

Elisabeth Ross
Australian Energy Market Commission

By online submission at www.aemc.gov.au

3 May 2012

Dear Elisabeth,

Re Rule change consultation ERC0140: Negative offers from scheduled network service providers

International Power-GDF Suez Australia (IPRA) and LYMMCO appreciate the work performed by the AEMC in preparing the consultation paper on the proposed Rule change. IPRA and LYMMCO would like to take this opportunity to comment on two of the specific questions posed by the AEMC as follows.

Will the proposed solution resolve the identified problem?

In section 5.3 of the consultation paper, the AEMC provide some discussion and brief analysis of how losses can impact on the prices of Tasmanian generators when referred to the Victorian reference node. The AEMC scenario 3 notes that with a BPL offer price of \$0 and Hydro Tasmania bidding -\$1000, the impact of losses would be that Hydro Tasmania generators would appear to be cheaper at the Victorian reference node than Latrobe Valley generators. This is true when there are no constraints binding between the Latrobe Valley and Melbourne. However, this is not the case when the Latrobe Valley to Melbourne constraint binds, which is precisely the circumstance when the constrained generators are likely to be competing for access to the constrained Victorian reference node.

To understand how constraints impact on the prices, it is first necessary to note the different treatment of generators and MNSPs when considering the cost of supplying 1MW at the regional reference node¹.

For generators, the effective price at the reference node is equal to the offer price at their connection point divided by their MLF. Generator offer quantities are not scaled by the MLF.

For MNSPs the effective price at the reference node is equal to the marginal cost at the connection point. That is, the price is not scaled by the MLF. However the MNSP quantity is divided by the MLF.

¹ The analysis presented is based on an IES Presentation "Expert Advice on Treatment of Losses for MNSPs", 27 November 2007

Now, when a constraint is binding, the cost of providing 1MW at the reference node is equal to the effective offer price * 1MW + Constraint Cost.

For generators, this equals:

$$\text{offer price} / \text{MLF} + \text{Shadow price} * \text{Gen Coeff} * 1\text{MW}$$

For MNSPs, this equals:

$$\text{offer price} * 1\text{MW} / \text{MLF} + \text{Shadow price} * \text{MNSP Coeff} * 1\text{MW} / \text{MLF}$$

If we assume that the offer price for both the MNSP and the generator are the same, and that the Coeff is equal to unity for both the generator and the MNSP, then:

$$\text{Cost for MNSP} - \text{Cost for Generator}$$

$$= \text{Shadow price} * (1/\text{MLF} - 1)$$

For the Latrobe Valley connection point, the MLF is approximately 0.968². This gives:

$$\text{Cost for MNSP} - \text{Cost for Generator} = \text{Shadow price} * 0.033$$

Or:

$$\text{Cost for MNSP} = \text{Cost for Generator} + \text{Shadow price} * 0.033$$

If the constraint shadow price is \$10,000:

$$\text{Cost for MNSP} = \text{Cost for Generator} + \$330$$

The AEMC example shows that without constraints binding, the MNSP enjoys a cost benefit over the generator of approximately \$158. The above analysis shows that when the constraint binds, the benefit moves towards the generator.

The above analysis includes a number of simplifying assumptions and should not be taken to represent the exact market outcome. However it does clearly demonstrate that the effect of a binding constraint will be to effectively add a cost premium to the MNSP compared to the generator, which becomes more pronounced as the shadow price of the constraint increases. This example shows, and more detailed analysis by IPRA confirms, that as the constraint shadow price increases, the cost benefit shifts to the Latrobe Valley generator.

² Assume for simplicity that the MLF for both LV generators and Basslink are the same

Is the proposed rule change a material response to the proposed problem?

As identified by the AEMC, the instances of negative bidding by BPL has been only a few trading intervals each year, with no instances in 2011. However as the LYMMCO example referred to by the AEMC noted, the price impact of negative bidding can be extremely high. Although it is possible that this is mostly a wealth transfer, these are real risks and costs to generators which cannot be managed effectively, and in turn must be recovered by the generator through increased costs to customers. In addition, this can also lead to contract liquidity issues as generators behind the constraint act more conservatively.

We hope that this short submission has provided some further information which will assist the AEMC in its judgements. Should you have any enquiries regarding this matter please do not hesitate to contact Chris Deague on 03 9617 8331.

Yours sincerely,

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IPRA

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