

3rd December 2007

Dr John Tamblyn  
Australian Energy Market Commission  
Level 5, 210 Elizabeth Street,  
Sydney, NSW, 2000

Dear Dr Tamblyn,

**RE: AEMC CONGESTION MANAGEMENT REVIEW DRAFT REPORT**

CSEnergy commends the depth of the draft report and would like to make the following responses to the Recommendations, to the possibility of external funding of IRSRs and to the possibility of Positive Flow Clamping.

**Recommendation 1**

CSEnergy agrees broadly with the AEMC's recommendations.

In particular the invocation of CSP/CSC arrangements across the NEM will create uncertainty to participants without providing a clear improvement to the efficiency of the NEM. Current arrangements being trialed or proposed are complex involving nodal pricing for generators and leave generators with basis risk between nodal prices and regional prices. The allocation of transmission rights to existing generators would be controversial and likely to create a transfer of wealth without fundamentally improving market efficiency.

Any long term and material change to the location of inter-regional congestion will be accommodated by the proposed new process for region change.

**Recommendation 2**

CSEnergy agrees that the need for implementing a regime of constrained-on payments is relatively insignificant. Network support agreements negotiated with TNSPs have provided a workable solution to this issue.

**Recommendation 3 & 4**

CSEnergy agrees with the AEMC's recommendations particularly recommendation 3 and the first point of recommendation 4.

Participants active in SRAs perform considerable analysis and price IRSR's accordingly. However it is worth noting that although the estimated firmness of an IRSR is appropriately discounted (because a weighted percentage between frequency, price difference and flow can be approximated), the risk of negative residues adds another degree of freedom which then requires an extra degree of conservatism to be applied to the pricing of IRSRs (this is because the negative residues have the potential to dominate the final value of the IRSR). Hence if

negative residues are to be directly netted from an IRSR value then a \$6000 limit should be applied prior to intervention (as is currently the case). However a superior result will be achieved if negative residues are netted off against auction proceeds and the limit increased to \$100,000 before clamping is applied. This will maintain efficient economic dispatch (since discretionary constraints would be applied less frequently) as well as firmer IRSRs (which as the AEMC noted would increase auction values accordingly). As such the AEMC's recommendations will result in a material net benefit to the NEM.

### **Positive Flow Clamping (PFC)**

CSEnergy contends that a PFC regime will be to the detriment of the NEM.

A PFC regime will increase the total cost of generation. Currently when a zero flow discretionary constraint is applied to prevent the accumulation of negative settlement residues the regional price in the lower priced region increases, which in turn increases the total cost of electricity. A positive flow discretionary constraint will result in an even greater increase in the regional reference price of the low price region which will further increase the total cost of electricity. This is contrary to the market objective and will merely increase the cost of power to end consumers.

Power flows across the intra-regional constraint will not be affected by invoking PFCs (as the limit will not change). Since the total availability of contracts is directly related to the ability to physically back these contracts then the total availability of contracts will not change. PFC will move the ability to provide contracts from local generators to inter-regional generators who own IRSR units. This will not increase the liquidity of contracts available to customers and will, in fact, reduce liquidity due to uncertainty in obtaining IRSR units as they will always retain a degree of non-firmness. Hence any claim that a PFC regime will materially increase liquidity is unfounded. Indeed under a PFC regime it is likely that the pricing of contracts will increase since basis risk will not be eliminated and hence this risk will be reflected in the price of contracts.

PFC will likely result in further inefficient dispatch since it will displace local generators in preference with more remote generators hence increasing transmission losses.

NEMMCO, at times, has difficulty in maintaining system security due to issues such as ramp rate, inflexibility, and FCAS trapezium issues (highlighted by the AER). This would be exacerbated by a move from 0 to PFC.

The AEMC states that the main advantage of a PFC regime is to improve the firmness of IRSRs. If a dynamic "k" is used then the perceived firmness would be marginal since the value of "k" is still unknown, the only improvement is that the value of "k" would change from zero to a value greater than zero. The value would not be predictable and would be subject to gaming by generators positioning their dispatch prior to a constraint binding. A fixed value of "k" would better achieve the objective of improving IRSR firmness however this introduces other issues namely:

1. Who determines the value of "k" and what principles will be applied?
2. Dispatch will be uneconomic and potentially far less so than the current zero flow clamping regime. It will likely be less economic than the dynamic "k" and could result in unintended outcomes since a fixed "k" could result in significantly different interconnector flows to those prior to the intra-regional constraint binding. One example of an unintended outcome is that it could

result in a very large increase in the price of the low price region, this price could approach the price of the high price region.

The condition to apply PFC when negative settlement residues are accumulating is arbitrary. Given the objective is to improve firmness of SRAs then PFC should begin as soon as the dispatch of local generators start to displace interconnector flow. For example the effect of moving flow from plus 500 to plus 300 has the same detrimental effect of SRAs as moving from plus 100 to negative 100. This is often the case during southward flows of QNI when a constraint binds between Sydney and Hunter Valley generation. Currently the Hunter Valley generators bid to -\$1000 to prevent offloading but at the expense of QLD generators. Even though this behaviour does not result in the accumulation of negative settlement residues it nonetheless reduces the firmness of the QLD-NSW IRSR.

### **Recommendation 5**

CSEnergy supports this recommendation. Extending the availability of the IRSR auction period will improve both price discovery of the IRSRs and also compliment the current liquid period of vanilla contracts (generally 3-4 years). However the further out the IRSR the more those IRSRs will need to be discounted due to the increased uncertainty of their value (due to changes in transmission infrastructure, generator and customer load over time) and hence their ability to back inter-regional trades. Therefore the volume of IRSRs auctioned should be weighted to the near term. In our experience generators (and therefore retailers) do not sell volume equally over the three year time horizon. We suggest the AEMC poll generators and retailers to help determine the ideal timing of Settlement Residue volumes to auction.

### **Generator funding of IRSRs**

CSEnergy also supports the possibility of generators funding IRSR units as described by paragraph 3 in chapter 5.3.3, provided the rules are kept simple. CSEnergy share the AEMCs stated concerns however we believe that a simple implementation has the potential to be no more onerous, discriminatory or non-transparent as what currently occurs during many counterprice flow events. It is well known that generators will quickly bid to -\$1000 in an effort to avoid being offloaded when both the regional price is high and an intra-regional constraint is preventing full dispatch. Under this scenario generators are proportionally offloaded based on their available capacity. If the remote generators (I'll use the example of the southern QLD generators in the AEMC example) prefer to gain the NSW price for their proportion of available capacity which contributes to the counter-price flow, then the QLD generators should have the option to do so. This will achieve efficient economic dispatch and would prevent the application of discretionary constraints. It would also reduce the total cost of electricity since potentially lower cost exports would reduce the price in the lower price region by supplanting higher cost generation within the low priced region. CSEnergy would be happy to provide input into any further investigations in formulating this form of funding for negative residues.

### **Recommendations 6-9**

CSEnergy welcomes all these recommendations, particular those that improves the transparency of NEMMCO's formulations, obligations and methodologies regarding constraints and the information provided to the market including mis-pricing events.

## **Recommendations 10**

CSEnergy agrees with the AEMC recommendation. CSEnergy would like to highlight that if such considerations become driven by material levels of congestion then piecemeal solutions should not be considered in isolation of a broader review of the transmission issues in the NEM. Such a review would not only include congestion but also the role of TNSP's, the nature of regulatory tests and the role of the proposed National Transmission Planner.

Brett Gebert

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