

4 December 2007

John Tamblyn, Chairman
Australian Energy Market Commission
Level 16, 1 Margaret Street
Sydney NSW 2000

By email: submissions@aemc.gov.au

Dear John,

CONGESTION MANAGEMENT DRAFT RULE DETERMINATION

Origin Energy Ltd (Origin) appreciates this opportunity to provide a submission to the Australian Energy Market Commission's (the Commission) "Congestion Management Review - Draft Report" (the Draft Report).

Origin notes that the Commission has decided against further developing and implementing a Constraint Support Pricing and Contracting (CSP-CSC) approach for managing intra-regional congestion in the National Electricity Market (NEM). The Commission considers the current level of congestion does not at this time warrant the introduction of complex and contentious new intra-regional congestion management arrangements. While Origin has some sympathy for this view we consider that congestion has the potential to increase dramatically from one year to the next and that therefore a CSP-CSC approach which is able to be applied in a selective and timely manner would have significant merit. We outline our proposal for how such arrangements may be implemented, and consider it the "first best" solution to material congestion which may not be otherwise addressed in a timely fashion by either investment or regional boundary change.

The Commission has proposed a number of important incremental changes which Origin considers will improve participants' ability to manage their exposure to congestion in the NEM. We are supportive of all of them except for the positive flow clamping proposal, which appears to replace one form of complex NEMMCO intervention (the current clamping approach) with another and may therefore lead to unpredictable and unintended outcomes. We are not convinced this will be good for the NEM and reject it unless clear net benefits can be demonstrated.

The option presented by the Commission that we consider holds the most promise is the Participant Funding of negative residues (Participant Funding proposal). If implemented in the right way such an arrangement would share many similarities to the CSP-CSC approach we propose, not least reducing NEMMCO intervention in the market. To some extent this approach may also avoid the need for a difficult and contentious regulatory process and gives participants full control over when and how such arrangements might be introduced, potentially improving timeliness.

However, as we discuss in more detail below, we also consider that the Participant Funding proposal is more limited in its application, does not remove incentives for disorderly bidding behind constraints, and due to its lack of explicit definition of access

rights, may stymie a negotiated allocation settlement, particularly with regard to new entrants. We therefore believe this option represents a “second best” solution.

CSP-CSC

The Commission's Draft Report rejects further development of constraint support pricing and contracting (CSP-CSC) arrangements in light of the presently low levels of congestion in the NEM, and the complexity involved in defining such arrangements. However, while Origin acknowledges the relatively low level of congestion currently affecting market participants, it is concerned that levels of congestion could change significantly from one year to the next. In this context we consider it may be worthwhile to develop arrangements that can be implemented quickly once congestion is likely to have significant detrimental impacts on participants, but might not otherwise be addressed in a timely fashion by either transmission investment or regional boundary change.

In this regard Origin argued in its submission to the Issues Paper that a selective application of CSP-CSC arrangements to material constraints was feasible and worth exploring further. We considered the CSP-CSC approach adopted should remain relatively simple and referred to the original proposal by CRA as the best approach¹. It is worth repeating the basic elements of this approach.

First, CRA defined the CSP as simply the price existing in the adjacent unconstrained region when a particular intra-regional constraint binds. Thus generators would receive, through an adjustment in settlements, either this price (that of the unconstrained exporting region) or the price in the constrained region (the importing region), depending on which side of the constraint they were located. In essence this approach operates by a virtual shifting of the regional boundaries when an intra-regional constraint binds ensuring all generators behind a constraint observe the same price signal regardless of the region they are in. This ensures competitive neutrality and imposes efficient locational and dispatch signals on generators on either side of the constraint.

Clearly, however, this type of pricing approach creates substantial new basis risk for participants and it is important that whatever new regulatory measure is introduced balances incentives with the need to avoid excessive or unmanageable risks. To this end CRA canvassed an additional component to their pricing approach, CSCs, which could be implemented to limit exposure to the CSP (that is, by guaranteeing the holder a certain level of financial access to the importing region's high price).

While CRA broadly articulated how CSCs would operate they did not propose a methodology for their allocation. This complex and contentious aspect of the CSP-CSC approach was left to the Commission.

Origin has some sympathy for the Commission's reluctance to tackle this difficult issue directly as it is inevitably contentious. For this reason Origin considered that the only viable option was to allocate CSCs on some shared basis, as we outlined in our submission to the Issues Paper. In summary, our suggested approach was to allocate shares to constrained capacity (or financial access the constrained region's regional reference node if you like) on the basis of the individual generator's capacity share in the overall

¹ Dealing with NEM Interconnection Congestion: A Conceptual Framework, A report submitted to NEMMCO by CRA, 24 march 2003

generation capacity contesting a particular constraint (and a share may also need to be allocated to an interconnector to ensure competitive neutrality).

For any level of dispatch above the allocated CSC levels (and therefore for dispatch in excess of the capability of the network to transport it at that point) the CSP (the adjacent unconstrained region's price) would apply. The practical effect of this approach was that in the subsequent financial settlement, as described in the CRA report, constrained off generators in the importing region would in the first instance receive the regional reference price for all their generation, but would then be required to pay back the difference between this price and the exporting region price for all dispatch above their allocated CSC. That is, they pay for any negative residue that arises as a result of their dispatch above the CSC level.

It is important to note the efficiency and public policy benefits of this approach. First, by determining a defined level of access for participants to constrained capacity regardless of bids the CSC reduces the potential for disorderly bidding (bidding -1000) behind constraints thus encouraging more cost reflective bidding. Second, the cost of negative revenues is directly borne by those who are in the best position to manage it, rather than consumers whom have no control over the quantum of negative residues they are ultimately required to fund.

A critical and contentious aspect of these arrangements is how they should apply to new entrants. Origin's original view articulated in its submission to the Issues Paper was that to ensure competitive neutrality over time access shares of existing generators would need to be reduced in order to accommodate the required access of the new entrant.

However, we have reconsidered our views in this regard, and now acknowledge that efficiency may be better served by allocating fixed CSCs (that is, a fixed level of non-firm access) to existing generators at the time the CSP-CSC arrangement is implemented. Any subsequent new entry would not change this allocation, with new entrants only being allocated CSCs to extent of any additional transmission capacity they add to constrained capacity through funded augmentation.

Origin considers this would reduce uncertainty for generators regarding their potential exposure to congestion over time while also internalising the full costs of locational decisions for future generation in highly congested parts of the network.

Participant Funding proposal

While Origin considers a CSP-CSC arrangement to be its preferred option for managing material intra-regional congestion, the "Participant Funding" proposal represents an innovative "second best" approach. Importantly, it also has the important quality of removing the need for NEMMCO to intervene in the market to clamp flows on interconnectors. In practice it has significant similarities to the CSP-CSC proposal discussed above, with the principal difference being that the CSC allocation process is implicit rather than explicit, as we explain below.

Under present arrangements when a constraint binds participants behind it will bid -1000 to maximise their opportunity for dispatch. In these circumstances NEMMCO will pro-rata access for generators in close proximity to one another on the basis of the dispatch volume each generator has made available in its negative price bands (loss factors would also be taken into account for generators further away from the constraint). Given that

generators will have strong incentives to include most of their capacity into the negative price bands in order to maximise their pro-rated amount, the outcome of this process is effectively that the prorated share is based on the generator's actual generation capacity. This leads to an implicit right of access approximately equivalent to the level in our proposed CSP-CSC arrangement.

Moreover, participant funding of the negative residues acts as an implicit CSP. That is, by allowing participants the opportunity to pay for the interregional negative residues, in order to avoid clamping by NEMMCO, participants are effectively exposed to a CSP (the low price in the exporting region) for any dispatch that exceeds the constrained capacity in the importing region and thus flows into the exporting region.

However, the key difference with the CSP-CSC type arrangements is that because the access rights are not formally defined generators will have to arrive at their own allocation of negative residues through negotiation. To the extent generators agree to logically allocate the negative residue costs on the basis of each generator's implicit access to the constraint the outcomes will be very similar to the CSP-CSC arrangement we have proposed.

A key benefit is that it avoids the need for a complex and involved regulatory process for justifying where and when to apply CSP-CSC arrangements, thus increasing the timeliness of its application, particularly given the strong incentives for participants to avoid the consequences of serious congestion and thus come to an arrangement.

However, this is likely to be outweighed by the weaknesses of this approach which are that it does not discourage disorderly bidding behind constraints (in fact such bidding still will determine the level of access to market) and the lack of a clear and explicit definition of rights may increase uncertainty and complexity of the negotiation process; most particularly with respect to new entrants coming into constrained regions over time. It is also limited in its application to circumstances where an intra regional constraint leads to a negative residue accumulation across interconnectors.

If you wish to discuss any of these matters further please do not hesitate to call Con van Kemenade on 02 8345 5278

Yours Sincerely,

A handwritten signature in black ink, appearing to read "D Barnes".

Dennis Barnes
General Manager
Energy Risk Management