



29 September 2010

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

Dear John,

Re: Transmission Frameworks Review Issues Paper

SP AusNet welcomes this opportunity to make this submission in response to the AEMC's Transmission Frameworks Review Issues Paper.

SP AusNet supports the exploration of any reforms to the transmission framework which enhance market outcomes and strengthen incentives for TNSPs to operate and invest more effectively and efficiently. A consideration of these issues is important in the context of climate change, where transmission networks play an important facilitating role.

A priority for this review is to ensure the framework provides incentives for future network and generation investment. Appropriately designed commercial incentives can facilitate the transmission investment that is needed to connect renewable and other low-carbon sources of generation in a timely manner. It may therefore be appropriate to revisit the current allocation of market risks and accountabilities if such changes are likely to deliver material benefits to the market and encourage greater investment. SP AusNet considers that appropriately designed incentive mechanisms, which properly reflect risks and accountabilities, provide the best means of delivering improved outcomes.

The Issues Paper notes that in exploring options to achieve the review's aims, it should be recognised that regulatory certainty has value in itself to those making investment and operational decisions as a generator, network business or customer. As also noted by the Issues Paper, any changes to the framework should be proportionate and evidence-based.

With these points in mind, the attached submission addresses selected topics raised in the Issues Paper.

We look forward to further opportunities to provide more detailed submissions to the AEMC on specific issues and proposals over the course of the Transmission Frameworks Review. In the meantime, we would be pleased to respond to any queries you may have on this submission.

Yours Sincerely

A handwritten signature in blue ink, appearing to read 'A.P.', with a long horizontal flourish extending to the right.

Alistair Parker

DIRECTOR REGULATION AND NETWORK STRATEGY

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SP AusNet's submission to the AEMC's Transmission Frameworks Review Issues Paper

1. Overview

The purpose of this submission is to highlight a number of issues pertinent to this review, and identify some of the challenges in implementing certain reforms. From SP AusNet's perspective, the principal challenges for this review will be to ensure that it:

- builds on the recently completed reviews in relation to transmission networks and investment; and
- in designing financial incentives and further regulations, takes account of the split responsibilities between SP AusNet (as network owner) and AEMO (as the planner of transmission network augmentations) in Victoria.

This submission addresses the following selected topics raised in the Issues Paper:

- the scope of the review;
- network operation;
- connection arrangements;
- promoting efficient transmission investment;
- economic regulation;
- transmission planning arrangements; and
- the role of transmission.

SP AusNet is a member of Grid Australia, and supports Grid Australia's submission in response to the AEMC's Issues Paper.

2. Scope of the review

The AEMC has noted that the Transmission Frameworks Review is broad-ranging. Accordingly, the AEMC has requested stakeholders comment on the appropriate scope of issues to be considered by the review, and whether the issues identified by it are the most material.

The principal impetus for the review is climate change. SP AusNet recognises that transmission has an important role to play in delivering the Government's commitment to ensure that 20 per cent of Australia's electricity supply will come from renewable sources by 2020. The Renewable Energy Target together with other policy initiatives will lead to a change in the location and mix of new generation; increase the need for timely and

efficient provision of connection assets; lead to changes in network flows; and increase transmission investment requirements.

SP AusNet notes that the outcomes of the AEMC's Review of Energy Market Frameworks in light of Climate Change Policies recommended, in relation to transmission frameworks, that:

- a generator transmission charge to signal network costs associated with connection in particular locations should be pursued;
- where feasible, prices received by generators should reflect network congestion; and
- generators should be able to negotiate an enhanced level of transmission service.

In addition to these three recommendations, work is currently underway to deliver improved pricing signals through inter-regional TUOS, and to ensure that TNSPs provide scale efficient network extensions.

The MCE's Terms of Reference for the Transmission Frameworks Review include matters relating to the AEMC's earlier recommendations (noted above). However, the Terms of Reference also extends to issues such as transmission planning and investment arrangements that have only recently been the subject of review and further enhancements. Evidently, the AEMC will balance the lessons learnt from these recent reviews with the need to take a holistic view of transmission's role in the NEM, especially in the context of climate change.

As a general proposition, SP AusNet supports reform where this is likely to promote the achievement of the national electricity objective. To the extent that reform requires existing accountabilities to be re-assigned or new obligations imposed, the mechanisms for remunerating TNSPs, including incentive schemes, will need to be revisited to ensure that there is an appropriate balance between risk and reward.

3. Network operation

SP AusNet believes that there is scope to further strengthen incentives for effective transmission network operation. SP AusNet supports the application of strengthened incentives where this is consistent with the achievement of the national electricity objective.

In particular, SP AusNet agrees that TNSPs should face appropriate incentives to manage and maintain their networks to ensure that network assets are available at times when they are of most value to the market. In this regard, it is noted that the AER's Service Performance Target Incentive Scheme (STPIS) encourages TNSPs to make available network capability when the market values it most. The AER's Final Decision on SP AusNet's revenue cap for the period from 2008/09 to 2013/14 describes STPIS applying to SP AusNet as follows:

"The STPIS places 1% of SP AusNet's MAR [maximum allowed revenue] at risk. This is an increase from the 0.5% of revenue at risk in the current regulatory control period. Each performance measure in the STPIS is weighted to determine what proportion of the total revenue at risk is attached to each target..."

The weightings place half of the revenue at risk for parameters related to security of supply and allocate the remainder equally to parameters related to reliability of supply and operational response. This allocation is consistent with the value placed on services by SP AusNet's customers and the objectives of the STPIS.”¹

In addition to the STPIS, SP AusNet is also subject to an Availability Incentive Scheme (AIS), which provides further incentives for SP AusNet to maximise operational network capability for the benefit of the market. This scheme creates an incentive for SP AusNet to minimise outages in general, and to move necessary outages to off-peak times. Under this scheme the network charges payable by AEMO to SP AusNet are reduced (i.e. rebated) based on the level of network outages. An outage rebate value is attached to individual items of plant, with higher values attached to more critical plant, and generally higher values attached to peak periods, than intermediate and off-peak periods.²

The AIS has now been in place for more than a decade. During that period, the scheme has provided SP AusNet with strong incentives to improve the availability of network assets, particularly at times when network capability is most highly valued by the market. The principles underpinning the design of the incentive properties of the scheme are broadly applicable to all TNSPs. Therefore, there may be merit in examining the benefits and feasibility of modifying the STPIS to incorporate the incentive properties of the existing AIS. SP AusNet would be pleased to provide the AEMC with more detailed information in relation to the AIS if it is interested in learning more about the scheme.

The AER's STPIS also includes a measure (MITC) which provides a financial incentive for TNSPs to minimise the market impact of transmission outages. This encourages TNSPs to manage both planned and unplanned outages so that the impact of network constraints on the wholesale market is minimised. This currently operates as a bonus-only scheme and will automatically apply to SP AusNet at the commencement of our next regulatory control period.

It is expected that the benefits of the MITC measure would include:

- providing improved incentives to ensure the transmission system is available at times most valued by the market; and
- encouraging improvements in the quality and reliability of the transmission network experienced by network users.

SP AusNet would support further initiatives that are designed to promote these outcomes. In addition, SP AusNet considers there is merit in examining options for improving information and transparency on network availability and outages.

4. Connection arrangements

The issue of timely generation connection is raised in the Issues Paper. In particular, concern is expressed that given the expected impact of climate change policies on

¹ AER, Final decision: SP AusNet transmission determination – 2008/09 to 2013/14, January 2008, page 181.

² Ibid, page 151.

generation mix and location, TNSPs must be responsive to new generation connections in terms of price, service levels and timeliness.³

In Victoria, AEMO is responsible for processing connection applications, and SP AusNet works with both AEMO and the connection applicant to facilitate the connection of new generation while seeking to maintain the requisite levels of power quality and ensure transmission network reliability. AEMO, SP AusNet and the connecting party must enter into tripartite contracts relating to the design and construction of the connection assets and the provision of shared network services. Greater complexity arises where the provision of services is contestable. SP AusNet and AEMO are working closely together to streamline contractual arrangements and ensure that connection applications in Victoria are processed in a timely and responsive manner.

Victoria is currently experiencing an increased level of interest in new generation opportunities. AEMO has recently reported receiving approximately 5,000 MW of Victorian transmission system connection applications and enquiries, and of these, approximately 3,600 MW are expected to be connected to the 500 kV lines between Portland and Geelong or the 220 kV lines out of Ballarat.⁴ AEMO observes that:

“These proposals, which aim to capitalise on Victoria’s substantial wind and gas resources and the existing transmission infrastructure along the south-western coast of Victoria and in the Ballarat area, pose new challenges for transmission planning due to their dispersed nature and associated uncertainty.”⁵

It is likely that this generation will drive significant Victorian transmission network investment over the next few years.

SP AusNet therefore recognises the importance of being responsive to generation connection enquiries. From a simple commercial perspective, SP AusNet is incentivised to connect users to the grid as quickly as possible; as noted in the Issues Paper, delays in the connection of new users to the network result in foregone revenues to TNSPs. Apart from the commercial incentives, SP AusNet considers that the existing Rules provisions provide sufficient assurance that connection enquiries and applications will be addressed in a timely manner. Notwithstanding these observations, SP AusNet would support improvements to the existing arrangements if reform would further the achievement of the national electricity objective.

5. Promoting efficient transmission investment

The Issues Paper notes that some submissions to the Review of Energy Market Frameworks in light of Climate Change Policies raised concerns that, despite the changes to the regulatory test, insufficient network investment will be undertaken to support new entry by generators or to ensure incumbents are unaffected by new entry⁶. SP AusNet considers that the existing arrangements are working well, but it is timely to review evidence from interested parties on this important issue.

³ Page 30 of the Issues Paper

⁴ AEMO, 2010 Victorian Annual Planning Report, page 33

⁵ Ibid.

⁶ AEMC, Review of Energy Market Frameworks in light of Climate Change Policies: Final Report, September 2009, pages 33-34.

In relation to the new RIT-T and the promotion of efficient transmission investment, the Issues Paper states:

“We also note that, while TNSPs may be more likely to test potential market benefits investments, there may be some challenges in applying the RIT-T to proposed network augmentations that are not required to meet a specific reliability requirement to pass the test. Whereas augmentations that are predominantly meeting a reliability standard can proceed on a least cost basis, a proposed augmentation that is primarily to improve the efficiency of spot market outcomes must yield a net benefit to the market. It may be difficult for some types of market benefits, particularly competition benefits, to be demonstrated.

Further, there has traditionally been an emphasis on reliability projects and, unlike meeting reliability requirements, there is no legal obligation under the Rules or direct financial penalty imposed on TNSPs for not progressing a proposed project that is primarily to address congestion or any other market benefit.

While the NTP (and the Last Resort Planning Power as a fall-back) will promote the testing of new transmission projects and the RIT-T should ensure that new investment is efficient and help identify projects that maximise net market benefits, these reforms do not extend as far as ensuring that TNSPs will undertake all such investments. Given the anticipated increase in the prevalence and materiality of congestion, we intend to consider whether current arrangements appropriately provide for efficient augmentations to relieve congestion to be undertaken, and to be done so in a timely manner. This will include an assessment of the effectiveness and linkages between the elements of the current frameworks, as well as potentially examining other types of incentive arrangements. Such an approach could involve rewarding TNSPs for investing efficiently (for instance, in response to market signals) and, conversely, exposing them to risk for under investment.”⁷

In response to these comments, SP AusNet notes that:

- In Victoria, all transmission augmentation decisions are evaluated using a probabilistic – as opposed to deterministic - planning standard, and therefore shared network augmentations in Victoria have not to date been justified on the basis of meeting a deterministic reliability standard. Rather, all such investment has been justified on the basis of maximising net benefits to the market. Experience in Victoria to date does not indicate that there have been any particular “challenges” in applying the Regulatory Test to proposed network augmentations that are not required to meet a specific reliability standard.
- SP AusNet would be opposed to any administrative arrangement that sought to compel TNSPs to invest in projects that are not commercially viable. The Last Resort Planning Power provides an adequate safety net in the highly unlikely circumstances that a TNSP has not responded to a material network investment need in a timely manner.
- Moreover, Chapter 6A provides a best practice regulatory framework that is designed to promote efficient investment in accordance with the national electricity objective. In order for investment to be regarded as ‘efficient’, the project scope and timing must be optimal. The regulatory arrangements are designed to be incentive-based, which means that decisions to commit capital to particular projects are based on commercial

⁷ Pages 24-25 of the Issues Paper

considerations. A regime that sought to compel TNSPs to invest would be inimical to the basic principles underpinning the present model of incentive regulation.

- Whilst SP AusNet is, in principle, supportive of the proposition of increased incentives to encourage efficient investment, the design of any such incentive arrangements must recognise the separation of the transmission augmentation planning function (which resides with AEMO) and transmission ownership (SP AusNet).

In relation to the timeliness of transmission investments, it should be noted that a major source of delay can arise from the environmental planning and council consent processes, which are beyond the scope of the AEMC's review.

6. Economic regulation

Chapter 6A of the Rules was settled in November 2006 following an extensive review by the AEMC. In SP AusNet's view, Chapter 6A incorporates key elements of current 'best practice' economic regulation for electricity transmission in Australia. In particular, the economic regulatory framework incorporates: building block regulation which provides ex ante incentives for efficient investment and expenditure; incentive mechanisms that hold TNSPs accountable for the quality of services they provide; revenue capping; merits review; and guided regulatory discretion.

Given that climate change policy is expected to lead to a substantial increase in grid investment requirements, any further reform of the economic regulatory framework should be focused on encouraging new investment. SP AusNet therefore welcomes the AEMC's intention⁸ to consider whether there is scope to explore additional ex ante market based incentives on TNSPs to deliver timely and efficient investment decisions, rather than ex post prudency reviews of capital expenditure. As a general principle SP AusNet would support proposals to strengthen incentives for efficient investment.

7. Transmission planning arrangements

The experience to date suggests that the transmission planning framework has facilitated efficient investment through the assembly of relevant market information and investment plans. The planning framework also provides for the scrutiny of transmission investment plans and also ensures that a national perspective is applied through AEMO's national transmission development planning role. The current transmission planning framework is centred around the following key elements:

- Annual Planning Review reports (APRs) are published by each jurisdictional TNSP⁹. These documents contain detailed information relating to demand forecasts, committed generation and transmission projects, emerging constraints, and potential options (including non-network solutions) for alleviation of constraints.
- The Annual National Transmission Network Development Plan (NTNDP) is published by AEMO in its capacity as the national transmission planner. The NTNDP is focussed on analysing constraints on the national transmission flow paths, and identifying possible network augmentations to facilitate greater inter-regional flows.

⁸ Page 26 of the Issues Paper.

⁹ In the case of Victoria, the relevant transmission network planning body is the former VENCorp which became part of AEMO in 2009.

- The Regulatory Investment Test for Transmission (RIT-T) provides a robust, transparent and consultative framework for the economic evaluation of options (including both network and non-network solutions) for addressing network constraints.

The transmission planning framework has been refined and developed over the course of a number of reviews in recent years, with the aim of:

- providing for the publication of more extensive planning information;
- increasing the transparency and economic rigour of TNSP investment decision-making;
- increasing the rigour of analysis applied to non-network solutions, and ensuring that network and non-network solutions are evaluated on an equal footing;
- ensuring that network planning is focussed appropriately on addressing inter-regional as well as intra-regional constraints; and
- implementing network investment criteria (through the RIT-T) that provide for a greater national focus on the market benefits associated with transmission investment.

SP AusNet would welcome any further initiatives which may improve the existing arrangements, but recognises that recent reforms have not yet been fully tested. The limited operational experience with the current arrangements means that an evidence-based approach may prove difficult to apply at this time. Nevertheless, SP AusNet looks forward to reviewing submissions from interested parties on this issue.

SP AusNet notes that the Issues Paper appears to be seeking ways of achieving coordination efficiencies between transmission and generation planning and investment. SP AusNet is open to proposals that improve coordination between transmission and generation investment, as such measures have the potential to further the achievement of the national electricity objective. However, SP AusNet strongly favours appropriately designed commercial incentives, rather than central planning, as the best means of delivering efficient outcomes under the current market design.

8. The role of transmission

The physical role of transmission is clear: that is, to transport electricity from generation connection points to customer connection points, and to provide customers with access to energy supplies by connecting generation. However, the specific questions canvassed in the Issues Paper regarding transmission services as a facilitator of the competitive markets (generation and retail) appear to be most pertinent to this review. These include questions as to the type of services provided, namely:

- How should the default level of ‘service’ that transmission businesses provide be defined and measured?
- Should generators and customers be able to purchase a higher level of service (i.e. a higher level of reliability or firm access)?

Currently the base level of transmission service is reflected in planning and service standards. In Victoria, in relation to transmission augmentations, AEMO assesses the net market benefits of reliability projects by comparing their costs and expected benefits (in terms of a reduction in expected unserved energy) on a case-by-case basis. Reductions in expected unserved energy are evaluated by taking into account the probability of individual and collective outages of transmission and generating plant, and an assumption about the value that customers assign to reducing unserved energy.

AEMO is required to plan the Victorian transmission networks to meet mandated levels of resilience to outages or events as specified in schedule 5.1A of the Rules. For most TNSPs, the requirements in the Rules are supplemented through jurisdictional requirements. While there is no defined reliability standard in Victoria, the adopted planning standard ensures that assets are compliant with system security and performance obligations. The AEMC has proposed creating a national regime for reliability standards, but this has not yet been progressed.

SP AusNet strongly concurs with the AEMC that revising the role of transmission in the market would represent a significant change¹⁰. However SP AusNet also recognises that firmer access is a major factor in generation investment decision making. SP AusNet therefore considers that any proposal to revise the role of transmission in the market, or the definition of transmission services, would warrant careful consideration, development and assessment, to ensure that any changes would help to align the incentives of generators and TNSPs, and therefore ultimately enhance the achievement of the national electricity objective¹¹.

¹⁰ Page 18 of the Issues Paper.

¹¹ Page 19 of the Issues Paper.