

POWERLINK QUEENSLAND

RESPONSE TO: AEMC SCOPING PAPER

National Transmission Planner

7 September 2007

Powerlink Queensland (Powerlink) makes this submission in response to the Australian Energy Market Commission's (AEMC's) Scoping Paper on a National Transmission Planner, released in August 2007.

A separate response to the AEMC's Scoping Paper was lodged by the Electricity Transmission Network Owners Forum (ETNOF), of which Powerlink is a member. Powerlink also supports the views expressed therein.

General Comments

In its April 2007 decision on the National Reform Agenda, Powerlink notes the Council of Australian Government's (COAG's) confirmation that accountability for jurisdictional transmission investment, operation and performance will remain with transmission network service providers (TNSPs). COAG also decided that, in order to enhance productivity and the efficient functioning of markets, the new regime must, at a minimum, be no slower than the present time taken to gain regulatory approval for transmission investment and must not reduce or adversely impact the ability for urgent and unforeseen transmission investment to take place.

Powerlink believes that these matters are significant positions and provide a clear and useful context within which the AEMC is required to conduct its review on National Transmission Planning Arrangements.

The AEMC's review will also inevitably encompass consideration of the roles of electricity transmission and electricity distribution. Powerlink suggests that the AEMC exercise caution in this regard, given that the boundary between these roles differs between States and that the functional roles do not necessarily align with organisational boundaries. For example, in Queensland, the electricity distribution network service providers (DNSPs) own and operate certain network elements which interact with, and support the transmission network (particularly during contingencies) to deliver overall transmission capability. Demand levels, particularly levels of reactive power demand are also critical to determining transmission capability where voltage stability determines the limit. Arrangements within the distribution network are the major contributor to the reactive power demand levels which are required to be supplied. Therefore, it is important that the joint planning which occurs between TNSPs and DNSPs is retained.

Scope of National Transmission System

The AEMC seeks views on whether the principles for identifying the national transmission system have been resolved and correctly applied.

COAG's overarching aim of energy market reform is to improve the efficiency, productivity and competitiveness of the energy sector. Consistent with these objectives, Powerlink reiterates ETNOF's views that the AEMC should ensure:

- there is no duplication of effort or overlap of roles between TNSPs and the national transmission planner. This is also entirely consistent with a 'fit for purpose' model;
- that the national transmission planner be established on the basis that it take a strategic and nationally co-ordinated approach to transmission network development; and
- that the national transmission planner focus on value-add activities. An important role for the national transmission planner could be to identify, gather and distribute information on national market benefits to ensure all relevant stakeholders are informed.

Powerlink considers that the major national flow paths identified in the Annual National Transmission Statement (ANTS) are not based upon sound principles and analysis but, instead, upon NEMMCO's subjective judgement of what portions of the network are used to transport significant amounts of electricity between major generation or load centres. While this of itself may not be an issue, concerns arise when, for example, the ANTS includes:

- a flow path which *flows away* from the bulk of the National Electricity Market (NEM); and
- flow paths where less than 1% of the energy transported traverses a State border.

Both cases are well catered for by regional planning and regional mandated reliability standards and thus should not realistically come under the umbrella of a national flow path.

In light of these examples and the strategic national viewpoint from which the national transmission planner should operate, Powerlink considers that there is a clear need to revisit what constitutes major national flow paths. While there may be some concern that too narrow a definition would fail to realise the gains envisaged from national planning, using the examples above, Powerlink contends that there is no national benefit in a flow path which flows in the opposite direction to the bulk of the NEM and little or no national benefit in flow paths for which more than 99% of the flow is consumed within State.

The use of generalisations to develop such fundamental and key aspects of the national transmission planning framework is less than first-best. A much more appropriate basis upon which to develop this definition is to first consider whether the potential national benefits are real and, if so, whether they are material.



Powerlink believes that it is important that the national transmission planner and the national transmission network development plan focus on flows paths which have a real and material national (rather than regional) impact.

Alignment of Regulatory Resets

As part of its review, the AEMC is required to consider the merits of aligning the timetables for transmission revenue determinations.

From a strategic national transmission planning perspective, there would appear to be little, if any, value in attempting to align TNSP revenue reset reviews. To the extent that transmission planning and regulatory decision-making in one jurisdiction might affect another, the impacts of this are likely to be small in the scheme of a transmission business's investment program. In any case, planning and regulatory processes currently in place already adequately address the inter-regional impacts of investment. For example, there is ongoing joint planning and interaction between TNSPs to consider and address emerging limitations between States as required under the Rules. Similarly, where a need to take action is identified, TNSPs currently undertake the necessary public consultation in accordance with the Rules and Regulatory Test. In terms of the revenue regulation framework, while the potential for interconnector upgrade may be identified for implementation during a regulatory period, given the level of uncertainty generally associated with its timing and cost, such works are generally captured by means of the contingent projects regime.

Applying the AEMC's standard approach to assessing the need for change, if there does not appear to be a material problem with transmission planning and network development from a strategic viewpoint under current arrangements where revenue reviews remain staggered, Powerlink fails to see the imperative to align review timetables.

Notwithstanding this, on face value, an alternative consideration would be alignment of TNSP and DNSP regulatory determinations within individual jurisdictions as opposed to the alignment of TNSPs as a group. As alluded to earlier, DNSPs in Queensland own network elements that contribute to the overall capability of the transmission network. The potential for synergies in planning matters is also more likely to occur between transmission and distribution businesses in an individual State than between TNSPs in relation to a single, modest capacity interstate connector.

In addition, transmission and distribution businesses within States are driven by the same load forecasts. Powerlink and the Queensland distributors also work on the basis of similar planning criteria for the transmission network, sub-transmission network and backbone elements of the distribution networks by virtue of Queensland's reliability standards.

The potential benefits associated with coincidental transmission revenue resets appears to be based on the proposition that material levels of potential augmentations involving multiple TNSPs are involved. Powerlink considers that there is currently very little evidence to support this view, and there is likely to be even less going forward – where a larger and increasing proportion of capital expenditure will be replacement rather than augmentation in nature. Once again, Powerlink would urge the AEMC to consider and respond to this question on a proportional basis to the magnitude of the so-called problem – if it exists.



Regulatory Test

The AEMC has been tasked to develop revised network planning and consultation processes. A central part of this task is to amalgamate the existing reliability and market benefits limbs of the Regulatory Test into a unified framework. This must be done in the context of the COAG direction 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”.

As the AEMC has noted in the Scoping Paper, this “will also require the development of practical approaches for implementation of the proposed new arrangements”. Powerlink considers that matters of practicality should be given due weight, as against theoretical concepts, to ensure that transmission investments necessary to meet a TNSP’s network performance obligations are able to proceed in a timely manner. It must be remembered that the Regulatory Test is applied to all relevant network augmentations and will not be limited to just the NTNDP.

In its Scoping Paper the AEMC has put forward three possible approaches to restructuring the Regulatory Test:

- a full market cost / market benefit analysis for all transmission planning;
- a least cost analysis referenced against the target development in the NTNDP; and
- a combined analysis where incremental costs and benefits above a least cost solution could be assessed.

Of these three possible approaches only the third option appears viable, considering the bounds within which this review is being conducted.

The first option, explicitly valuing reliability and all other network performance obligations, pre-empts the task that COAG has given the Reliability Panel of examining nationally consistent transmission reliability standards. There are also real practical difficulties in States like Queensland where significant joint planning between Powerlink and the DNSPs is required. This planning often results in a combination of network developments in both transmission and distribution networks. However, even if the benefits of transmission network reliability standards are to be explicitly valued this may not be case for distribution networks. It is noted that in response the ESDS review in 2004 the Queensland DNSPs are required to move to an N-1 standard for the sub-transmission and distribution backbone. The Regulatory Test must be able to handle these circumstances regardless of what standards the Reliability Panel ultimately adopts for transmission networks.

The second option would require Powerlink to rely upon the NTNDP, however the COAG decision makes it clear that TNSPs are to remain accountable for transmission investment, operation and performance. The notion that Powerlink would be obliged to select an option to conform to the NTNDP at least cost cuts directly across Powerlinks legal obligation to meet supply reliability standards. If Powerlinks own planning analysis showed that, in order to meet its obligations, it should do an augmentation of different scope and/or timing to what was shown in the NTNDP, then a Regulatory Test which prevented this would be inconsistent with the COAG decision. It must also be recognised that if the NTNDP is “strategic”, then there will be many transmission network augmentations which Powerlink must do that are not in the NTNDP anyway. The Regulatory Test must be able to accommodate these circumstances.



The third option is consistent with the COAG decision, and the intention of allowing incremental market benefits to be assessed against the extra costs of a higher than least cost solution. In this regard Powerlink refers the AEMC to the possible arrangements for a reformed Regulatory Test put forward in the ETNOF response to the Scoping Paper.

In relation to what alternatives should be considered in the Regulatory Test analysis, Powerlink believes that the present arrangements are an appropriate balance between the needs for considering plausible alternatives, and not introducing needless delays to reliability-driven augmentations. Powerlink considers it essential that where an investment is required in order to meet mandatory network performance standards, any alternatives must have an identified proponent to accept a proportional share of the reliability obligations.

Value of Reliability Benefits

In Table 1 of the Scoping Paper¹ the AEMC states that under the reliability limb of the Regulatory Test “benefits are not valued”. Powerlink considers that this statement is less correct than stating that “benefits are implicitly, rather than explicitly, valued”.

The value of reliability benefits is also implicitly captured in the present value analysis of future required network investments under the Regulatory Test. A low cost initial investment may only meet the reliability standard for a short time before requiring a subsequent, more costly investment. Alternatively, a more costly initial investment may allow the reliability standard to be met well into the future at a lower present value cost. This point is considered further in the ETNOF submission to the Australian Energy Regulator consultation on the Regulatory Test Version 3. Powerlink encourages the AEMC to consider the points raised in that submission in any redesign of the Regulatory Test being considered through this consultation.

Summary

Powerlink is concerned to ensure that the scope of the new National Transmission Planner arrangements meet the requirements set out in COAG's April 2007 decision on the National Reform Agenda. In this regard the major issues arising from the AEMC's Scoping Paper that Powerlink wishes to comment on are:

- The existing major national flow paths that are the subject of the Annual National Transmission Statement need to be revisited in light of the COAG decision. A number of these are already well catered for by existing regional planning arrangements and mandated reliability standards within the region. Powerlink believes that it is important that the national transmission planner and the national transmission network development plan focus on flows paths which have a real and material national (rather than regional) impact.

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- The potential benefits associated with coincidental transmission revenue resets appears to be based on the proposition that material levels of potential augmentations involving multiple TNSPs are involved. Powerlink considers that there is currently very little evidence to support this view, and there is likely to be even less going forward. Notwithstanding this, on face value, an alternative consideration would be alignment of TNSP and DNSP regulatory determinations within individual jurisdictions as opposed to the alignment of TNSPs as a group. The potential for synergies in planning matters is more likely to occur between transmission and distribution businesses in an individual State than between TNSPs in relation to a single, modest capacity interstate connector.
- Of the three possible approaches put forward for redesign of the Regulatory Test only the third option appears viable. The third option is consistent with the COAG decision, and the intention of allowing incremental market benefits to be assessed against the extra costs of a higher than least cost solution. In this regard Powerlink refers the AEMC to the possible arrangements for a reformed Regulatory Test put forward in the ETNOF response to the Scoping Paper.
- The value of reliability benefits within the existing reliability limb of the Regulatory Test should be recognised as being implicitly captured and it is erroneous to suggest it is not being valued at all.

