objective.[2] Grid Australia also notes that this is in alignment with the Revenue and Pricing Principles in Section 7A of the National Electricity Law (NEL), which include:

1. A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in—

   (a) providing direct control network services; and

   (b) complying with a regulatory obligation or requirement or making a regulatory payment

2. A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to direct control network services the operator provides. The economic efficiency that should be promoted includes—

   (a) efficient investment in a distribution system or transmission system with which the operator provides direct control network services;

   (b) the efficient provision of electricity network services; and

   (c) the efficient use of the distribution system or transmission system with which the operator provides direct control network services.

These NEL obligations reflect the widespread view that well designed incentive based arrangements will lead to better outcomes than would be achieved by direct regulatory intervention (whether by imposing an obligation or attempting to assess the efficiency of expenditures). This is because incentive arrangements provide TNSPs with the opportunity and incentive to find ways of meeting the desired objective through lower cost means, or to provide a superior outcome for the same cost, including by taking account of new information as it becomes available.

The prospect of a reward for superior performance may also encourage businesses to undertake additional investigations and other activities in order to 'find' efficient initiatives that otherwise may not have been identified.

As Grid Australia noted in its submission on the AEMC's Issues Paper, incentive arrangements need to be carefully designed. Incentives can only be expected to affect matters that can be controlled by the TNSPs. Moreover, incentive arrangements may expose the TNSPs to risk – while this is part and parcel of such arrangements, care is required to ensure that the risk created is one that can be managed by the TNSPs.

[2] This is set out in Grid Australia's policy statement on Transmission Arrangements in the NEM that can be found at: *http://www.gridaustralia.com.au.*

As a consequence, it may not be possible or appropriate to apply incentive arrangements to all aspects of TNSP performance. Administrative measures may be necessary to supplement incentive arrangements. For example, the RIT-T, the Last Resort Planning Power and the National Transmission Planner are administrative arrangements that support the incentive regulation arrangement applying to TNSPs.

A large majority of respondents to the Commission's Issues Paper supported incentive regulation where it is practicable, including the following:

> *'Incentives on market participants, including TNSPs, are possible measures available to seek to reduce the presence of congestion and maximise network capacity'. National Generators Forum, p4*

> *'Infigen agrees that monopoly transmission businesses should have appropriate regulatory incentives and obligations to ensure efficient and timely investment in response to changing demand for transmission services over the medium to long term.' Infigen Energy, p4*

Indeed, together with the emphasis upon incentive regulation there was a stated preference in submissions for not reinstituting a 'central planner' model:

> *'The NGF is concerned that proactive planner is reinstituting a central planner mindset which will detract from overall market driven efficiency.' National Generators Forum, p10*

In summary, a best practice regulatory framework will rely primarily on appropriate incentive arrangements and supplement these with administrative arrangements where necessary.

3.2 Incentive regulation and investment decision making

Grid Australia acknowledges that AEMO advocated throughout its submission the greater use of incentive arrangements to encourage outcomes that are consistent with the NEO. However, in respect of transmission investment decision making, AEMO also commented as follows:

> *'The optimal solution would be to entrust responsibility for planning and investment decision making into a nationally focused body vested with the responsibility to address emerging network constraints' AEMO, p28*

The Victorian Department of Primary Industries submission went further and advanced the view that a not for profit entity – such as AEMO – should perform that role:

'With an independent not for profit planning body with no commercial interest in decisions, there would be limited risks that planning and investment decisions would be distorted.' Victorian DPI, p7

'DPI believes that consideration should be given to whether AEMO's planning role is broadened further so that it takes on responsibility for making transmission planning and investment decisions on a national basis.' Victorian DPI, p7

Grid Australia has two key observations about these positions.

If the view is reached that incentive arrangements should be applied wherever possible – including to decisions about transmission investment – then it follows that it would be inappropriate for a not-for-profit organisation, including AEMO, to be established as a national transmission planning and investment decision maker.

A fundamental requirement for incentive regulation is that the entity that is regulated has a commercial objective. The stronger the commercial objective, the more effective the relevant financial incentives will be. A 'not-for-profit' entity cannot respond to the financial incentives that are created under incentive regulation. Thus, it necessarily follows that if the nationally focussed body is intended to be subject to incentive regulation, then it would be highly inappropriate for a non-commercial organisation to undertake this role.

Alternatively, if it is considered that a not-for-profit entity like AEMO is the logical entity to make all transmission investment decisions, it must first have been concluded that incentive regulation has no role to play with respect to encouraging efficiency in transmission investment decision making. That is, that central planning for all transmission augmentation decisions is considered more efficient than well designed incentive regulation of integrated transmission capital and operating expenditure decisions.

Grid Australia notes that no evidence has been advanced to support a conclusion that incentive arrangements have no role to perform with respect to transmission investments. Rather, the overwhelming number of submissions to the Issues Paper, including from the AER, express strong support for incentive regulation.

As incentive arrangements currently do comprise an important part of the framework for transmission investment, adopting AEMO's views on this matter would undermine the principle of incentive regulation, which in turn is fundamental to the regulatory framework that applies to TNSPs and other regulated electricity and gas service providers.

Against this background, it is noted that in Victoria – where a not-for-profit body is responsible for making transmission augmentation decisions – the scope for incentive regulation is much narrower than in the remainder of Australia. For example:

- There is no scope in Victoria for incentive regulation to encourage innovation about the optimal means of augmenting the network to meet a defined obligation (such as a reliability standard). These are central planning decisions that are made by AEMO.
  - In contrast, in the rest of the NEM, TNSPs have an incentive to select the lowest efficient cost means of meeting any regulatory obligation.
  - TNSPs are also subject to transparent processes which demonstrate the robustness of their processes and decisions, for example, the RIT-T consultation requirements and public scrutiny of proposed forward expenditure via the AER's revenue determination process.
- There is no role for incentive regulation to encourage an optimal trade-off between network and non-network options for resolving a constraint. These are central planning decisions that are made by AEMO.
  - In contrast, outside of Victoria the TNSPs have an incentive to minimise all costs, which may encourage the efficient substitution of non-network for network investment within the required timeframes.
- There is no role for incentive regulation to encourage the optimal trade-off between asset investment and operating and maintenance measures. These roles are split between AEMO and the network service provider.
  - In contrast, TNSPs outside of Victoria are able to make this trade-off given there is one commercially motivated business making decisions on both of these elements in each State.
- There is no role for incentive regulation to encourage small investments or other schemes to improve the transfer capability of the current network assets. These are central planning decisions that are made by AEMO.
  - In contrast, the market impact component of the service performance incentive scheme exposes the TNSPs to the market impact of transmission outages, and so encourages such small investments or schemes where they may alleviate the market impact of outages.

It is relevant, in this respect, to note that the AER identified shortcomings flowing from the central planning model in Victoria in its last revenue cap review in that State. In its draft decision the AER noted that the central planner had not considered the inter-dependencies between its forecast planned augmentation projects and allowances. The AER also stated that in forecasting its planned augmentation expenditure the

central planner did not appear to have fully considered the impact of the TNSPs replacement program on augmentation timing and requirements.[3]

The incentive properties of the current transmission framework outside of Victoria are discussed in more detail in the following section. However, the discussion above implies that if the majority view of stakeholders is accepted that incentive regulation promotes superior outcomes to central planning, then it is logical to conclude that the currently limited role for incentive regulation in Victoria is suboptimal.

4. The incentives within the current framework

4.1 Capital expenditure incentive

AEMO's observations

AEMO makes a number of observations about what it considers to be the current incentive properties of the regulatory regime for transmission and how the regime should be improved, which include the following:

> *'Under the building block approach a TNSP is **rewarded for delivering transmission assets** with an ongoing payment stream for the life of the asset.', AEMO, p14 Emphasis added*
>
> *'Transmission development is therefore driven more by the revenue regulation and incentive framework set out in Chapter 6A of the NER than by the transmission planning regime in Chapter 5.' AEMO, p14*
>
> *'Integration of network planning and economic regulation – The regulatory arrangements need to be designed around the challenges faced in planning the transmission network … Revenue regulation would also need to be undertaken on a national basis with the regulator considering all revenue needs at the same point in time. This would enable the regulator to make trade-offs between investments in different networks.' AEMO, pp26-27*
>
> *'Service Provision – The **role of network businesses should be focused on the provision of defined service levels, rather than the provision of assets**. The rewards for providing these services should be commensurate with the risks faced in providing these services.' AEMO, p26 Emphasis added*

Grid Australia considers these statements to be affected by misconceptions – the first three statements about the purpose of capital expenditure forecasting during a

[3] AER, 2008, Final Decision: VENCorp Transmission Determination, 2008-09 to 2013-14, April, p.23.

revenue cap review and the incentives that are subsequently provided and the fourth about the standard practice of incentive-based building blocks regulation.

Setting the revenue cap and incentives

The statement that TNSPs are rewarded for delivering transmission assets provides an incomplete description of the incentives to which TNSPs are exposed.

When setting the level of a new revenue cap the Rules require that actual capital expenditure undertaken in the previous regulatory period is included in the starting RAB, and the RAB is projected forward incorporating a forecast of capital expenditure for the next regulatory period. A return on the RAB – including the forecast of capital expenditure – is included in the revenue cap. The revenue cap is set for the regulatory period (with the exception of 'pass throughs', contingent projects or a reopening of the revenue cap in response to a catastrophic situation). The incentive features of this process can be considered as having long term and short term components:

- First, by setting the revenue cap such that a return is provided on actual (past) expenditure and a forecast of efficient future expenditure, TNSPs are provided with an expectation that they will earn an appropriate regulated return on capital expenditure. Among other things, as part of a revenue reset process, such expenditure is subject to an ex-ante prudency review and the AER also undertakes a detailed review of a TNSP's planning and other governance processes. This provides the incentive and capacity for TNSPs to continue to invest in the networks.

- It is important to note that the return on capital – which is determined independently by the AER in accordance with the Law and Rules – merely compensates TNSPs for the return that could have been earned if the investment funds were devoted to other investments. On this basis it is incorrect to conclude that the prospect of earning a regulated return provides TNSPs with an incentive to invest unnecessarily in transmission assets.

- Secondly, as the revenue cap is fixed for the period between reviews, TNSPs have an incentive to spend less if it is efficient to do so (subject to meeting offsetting obligations or incentives, discussed below) as the same level of revenue is earned irrespective of whether the forecast expenditure occurs or not.

The application of a revenue cap means that the TNSPs are in fact penalised for any additional dollar that they spend – it follows, therefore, that they have an incentive to consider whether the relevant project is necessary at all or can be delivered at lower cost. Notwithstanding this, as expanded upon below, Grid Australia notes that the incentive regime aims to ensure that service obligations are met at lowest efficient and sustainable cost. By incentivising TNSPs to look for ways to reduce the capital

(and operating) expenditure required to deliver services to customers, a lower RAB at the start of the next regulatory period results in lower prices for customers than would otherwise apply.

Clearly, the incentive for TNSPs to reduce their expenditure needs to be balanced with either a requirement or incentive (or both) to ensure that an efficient level of service is provided to customers. Indeed, the inclusion of service obligations or incentives is premised on the effectiveness of the economic incentives to encourage the TNSPs to minimise costs and avoid inefficient investment.

This is currently achieved under the transmission framework through a combination of reliability obligations (as set out in Chapter 5 of the NER and in jurisdictional instruments) and through the Service Target Performance Incentive Scheme (which is discussed further below). The combination of the financial incentives on TNSPs to minimise cost with the measures to ensure appropriate service delivery imply that:

- TNSPs have an incentive to meet their service obligations at the lowest cost, which includes to:
  - take account of information and analysis reasonably expected to be considered at the time of making the investment decision, which may adjust the project scope or its timing as necessary (the latter of which includes investing in smaller projects or schemes that may enable a major investment to be efficiently deferred);
  - select the lowest efficient cost investment that meets the required timeframe for delivery, including to adopt new technology or techniques as they become viable;
  - employ non-network options over network options; and
  - use innovative work practices, improve outage coordination, and optimise the capital and operating work program.
- TNSPs have an incentive to spend efficiently (both operating and capital) and improve their service levels where this generates a reward under the Service Target Performance Incentive Scheme that exceeds the cost of that initiative (this scheme is discussed further in section 3.2 below).

Given these arrangements it is not the case that TNSPs are merely rewarded for delivering more transmission assets.

<u>The purpose of forecasts when setting the revenue cap</u>

Similarly, it is an overstatement to conclude that transmission planning is driven or dominated by the revenue cap setting arrangements. It is true that a substantial degree of analysis is undertaken to justify transmission expenditure forecasts (and,

from the AER's point of view, to diligently assess those forecasts). However, the purpose of these forecasts is to determine the level of the revenue cap. Once the revenue cap is established, TNSPs are free to vary from the forecast program where network needs change and/or where better methods are found for meeting that need. Indeed, it is this ability to vary from the forecasts that allows the economic incentives in the regime to work. TNSPs, therefore, plan their networks on a continuous basis and change plans as new information arrives or alternative solutions are revealed and can reasonably be expected to be taken into account.[4]

Incentive-based building-block regulation or service based regulation?

Turning to AEMO's final comment, Grid Australia considers that the suggestion that the role of TNSPs should be re-focussed towards providing *services* rather than delivering *assets* presents a false dichotomy.

When revenue caps are reset, any assessment of cost necessarily starts with a focus upon the services that the TNSPs either are required or are expected to deliver.[5] Indeed, the capital and operating expenditure objectives in chapter 6A of the Rules have a strong focus on service delivery and make no mention of assets.

Nevertheless, cost is a fundamental input into the setting of revenues and prices under orthodox methods of modern incentive regulation. For capital intensive firms, a focus upon cost necessarily implies that there will be a significant focus upon assets. Determining the cost of providing a given level of service (where cost is defined to include all economic costs, including a commercial return) is essential to ensuring a continued incentive and capacity for investment. In addition, a reference to cost is also commonly justified as a means of ensuring a fair outcome for customers. It is therefore not surprising the NEL enshrines the principle that there should be a reasonable opportunity for TNSPs to recover efficient costs for the services they deliver.

However, focussing upon cost does not imply that the relevant regulated business is encouraged to ignore the standard of service that is provided to customers. In virtually

[4] The Rules also encourage transparency with respect the planning process undertaken by TNSPs by requiring them to prepare and publish an Annual Planning Report each year. These Annual Planning Reports are required, amongst other things, to identify emerging constraints and limitations for a period of up to 10 years.

[5] Having said that, As Grid Australia noted in its submission to the Review into the Use of Total Factor Productivity for the Determination of Price, the outputs provided by transmission – such as the maintenance of system wide security and the facilitation of competition between sources – are more complex to define and measure than for distribution (Grid Australia, 2010, Submission to the Review into the Use of Total Factor Productivity – Preliminary Findings Paper, February, p.3). This complexity is not a matter that was addressed in AEMO's submission.

all sectors that are subject to incentive-based regulation, the revenue or price caps (which, as discussed above, are aimed at discouraging over–investment and encouraging TNSPs to find lower cost ways to deliver the same service) are combined with separate incentive arrangements to encourage a focus on service provision. These other measures may take the form of mandated standards, financial incentives for improved service outcomes or a requirement to report publicly on the standards of service that are provided. The mere fact that the mechanics of setting revenue caps often focus on the assets required to achieve service obligations does not imply that there must be an absence of focus or concern about service provision.

Options to refine incentives

Notwithstanding the remarks above, Grid Australia acknowledges that the current incentive arrangements may require refinement in some areas and is open to discussion on practical means of enhancing the incentive properties of the current regime, including both the incentives to encourage cost efficiency as well as service performance. Indeed, Grid Australia recently sponsored a rule change to enable the market impact component of the service target performance incentive scheme to be applied in advance of the next revenue cap review. This scheme – which may not be widely understood – is discussed further in the next section.

Market impact incentive scheme

AEMO makes the following observations about the exposure of the TNSPs to the market impacts of their operations:

> *'Under the current regulatory framework TNSPs are exposed to limited market or financial risks imposed by regulation for the way that they operate their network.* ***There is no underlying link between market pricing and TNSPs' operations activities*** *and there are no financial consequences to TNSPs for failing to make available potential spare capacity.' AEMO, p14 Emphasis added*
>
> *'Consequently* ***networks do not respond to movements in the market*** *and consequently generators and customers cannot gain the benefit of flexible operational response.' AEMO, p14 Emphasis added*

As foreshadowed in the preceding comments, these comments do not recognise that the market impact component of the Service Target Performance Incentive Scheme for TNSPs provides a link to market pricing and TNSPs' operations activities. This scheme was applied to TransGrid from its last revenue cap review, and Grid Australia sponsored a rule change – which the AEMC approved, with the support of the AER – to permit this scheme to be extended to other TNSPs prior to their next revenue cap

reviews. As a consequence, the scheme now also applies to Powerlink and is soon expected to apply to ElectraNet.[6]

The market impact component of the performance incentive scheme provides an incentive payment to TNSPs – in addition to what applies under the pre-existing performance incentive scheme – where the non-availability of transmission assets results in market impact (measured as a change to the spot price) of $10/MWh or more. While the scheme is new and so its full effects and strengths and weaknesses are not yet known, the scheme is designed to create:

- an additional incentive for the TNSPs to ensure that their assets are available when most valued by the market, including by reviewing the timing of planned outages; and

- an incentive to reduce the likelihood that an asset outage may cause a constraint that has a material impact on the market, in turn encouraging investigation of such matters as to whether the settings on equipment are appropriate, whether ratings could be increased or whether other schemes could be employed to avoid or lessen the market impact of a constraint.

Indeed, the Australian Energy Regulator's submission to the Issues Paper observed that such a positive reaction to the scheme has already been observed:

> *'**TNSPs are able to respond to an incentive mechanism to reduce their market impact**, as illustrated by TransGrid's action to increase the ratings of the Mt Piper to Wallerawang lines.' AER, p7 Emphasis added*

Grid Australia acknowledges, however, that this scheme would only encourage actions that may reduce the market impact associated with transmission outages, and would not encourage actions that may reduce congestion (or the market consequences thereof) that is unrelated to outages.

Having said that, as Grid Australia has noted previously, the transfer capability between two points that exists at any point in time, as well as the market consequence of congestion, is affected by a large number of factors, many of which are outside of the control of TNSPs (such as generator bidding behaviour).

It is important that this be taken into account when considering whether and how incentive regulation could be extended in this area. Again, Grid Australia is open to discussion on practical means of enhancing the incentive properties of the current regime in this area where opportunities for improvement can be demonstrated.

[6] An application for early admission to the scheme is currently before the AER.

5. Other issues

5.1 The new RIT-T

AEMO made the following comment about the new RIT-T:

> *'While some attempts have been made to address this through the Regulatory Investment Test, which now requires consideration of market benefits for all assessments, the **reliability driver will continue to drive the investments and prevent more encompassing assessments to be conducted**.' AEMO, p10 Emphasis added*

Grid Australia notes that this comment is somewhat speculative and not supported by evidence – indeed, as noted previously, the new test has not as yet been applied. It also suggests an expectation that the TNSPs will fail to comply with the Rules, which Grid Australia strongly disagrees with.

Moreover, AEMO's views about the effect of the new test contrasts markedly to the view of the AEMC, which designed the new test with the specific intention of encouraging TNSPs to consider where enhancements to reliability-driven projects may deliver market benefits:

> *'Under the proposed RIT-T, all prospective investments above a suitable cost threshold would be assessed under a cost-benefit framework. The purpose would be to identify options which maximise the present value of net economic benefits (or minimise the present value of net economic costs) subject to meeting relevant jurisdictional Rule based reliability standards (where they apply).' Final Rule Determination, National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009, AEMC, 25 June 2009, p16*

As Grid Australia's members are required to abide by the NER, it is not clear exactly how assessments of the market benefits of all investments will be 'prevented' through the consideration of reliability drivers or not.

AEMO's comments with respect to the RIT-T also under-value its own role with respect to transmission investment assessments. Under the current regime, AEMO has an important role in encouraging coordination of transmission planning activities.

In the first instance, AEMO is required to publish a development strategy for the national transmission grid as part of the National Transmission Network Development Plan (NTNDP). This includes analysis of possible inter-regional transmission investments and how each TNSP's proposed augmentations relate to the development plan. This plan is expected to assist TNSPs to ensure that their projects are coordinated with developments or opportunities in other jurisdictions to the extent reasonable and appropriate. It should also assist with the identification and analysis of potential 'market benefit' projects.

In addition, AEMO has a more direct role with respect to transmission investments through an express requirement that TNSPs consult with AEMO on proposed network investments. Again, this provides AEMO with the capacity to ensure that developments are coordinated across the NEM, and also provides AEMO with the opportunity to assist with the identification and substantiation of the 'market benefit' elements of projects. Indeed, given the role that has been assigned to AEMO, it is difficult to envisage that any perceived past failure of TNSPs to identify 'market benefit' projects or enhancements may persist. Grid Australia considers that there is no evidence to suggest that this failure exists.

5.2 Incentive to favour negotiated transmission services

AEMO also comments that TNSPs have an incentive to favour investment in negotiated transmission services over prescribed transmission services, as follows:

> *'There is evidence that the rates of return for providing these services are substantially above the regulated transmission returns available to TNSPs under the NER. This would suggest that TNSPs would be willing to forego construction of prescribed [sic, negotiated] transmission services over prescribed transmission services.' AEMO, p.13.*

First and foremost, Grid Australia notes that the NGF, which represents generators, provides a contrary perspective on the balance between prescribed and negotiated transmission services. The NGF states:

> *'The focus that the NER places on end use consumers may cause the NSPs to place a greater emphasis on delivering prescribed network services than on the provision of contestable or negotiated connection services.' NGF, p.14.*

While Grid Australia considers the NGF concern is unwarranted, it is noteworthy that connecting parties appear more concerned that TNSPs place sufficient priority on the provision of contestable or negotiated services rather than too much priority.

It should also be recognised that for negotiated services TNSPs are required to have their negotiating framework approved by the AER in accordance with the negotiating principles in the Rules. These principles include that charges for negotiated transmission services should reflect the incremental cost of providing the relevant service together with an allocation of other costs that is consistent with the cost allocation methodology approved by the AER.

The principles also require that the price charged should be the same for all transmission network users unless there is a material difference in costs. Alternatively, the discipline that applies to contestable services is that the service is

subject to competitive pressure from other potential suppliers. Should a prospective network user not be satisfied with the price offered by the TNSP, the user is free to choose an alternative provider.[7]

Moreover, even if AEMO's view that above commercial returns were available from negotiated transmission services is correct, it does not follow that TNSPs would be expected to spend less on prescribed transmission services and to redirect these resources to negotiated activities. In particular, TNSPs cannot merely choose to invest in negotiated or contestable transmission services for the purpose of making higher returns. Rather, these projects are only developed where requested by a counterparty and where that party is willing to pay a charge that recovers the cost of the assets providing the services.

Additionally, the TNSPs are not free to reduce their expenditure on prescribed transmission services, but rather are required to comply with numerous obligations including mandated reliability standards.

5.3 Connection arrangements

TNSP connection obligations

AEMO makes the following comment in relation to the TNSPs' obligations in respect of connections.

> *'The standards that a new connection must meet are invariably around the performance standards of a new generator or a new load. These standards are set out in schedules 5.2 and 5.3. There are, however,* ***no commensurate standards imposed on a TNSP to give effect to that connection. Neither with respect to timing, which is subject to negotiation between the parties, nor the costs of facilitating the connection****, which is invariably charged back to the connecting party.' AEMO, p15 Emphasis added*

AEMO is incorrect to assert that there are no obligations on TNSPs in respect of providing connections. Rather, the TNSPs are subject to numerous obligations, a sample of which includes the following:

5.2.3 of the Rules:

(d) A Network Service Provider must:

[7] Note that should the service not be subject to genuine competition, its provision would fall under the negotiated transmission service framework.

(1) review and process applications to connect or modify a connection which are submitted to it…' 5.2.3 Obligations of network service providers

'(f) A *Network Service Provider* must to the extent that it holds technical information necessary to facilitate the processing of a *connection* enquiry made in accordance with paragraph (a) or an *application to connect* in accordance with clause 5.3.4(a), provide that information to the *Connection Applicant* in accordance with the relevant requirements of schedule 5.1, 5.2, 5.3 or 5.3a.' 5.3.2 Connection enquiry

5.3.3 of the Rules:

'(b) The *Network Service Provider* must:

(1) within 10 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or

(2) within 10 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d), provide the following information in writing to the *Connection Applicant*: …' 5.3.3 Response to connection enquiry

'(b1) The *Network Service Provider* must:

(1) within 20 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or

(2) within 20 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d), provide the *Connection Applicant* with the following written details of each technical requirement relevant to the proposed *plant*:…' 5.3.3 Response to connection enquiry

TNSPs are also bound by the response timeframes and requirements of their Negotiating Frameworks.

Other jurisdictional level obligations in relation to transmission connections also exist.[8]

[8] For example, the NSW 'Energy Services Corporations Act' sets a '*principal objective*' on TransGrid '*to promote effective access to those transmission facilities*'.

The current process for connection involves an element of negotiation and connection costs are charged to the connecting party. However, TNSPs are not at large with respect to these matters, but rather any connection party may avail themselves of the dispute resolution provisions in the law and Rules if a TNSP is perceived as acting unreasonably or contrary to the Rules. The performance standards for new loads or generators are, correctly, focused on ensuring that the new connection does not impact other users, and that it does not compromise power system security. TNSPs have a key role in ensuring this, as does AEMO when it takes part in commissioning and registration processes.

Grid Australia also notes that TNSPs have worked proactively to streamline the practical application of the Rules process for connections.[9]

Problems with the Victorian connection arrangements

Grid Australia notes that while a number of stakeholders commented adversely on the transmission connection arrangements, the Victorian arrangements were singled out for special attention. For example, the NGF noted that:

> *'AEMO has indicated it would need to include a number of additional protections in its connection documents over and above what it would normally include if SP AusNet were to construct and operate the terminal station. Therefore, while the opportunity may exist, the proposed additional obligations on the generator may make it unviable' National Generators Forum, p18*

and:

> *'Unfortunately, the decision for a generator to construct a terminal station may be unavoidable if there is no other viable tender to undertake the works. In this case, the additional obligations proposed by AEMO may impose onerous and unavoidable costs on the generator, who has little or no opportunity to negotiate.' National Generators Forum, p18*

It, therefore, appears that the Victorian arrangements are considered inflexible in relation to connection standards. The NGF also considers that AEMO's approach in procuring any shared assets related to a connection is less than transparent and limited by its lack of exposure to risk:

> *'The negotiations that AEMO undertakes on the connection applicant's behalf expose the applicant to significant additional risks. Unlike a commercial entity, AEMO has little incentive to push for a particular cost or risk outcome because AEMO is indifferent to the service outcome. The connection applicant bears all*

[9] Grid Australia's Connection Guidelines are available at: www.gridaustralia.com.au.

the risk but has little recourse should there be any delays or difficulties with delivery of these transmission services. In other jurisdictions, the connection applicant negotiates contracts for these services itself.' National Generators Forum, p19

In Victoria, a new generator or load connecting to the grid faces additional complexity because it has to negotiate two agreements (a connection agreement with SP AusNet and a use of system agreement with AEMO) and, in the process, test for gaps and overlaps between the two. In contrast, in other States, only a single agreement is needed. The Victorian connection arrangements are inefficient and arguably not well aligned with the National Electricity Objective.

Grid Australia welcomes the opportunity to assist in the refinement of the processes and regulatory arrangements with respect to new connections and to ensure that any unnecessary barriers to the efficient growth of the market are removed and has already initiated discussions with the National Generators Forum in response to their specific concerns. However, the views in submissions suggest that a priority for such reform should be the arrangements applying in Victoria, including the institutional arrangements for responding to connection applications and the commercial incentives of the parties involved.