



RESPONSE TO

AEMC Congestion Management Review Directions Paper

12 April 2007

Powerlink Queensland appreciates the opportunity to comment on the Congestion Management Review (CMR) Directions Paper. This submission provides Powerlink's view relating to a number of the questions raised and issues proposed for further analysis in the CMR Directions Paper, that the Australian Energy Market Commission (the Commission) sought comment on by the 13 April 2007.

Management of congestion under the existing Rules

The Commission is seeking comment on specific issues relating to transmission network incentives. While Powerlink believes that incentives regarding transmission network investment and operation were fully canvassed as part of the Commission's revenue and pricing rules, the following issues have been raised through the Directions Paper:

1. The Commission suggests that TNSPs undertake more maintenance at times of off-peak loading on the network. While the Commission's recent determination on economic regulation of transmission networks provides for the Australian Energy Regulator (AER) to implement an incentive scheme, it does not and cannot dictate that all necessary capital and maintenance programmes be carried out at off-peak loading times.

As the Commission recognises, "transmission capability is a joint function of transmission infrastructure, load and generation patterns and NEMMCO management of the power system¹." The planning of outages is not just for TNSPs to determine, but rather to manage through a collaborative approach with directly affected NEM participants and NEMMCO. Due to the rapid growth in the electricity demand in Queensland and the consequent expansion of the transmission network, many outages required to commission new works cannot be confined to weekends but must occur, at least partly, on weekdays.

It would be erroneous for the Commission to assume that there is a capability (at least in respect of the Queensland grid) for ever increasing amounts of essential work to be accommodated in weekend and off-peak times.

2. There is the suggestion in the Directions Paper that TNSPs choose to progress network investments under the Reliability Limb of the Regulatory Test because it delivers investments earlier than can be justified on a cost-benefit analysis under the Market Benefits Limb.

Powerlink does not believe there is any factual basis to support that suggestion in relation to the Queensland grid. The reality is that Powerlink is legally required, under its Transmission Authority, to meet a deterministic N-1 reliability of supply standard. The use of the Reliability Limb is not a discretionary choice – it is the only mechanism which is consistent with a deterministic reliability standard.

¹ CMR Directions Paper, Section 5.2.1, p52

Incremental Options for Improving Congestion Management

Constraint Formulation and Boundary Change

As NEMMCO's interpretation of the use of "fully optimised" constraint formulation allows for the maximum use of available capacity on a transmission system, Powerlink supports the insertion of clauses (a) and (b) of Part 8 of Chapter 8a of the Rules, into Chapter 3 of the Rules.

Regarding changes to regional boundaries, it is important that the Commission recognise all of the potential financial impacts to customers of such changes. It is not simply the energy price seen by customers that would change. If regional boundaries are to change, the proceeds from the auctioning of Inter-Regional Settlement Residue (IRSR) units received by the relevant TNSP(s) would vary. Since these IRSR monies are applied to offset transmission network charges, such a change will impact the TUoS charges to customers. For this reason, any changes to region boundaries must align with the timetable for transmission pricing arrangements and must consider any potential price shocks to customers.

Basis Risk Management

Currently, the settlement residue auctions recognise that the constraint equations that describe network capability will change and develop over time to describe new situations, and that the auction process does not govern this dynamic. If a constraints based approach, such as suggested by Dr Daryll Biggar, was implemented, an individual constraint equation would bring with it financial rights. While this may allow the participants to achieve firmer risk management through the purchasing of several rights, as congestion is relieved over time through development of the network, the value of the rights previously purchased will diminish. This could then provide incentives for these residue holders to work to frustrate or delay beneficial network enhancements.

Constrained-On Payments

Powerlink has a number of concerns regarding the introduction of payments for constrained-on generators, and views the change as potentially fundamental in nature, as opposed to the Commissions view that it is an incremental change.

Under the current Rules, it is only when a direction is made to a participant by NEMMCO as a last resort that payment is made. Changing this such that generators control these payments through bidding is a fundamental change to the governance. A further fundamental change would be if the TNSPs had to manage the allocation and payment of constrained-on payments. This would be a fundamental change with risk allocations that have not been previously discussed. This brings the need for clarity of roles and responsibilities in respect of the provision of network capability into the realm of the CMR.

Information Provision

Information is provided in good faith by NEMMCO or TNSPs as part of annual review documents to guide potential investments. However, Powerlink does not consider it should be seen as carrying any special insight into future market dynamics or that such information would be sufficient for third party's to use in actual investment decision making. That information is necessarily prepared based on assumptions, the basis of which will vary with time. Investors will still need to be responsible for drawing their own conclusions from the range of information and views that will be available to them, including more detailed studies which they may seek as part of the connection application process. We urge the Commission to work with transmission companies to identify what information is appropriate to be provided generally, in what timeframes and at what cost before reaching any firm conclusions on this point.

Fundamental Options for Improving Congestion Management

NEMMCO's Intervention Power

The Directions Paper discusses whether NEMMCO's power to intervene to manage negative settlement residues should be removed. At this stage, the removal of the intervention obligation in Part 8 of Chapter 8A, is viewed by Powerlink as premature. Powerlink recommends the proposal be considered and further explored in the CMR's ongoing development.

Roles and Responsibility in respect of the provision of network capability

Powerlink, like others commenting in response to the issues paper, is concerned with the ambiguity in the NEM roles and responsibilities in respect of the provision of network capability. Powerlink recommends that these NEM roles and responsibilities be clearly defined removing any ambiguity, otherwise recommendations from the Commission may cause what is perceived as an incremental change, to in fact constitute a fundamental change.

Powerlink refers to the Commission's Directions Paper;

"as transmission capability is a joint function of transmission infrastructure, load and generation patterns and NEMMCO management of the power system, there is a limit to what can be achieved in this manner without clarifying and/or rearranging the responsibilities and accountabilities of TNSPs, NEMMCO and market participants²."

"Even though, NEMMCO limits its deployment of NSCS for the benefit of trade to the activity of managing interconnector capability, neither NEMMCO nor NSPs have been formally assigned an accountability for delivering interconnector capability. Responsibility for the interconnector capability envelope is shared between TNSPs and NEMMCO, but there is no common understanding in the market as to what that interconnector capability envelope looks like and, hence, what level of NSCS should be delivered³."

NEMMCO's submission acknowledges that there is an overlap between it and TNSPs in providing a reliable network and particularly the procurement of reactive power. NEMMCO's acknowledgement on ambiguity around these NEM roles and responsibilities was also supported by Transend and Macquarie Generation⁴.

Powerlink does not support the Commission's proposal of a separate and more specific review regarding NEM roles and responsibilities, but sees the CMR as an appropriate opportunity for NEM roles and responsibilities in respect of the provision of network capability to be clearly articulated for the NEM participants.

In the context of network capability, Powerlink notes that the transfer capability of an interconnector can also be materially impacted by factors such as the output of various generating units, and the flows on other (distant) interconnectors.

The existing constraint equations are designed to dynamically deliver the maximum transfer capability at each point in time, whilst maintaining system security, having regard to the ever changing pattern of generator outputs and flows elsewhere in the interconnected system.

² CMR Directions Paper, Section 5.2.1, p52

³ CMR Directions Paper, Section 7.2.2, p78

⁴ CMR Directions Paper, Section 7.2.2, p76

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Incentive Scheme

Given the recent Rule changes following the review of transmission economic regulation and pricing, Powerlink supports the approach of the Commission to wait for the AER's guidelines on service target performance incentive scheme, before any relevant Rules are viewed for change.

IES Report – Modelling of Transmission Pricing and Congestion Management Regime

Powerlink notes the Commission's view that the assumptions underlying the IES analysis need to be fully interrogated⁵. In this regard, Powerlink believes there are significant issues in some of the (unrealistic) underlying assumptions in the IES analysis. In particular, the analysis appears to assume that there are no constraints on fuel availability, or other key factors which affect generation location. The consequence of such an assumption is that it leads to projections of significant amounts of new generation in the SEQ load centre, where there are well-known constraints on fuel availability and cost, water, and environmental acceptability.

It is these real-world constraints that cause most new generation to locate at more favourable (from a fuel availability and cost, water, environmental etc) locations outside the SEQ load centre, which ultimately means more transmission infrastructure. Nodal pricing would not solve the real-world constraints on generator location.

The Commission's caution in relation to this analysis is, in our view, most appropriate.

Future Consultation

Powerlink looks forward to participating in the Commission's ongoing CMR work programme.

⁵ CMR Directions Paper, Section 3.4, p29