CS Energy Limited

InterGen Australia

NewGen Power

Stanwell Corporation Limited

Tarong Energy Corporation Limited

7 December 2007

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

Dear Dr Tamblyn,

CONGESTION MANAGEMENT REVIEW DRAFT REPORT

CS Energy Limited, InterGen Australia, NewGen Power, Stanwell Corporation Limited and Tarong Energy Corporation Limited welcome the opportunity to respond to the Draft Congestion Management Review (the Draft Report) put forward by the Australian Energy Market Commission (AEMC). These businesses represent a significant proportion of generation capacity in the National Electricity Market (NEM) and are the major producers of electricity in Queensland. While individual businesses may put forward separate submissions addressing the broader issues discussed in the Draft Report, this letter focuses on an analysis of Positive Flow Clamping (PFC). PFC is likely to have impacts for generators located in Queensland and in the first instance those located in South-west Queensland.

Specifically, this letter focuses on the impacts for dispatch efficiency and outcomes from a Report (attached) commissioned by the above mentioned generators in relation to this issue. While this work represents an initial study into dispatch impacts of PFC, it provides important findings relevant to AEMC's future consideration of the proposal.

As background, we note that as part of the Draft Report, the AEMC is considering the way in which negative settlement residues are managed and whether improvements can be made to the current clamping mechanism as a means of improving inter-regional trading risk, increasing dispatch efficiency and possible system security. In that context, PFC is being considered as an alternative to zero flow clamping to manage negative settlement residues.











In relation to the ROAM Report, *Investigation of Positive Flow Clamping*, participating generators would like to make the following comments and observations.

- An analysis of historical market outcomes show that negative settlement residues do not occur
 often nor with severity on interconnectors other than the Queensland-New South Wales
 Interconnector (QNI). This is due to the growth in generation in South-west Queensland
 exceeding the transmission capability between this region and the regional reference node.
- Looking forward, ROAM Consulting have undertaken market simulations (and detailed load-flow modeling) for the 2010-11 financial year to understand the market and efficiency impacts of PFC. 2010-11 was considered a relevant case year for analysis as it incorporates the 1200MW (approx) of new generation proposed for the region and planned transmission developments.
 - In order to determine the relative impacts of PFC a number of scenarios were compared including: No clamping; Zero clamping and PFC (at 250MW and 500MW)
- The key outcomes of the modeling include:
 - o implementation of PFC on QNI results in a reduction in market efficiency (measured as a function of total production cost) in the order of \$0.26 million to \$6.09 million for 2010-11 (depending on the positive clamping parameter) relative to current zero clamping arrangement. This is due to the requirement for higher cost generators to meet the reduction in South-west Queensland generation. Note increased levels of PFC significantly increase the overall costs. These results are consistent with the well accepted fact that South-west Queensland generators are among the lowest cost generators in the NEM.
 - PFC is also likely to increase transmission system losses (on average, the increase in losses is approximately 10MW under the 250MW clamping scenario relative to zero clamping)
 - The simulation modeling shows that PFC may result in perverse spot market outcomes due to the relationship between dispatch and network powerflows on other network limits. These outcomes are likely are to be unpredictable and dependent on the network conditions at the time, which is inconsistent with promoting stable and transparent markets.
 - The resulting reduction in generation dispatch from the South-west Queensland generators is likely to have flow-on impacts with respect to risk factors and the capability for these generators to enter into contracts at the Queensland Regional Reference Node.

In summary, there is evidence to suggest that the clamping approaches could lead to significant distortions in market outcomes and reductions in market efficiency. While the ROAM Consulting Report represents an initial investigation into the impact of PFC on dispatch efficiency (and as a result makes a number of simplified assumptions and scenarios) the strength of the results raises significant concerns with the PFC concept.

The participating generators would be pleased to further discuss these issues with the AEMC. Questions relating to this submission can be directed to Erin Bledsoe on (07) 3335 3804.

Yours faithfully

Limited

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Corporation Limited