



21 December 2012

M John Pierce
Chairman
AEMC
Level 5, 201 Elizabeth Street
Sydney NSW 2000

Dear Mr Pierce

NGF Response to AER Special Report – The impact of congestion on bidding and inter-regional trade in the NEM, December 2012

The National Generators Forum (NGF) is taking the opportunity to respond to the AER's Special Report on the impact of congestion on bidding and inter-regional trade in the NEM through the Transmission Frameworks Review (TFR) because the AER's report refers to key aspects of the TFR.

The NGF is the national industry association representing private and government owned electricity generators. NGF members operate all generation technologies, including coal-fired plant, gas-fired plant, hydroelectric plant and wind farms. Members have businesses in all States.

The AER Report analyses 12 examples of the counter price flow events into New South Wales, 8 examples of counter price flow events into Victoria, and a number of counter price flows related to congestion around Gladstone. Based on this analysis the AER has endorsed the Optional Firm Access (OFA) proposal outlined in the TFR Second Interim Report.

While the NGF welcomes the publication of market reports on network congestion and other issues, the NGF notes that there are other primary causes of these market events. The NGF believes a model such as the proposed OFA would change the risk profile of the market, put pressure on contract prices and may reduce volumes of traded electricity derivatives. These issues exclude the significant implementation costs for businesses (and TNSPs) following the introduction of the OFA.

The NGF has analysed the market events outlined in the AER report and recommends addressing the root cause of these "disorderly" bidding market events, which the NGF observes have been caused predominantly by transmission outages. There is room for improvement in two areas: (1) to improve the TNSP Market impact incentive scheme and (2) to introduce changes which encourage TNSPs and AEMO as the Market Operator to better co-ordinate transmission outages.

The root causes of “disorderly bidding”

The NGF has analysed all 20 events involving the NSW-VIC and VIC-NSW interconnector. What was found was that 17 of the 20 market events involved key/major transmission outages (see Table 1 below) which reduced overall transmission capability. Only 3 of the events were System Normal (NIL) events but even in these NIL events other constraints / outages were already limiting transmission flows leading up to the “disorderly bidding” event. These three “NIL” events are highlighted in the yellow in Table 1.

Flow From	Date/Time	Outage
VIC to NSW	9/02/2010 16:30	Out = Dederang to Glenrowan No.1 or No.3 220kV line
VIC to NSW	10/02/2010 14:30	Out = Dederang to Glenrowan No.1 or No.3 220kV line
VIC to NSW	21/04/2010 12:30	Out= Eildon to Mount Beauty No. 1 220 kV line and one Dederang to South Morang 330 kV line
VIC to NSW	22/04/2010 15:00	Out= Dederang H2 330/220 kV txfrmr and one Dederang to South Morang 330 kV line
VIC to NSW	21/06/2010 9:00	Outage = Lower Tumut to Wagga 330kV line
VIC to NSW	22/10/2010 11:00	Out = Hazelwood #6 220 kV bus , Murray better coeff than NSW
VIC to NSW	28/11/2010 6:00	Out= Thomastown No. 1 220 kV bus
VIC to NSW	31/01/2011 15:30	Out = Nil. HHE 15:00 flow was very positive (4 periods) then unexpected Darlington constraint caused VOLL price VIC (and flow negative). Price stayed VOLL and flow slightly positive due to low RHS $V \gg V_{NIL_1B}$ constraint (1556).
VIC to NSW	30/05/2011 13:30	Out= one of Dederang-Murray(67 or 68)
VIC to NSW	31/05/2011 8:30	Out= one of Dederang-Murray(67 or 68)
VIC to NSW	2/07/2011 13:00	Out = one 500 kV line between Heywood and Moorabool
VIC to NSW	11/09/2012 9:00	Outage = Lower Tumut to Wagga 330kV line
NSW to VIC	7/12/2009 12:00	Out = SydneyWest-Yass(39)
NSW to VIC	22/01/2010 15:00	Out = Nil, but low rated Mt Piper-Wwang (70) line
NSW to VIC	4/02/2010 12:00	Out = Nil, but low rated Mt Piper-Wwang (70) line also Kemps Creek - Syd South out
NSW to VIC	11/02/2010 14:30	Out = Nil, but low rated Mt Piper-Wwang (70) line also Yass-Syd West (39) line out
NSW to VIC	26/03/2010 13:00	Out = Dapto-Marulan(8)
NSW to VIC	13/04/2010 14:00	Out = Dapto-KangarooValley(18)
NSW to VIC	29/06/2010 17:30	Out = Nil, but low rated Mt Piper-Wwang (70) line
NSW to VIC	9/11/2011 15:30	Out = Dapto-SydneySouth(11)

Table 1: Market events and corresponding key transmission outages

The AER concludes that the OFA proposal would address the disorderly bidding associated with these market events. The NGF strongly disagrees with this assertion. As outlined in the NGF’s submission to the TFR Second Interim Report the OFA proposal:

1. Does not resolve disorderly bidding. It simply introduces another incentive for disorderly bidding which is dependent on whether generators behind the constraint have access rights or not;
2. Will introduce operational complexities in the Spot market which ultimately will increase the pricing risk (basis risk) of managing forward contract exposure and as a consequence lead to a reduction in forward Contracts sold; and
3. Would not improve the current arrangements as the AER Report has demonstrated that these disorderly events occur in prior outage (non System Normal) conditions. Under these conditions the holder of “firm” Access rights will have their entitlements scaled back and hence it is ambiguous whether there would be more financial certainty under the OFA proposal.

The NGF believes it would be more efficient to address the root cause of these “disorderly” bidding market events, which the NGF observes have been caused predominantly by transmission outages. The NGF asserts that the OFA is not the answer as the effectiveness of Access rights is diminished when they are scaled back due to transmission outages. Instead the NGF believes there is room for real improvement in two areas:

- (1) to improve the TNSP market impact parameter scheme (MIPS); and
- (2) to introduce changes which encourage TNSPs and AEMO as the Market Operator to better co-ordinate transmission outages.

Furthermore, observing the impact of an enhanced TNSP MIPS on reducing the costs of congestion would appear a more sensible and measured approach to reform in this area. It would be premature to introduce wholesale changes to the market design before the extent of these incremental changes are understood.

The NGF notes that the AER is currently conducting a review of the Service Target Performance Incentive Scheme (STPIS). Whilst the NGF agrees that the market impact component (MIC) of the transmission STPIS has improved the focus of TNSPs on the market outcomes of their actions we question whether this has just been a windfall to TNSPs rather than being truly efficient. As mentioned in previous submissions¹ to the Review the NGF believe there are improvements that can be made to the MIPS. For instance the AER has proposed to improve the design (by moving to a rolling performance measure). The NGF is considering other changes which may create sharper incentives for TNSPs. The NGF encourages the AER to continue with its analysis in this key area.

Finally the NGF believes AEMO as the System Operator is well placed to assist TNSPs with better outage co-ordination of their transmission outages. This is a facet of the NEM which the Association believes the AER can play a constructive role in conjunction with AEMO and TNSPs to improve the impact of planned transmission outages.

Transmission constraints are transitory

The AER Special Report highlights congestion around the Gladstone area. All the events around Gladstone in Queensland are well known to the market. Further to this there are already planned transmission investments which will take effect as early as 2013 to mitigate these constraints. (Latest advice from Powerlink Queensland indicates that construction is well advanced and commissioning will take place next year.) What these examples highlight is that material congestion in the NEM is transitory in nature. Hence wholesale market changes like the OFA would be a disproportional policy response to a transitory issue.

The NGF has made comments relating to the congestion around the Gladstone area in previous submissions to the Review. The constraint was used as an example to suggest improvements to the present market design.

The AER’s proposal, which is to remove the Queensland-NSW interconnector from the constraint equation is similar to the existing treatment of Directlink, which was removed from the LHS of the equation when updated by AEMO. The effect of doing so is to preclude the vast majority of QLD generators from setting the QLD RRP. In our response to the transmission review’s Options Paper we questioned whether this is efficient, because there is no way for the cost of the constraint to be reflected in prices.

It must be remembered that the real cost of the constraint with the existing NEM design is placed upon those generators constrained on or off. In the case of the Gladstone congestion the cost of the constraint is imposed on CS Energy as Gladstone units are significantly more expensive to operate than Callide units (one must not forget this is why the constraint binds). Should CS Energy not disorderly rebid it will lose money because, irrespective of price, its costs will increase.

¹ NGF Response to Issues Paper and Options Paper, Transmission Frameworks Review

Interconnector flows and SRAs

The AER Special Report makes comment on aspects of interconnector flows and SRAs which the NGF believes are factually incorrect or can be misinterpreted. The NGF aims to address these misconceptions with Interconnector flows and SRAs.

Firstly, to be clear disorderly bidding is a result of transmission constraints. The transmission constraint causes the volatile price outcomes and not disorderly bidding. In the face of transmission constraints, disorderly bidding by generators behind the constraint is how these generators manage their risk. These generators behind the constraint do not influence the RRN price which is set by generators on the other side of the constraint. The NGF illustrates this point with an example with the market event on the 7th December 2009. Some facts surrounding this market event are:

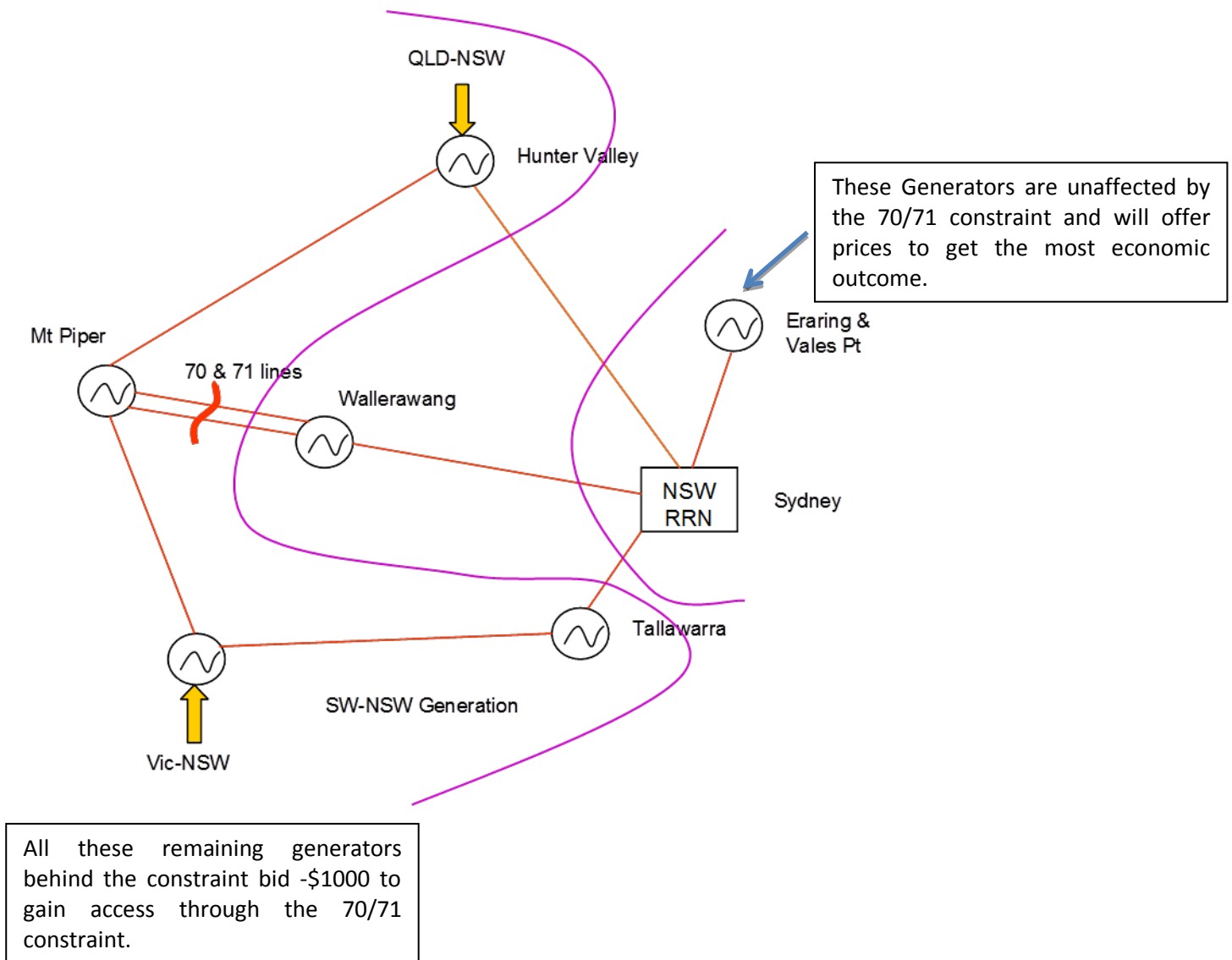
- The 70 / 71 line constraints bound for 7 hours on the day
- Spot prices in the NSW Regional Reference Node (RRN) reached over \$9000/MWh

During this constraint the high Spot prices in the NSW RRN can only be set by generators on the other side of the constraint. The price volatility that the AER refers to in its Special report has very little to do with generator behaviour behind the constraint but is dictated by generators on the other side of the constraint setting the RRN price. An OFA proposal only reallocates the access behind the constraint. The OFA proposal does not influence the behaviour of generators on the other side of the constraint. Hence there would be no difference to the Spot price outcome.

All other generators and interconnectors are effectively behind the constraint and jostling for the limited transmission access through the 70/71 line constraint.

The NGF acknowledges that intra-regional generators (in this example SW-NSW Generation, Mt Piper, and Hunter Valley generators) have preferential access over the Interconnectors (in this example Vic-NSW and QLD-NSW (QNI)) because these generators receive the NSW RRN price. However, as outlined in our Second Interim Report submission this feature of the NEM allows generators within any Region to confidently forward sell Contracts. This feature ensures that there are strong Regional commodity markets where energy is easily brought and sold to manage risk.

The AER has flagged changes which may change the access of intra-regional and interconnectors. It is important to consider how these changes may influence the Contracts market. The NGF asserts that generation forced outage risk sets the risk limits for forward contracts sold. Any changes to the current market design which reduces access to intra-regional generators and effectively transfers this access to interconnectors does not automatically mean that the availability of contracts at the RRN remains the same (it might actually be reduced). This is because even though the interconnector has better access to the adjacent region it does not mean that generators supplying the interconnector would be equally willing to forward sell contracts to the adjacent region because their plant forced outage risk (which is a lot greater than the interconnector forced outage risk) still sets the limit for the volume of contracts they are willing to sell. In other words, the NGF believes the volume of available Contracts would decrease to the detriment of consumers.



SRA proceeds are influenced by many factors

The AER asserts in its Special Report that there has been a significant reduction in the utility of settlement residues as a result of “disorderly bidding”. The AER asserts that this has manifested in a reduction in the SRA proceeds.

The NGF believes the unprecedented lower demand levels and lower price volatility are the primary reasons why settlement residues have reduced in value.

The NGF acknowledges that disorderly bidding events can result in counter-price flows on interconnectors which reduce the utility of SRA units. However, as highlighted by the AER Special Report disorderly bidding events are primarily driven by transmission outages. Hence an improvement on the way planned transmission outages are scheduled and managed would reduce disorderly bidding and therefore increase SRA values and proceeds.

Conclusion

In summary, we commend the AER for its initiative in commissioning this report. However, we see more value to the Market if the AER were to look at the root cause of these market events and conclude that the timing and scheduling of transmission outages is the primary cause of disorderly bidding during these market events.

The NGF believes the OFA proposal or any other “disorderly bidding” rule in transmission outage conditions would reduce generators access to its RRN and as a consequence reduce Contract market volume and liquidity to the detriment of end consumers.

Yours sincerely

A handwritten signature in black ink, appearing to read 'TR', is positioned below the closing text.

Tim Reardon
Executive Director