



3 December 2007

Dr John Tamblyn
Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW 2000

By email: submissions@aemc.gov.au

Dear Dr Tamblyn,

Congestion Management Review – Draft Report

The Energy Retailers Association of Australia (ERAA) is pleased to comment on the Draft Report of the AEMC review of Congestion Management (the Review) in the National Electricity Market (the NEM). Congestion in the NEM both increases direct energy costs and the risks of market participation. While we acknowledge that removing all congestion would be prohibitively expensive, we also note that unmanaged congestion increases the cost of energy to customers, as generators pass on the risk and cost associated with being constrained off the system onto retailers through higher wholesale contract prices.

ERAA members note that the AEMC have taken a deliberately narrow view of the terms of reference provided to them by the Ministerial Council on Energy (MCE). This narrow view appears to have prevented a wider and more comprehensive examination of the issues, for example the examination of transmission pricing and development rules in the prevention of congestion. While we accept that the AEMC has only recently completed a review of transmission pricing, we do not consider that the congestion impacts were adequately assessed during that review and therefore need to be examined as part of this review.

Materiality of congestion

The ERAA is concerned that congestion in the NEM is increasing. Despite the AEMC report showing that congestion in the NEM is not material, analysis by the AER shows an increasing cost of congestion to the market. The AER measures, and the measures adopted by the AEMC seek to measure productive efficiency, which is important.

Dynamic efficiency impacts of congestion are, however, also important since it impacts the investment environment. These impacts have the potential to (and in our view do) reduce the efficiency of investment, which has a large and long term economic impact. We are therefore concerned that the Commission has not taken sufficient account of dynamic efficiency in its review.

We are also seeing concern being expressed by NEMMCO and the AER in relation to disorderly bidding and use of ramp rates to reduce the impact of congestion on generators. These band-aid solutions are necessary because the Rules have not provided other means to prevent or effectively manage congestion in key areas.

The time to address the issue is therefore now while the costs are not excessive and there is time to analyse the alternatives. Waiting for the costs to be material, as proposed by the AEMC, risks solutions being developed under pressure and without due time for implementation.

We consider that the AEMC should be examining both long term and short term approaches that can be used as and when problems arise. Some problem areas are already becoming apparent. We know, for example that the South East of South Australia is congested, with more generation than transfer capability in parts of the network. Similarly plants impacted by the Tarong constraint are often impacted by congestion leading to some plants being unable to be dispatched and others having to bid in a disorderly way to maximise their dispatch. Congestion impacts are also being felt in the Latrobe Valley and are expected around the Murray generators in the newly expanded Victorian region.

Market Rules for semi-dispatch are being proposed ostensibly to manage security issues but mainly, in fact, to manage network congestion that is occurring due to the locational decisions of non-scheduled plants. The proposed dispatch changes will help NEMMCO manage the power system operationally when congestion occurs, however they do nothing to resolve the gaps in the regulatory arrangements that allow the congestion to occur in the first place. Improvements in the application of generator access rules, notably Rule 5.4A, would prevent congestion and related system security issues developing.

The ERAA considers that a modified CSP/CSC approach could be used in these areas with useful effect in reducing the impacts of the congestion, and providing enhanced locational incentives to generator entrants. We urge the Commission to reconsider its views and work towards some form of management of these types of constraints.

The problem of generation located away from loads, often the case with coal, wind and now “hot rocks”, is increasing. It is therefore critical that the generation and transmission investment models work together to ensure that the total cost of each investment is taken into consideration when projects are assessed. We believe that the current regime will not achieve this.

The problem of remote generation causing network congestion is increasing:

- The planning council in SA has been expressing concern for some time and further problems are being predicted in South Australia, with a number of wind farms proposed for Eyre Peninsula, which has limited network capacity.
- the “hot rocks” projects in the north of SA will need to come into the network near Davenport for transport to Adelaide on links now reaching capacity.
- the new Federal Government is proposing to markedly increase the renewable energy targets which would result in more of these projects becoming viable around the NEM, requiring access into the increasingly congested networks.

The ERAA therefore considers that the AEMC cannot defer the management of congestion until a later time.

Settlement Residues

The ERAA supports the AEMC proposal to stop the current practice of netting negative residues off against positive residues on a weekly basis and to substitute netting them off on a trading interval basis. This will increase the certainty of the residues and enhance the SRA process.

We also support the use of settlement residue instruments with a longer term. This will support long term portfolio management.

The ERAA considers that more work should to be done on the proposal to allow participants to fund negative residues to maintain generator output in the face of intra regional constraints, such as the Tarong constraint. We support the idea in principle, but would like to see exactly how it would work, particularly how each party funding the residues would be given the increased dispatch rights. We think that this approach could have the benefit of reducing the risk to generators caught behind temporary constraints in much the same way as constraint support contracts.

The ERAA thinks that this idea should be strengthened by creating a process that uses funds from generators that are bidding negatively behind a constraint to fund the negative residues caused by their dispatch. When there is a binding (intra regional) constraint within a region, and generators within that region bid below \$0/MWh, the value of their offer to pay to be dispatched should be used to offset the negative residues that result. The amount to be charged to each generator would be the product of their offer price and quantity dispatched less the product of the adjacent region’s pool price and inter regional flow (less losses). The revenue from the generators would go into the settlement residue fund to offset the negative residues. This approach would remove the need for a positive flow cap, and allow the market price signal to perform as intended in the market design.

The ERAA has concerns with the proposal to clamp interconnectors in a direction to prevent negative residues and at a level to maintain positive residues.

Conceptually the proposal would apply the level of clamping to mimic efficient dispatch, and would therefore be more efficient than the current approach of clamping a link to zero. Such an approach would reduce the risk of purchasing settlement residue rights over some links both increasing their value in reducing basis risk (and therefore the cost of energy) and, logically, allowing the value of those rights to increase to near their true value (reducing network charges to customers). Both of these outcomes are in the long term interests of customers.

The approach would, however, need significantly more development before it can be supported since:

- it may create an incentive for a generator to increase output prior to periods when congestion is forecast in an attempt to gain a greater share of the “k” factor once clamping occurs. Such an outcome could have the perverse effect of increasing congestion, and would do little more than to move the current distortions without addressing the fundamental problem (ie. lack of clarity over access rights)
- the threshold selected would be arbitrary and may introduce even greater uncertainty than the current zero-flow clamping arrangements
- while NEMMCO can, technically, clamp interconnectors to prevent excessive accumulation of negative residues, it is often not possible because of the speed in which the situations develop, system security concerns and disorderly bidding (particularly ramp rates and inflexibility) by generators. It is therefore not clear that there is likely to be a true benefit
- we believe that a positive threshold would introduce even greater technical complexity into dispatch and that this would erode the value from increased inter-regional flows.

The ERAA is therefore not convinced that the proposal to clamp interconnections in a direction to prevent negative residues and at a level to maintain positive residues will work or be worth the cost of development and operating a system to support it.

Three members currently support the AEMC fleshing out the positive flow clamping concept but one is firmly of the view that no more effort should be expended on this concept. We note that our proposal for funding negative residues outlined above would better achieve the desired result without the problems of this approach.

The ERAA also does not support increasing the amounts of negative residues that can be accumulated before NEMMCO acts to prevent them increasing. Reducing the causes of inefficient negative residues is a necessary precursor to increasing this limit. We are not convinced that the current proposals for congestion management will remove the causes of inefficient negative residues and are concerned that removal of the Snowy region will increase congestion in Victoria near Dederang.

Payments for constrained on generators

The ERAA does not hold strong views on payments for constrained on generation. While we note that generators are routinely constrained on in Queensland (often a direction is required), in New South Wales and in Victoria.

We are concerned, however, that the funding of constrained on generation is either by an uplift on retailers that may not be able to be passed on to customers (directions in Queensland), by a general increase in pool price (seen when a generator rebids unavailable to avoid uneconomic dispatch, often in Victoria) or by the generator wearing the loss.

Since all forms of constrained on generation are to reduce the effect of congestion on dispatch the ERAA considers that the costs should accrue against the networks.

In the case of North Queensland it is clear that the direction of generators to operate is a direct alternative to increasing the network. It is also more cost effective than augmenting the network. The costs should therefore be charged to the relevant NSP(s). This can be achieved simply by confining the use of "other" directions, and defining a new reason for a direction as network support.

In the general case of constrained on generation in NSW and Vic, the market dispatch is made more efficient if the network constraints are reduced by bringing in some generation. This is clear in Victoria where the pool price simply increases to a less efficient level when the constrained on generators are made unavailable. Since the generators are providing support for interconnector flows, a CSC approach like that used for Tumut prior to the removal of the Snowy region could provide more efficient dispatch and lower the cost of energy.

In summary, the ERAA considers that, while the AEMC has proposed several good ideas to assist in the management of congestion, it should take this opportunity to more fully address congestion problems in the NEM, including those associated with the investment environment. Without action to address the shortcomings of the interaction between generation and transmission investment, current static inefficiencies will continue to compound, and future sub-optimal investments will proceed causing dynamic inefficiencies of a much larger scale.

Should you require any further information in relation to this matter please feel free to contact me on (02) 9437 6180.

Yours sincerely

[Transmitted Electronically]

Cameron O'Reilly
Executive Director
Energy Retailers Association of Australia