ENERGY RESPONSE linking demand with supply in the Australian energy market

31 October 2007

The Reliability Panel
Australian Energy Markets Commission
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SUPPLEMENTARY SUBMISSION ON THE SECOND CRR INTERIM REPORT, AUGUST 2007

Thank you for the opportunity to provide additional comments to those submitted to the Panel by Energy Response on 28 October 2007 on the Second Interim Report dated August 2007.

This letter outlines what we believe are the specific issues with the Reserve Trader (RT) mechanism and our views on what a Standing Reserve (SR) mechanism should look like. Our views are those of a Demand Side Response (DSR) Aggregation company with 3 years experience of DSR in 3 different markets.

From our viewpoint the existing RT mechanism has a number of shortcomings but can be improved for an interim period as described below:

1. RT is not a reliable or sustainable process as it exists and even with improvements will not serve the NEM well enough for the longer term.
2. Funding Mechanism – we understand that there is a convoluted process whereby the jurisdictions approve the funding for RT and the Retailers cannot pass through the cost. This means considerable time is expended obtaining agreement (or not) and the program cuts into the Retailers slim margins. The cost is eventually passed on to the end use customer anyway, as the Retailer must recover the cost eventually. Suggested solution: Funding needs to be raised by NEMMCO as part of its operational budget and carried forward if not required to be spent that year.
3. Timeliness of RT – NEMMCO indicate that they require six months advance notice to be able to get all the appropriate approvals and go to tender. When a need arises with little notice (as it did in the 06/07 summer and last winter) the mechanism cannot be called into play. Suggested solution: Item 2 will shorten the timespan but also contracts which are formed for RT need to be for a period of 3 to 5 years to really get the Demand Side interested.
4. Infrequency of RT – End users are very happy to participate in the provision of DSR for reserve capacity all the time. They want flexibility and protection from liabilities, but that is the role that an aggregator can play. If end users have the opportunity to participate regularly then that encourages the implementation of

enabling technology and procedures that will improve the reliability and speed of response of the DSR.

5. Understanding of aggregated DSR – Tender documentation does not adequately consider the aggregation of end users, most are too small to bid for RT themselves - combining these small bits of DSR together is the value an aggregator creates thereby providing a viable, firm, commercial quantity of DSR for Reserve. Commercial terms that involve aggregated DSR are currently poorly conveyed. If the NEM is serious about creating greater participation from the Demand Side then the NEM must be more accommodating to end user terms. There appears to be distrust of end users that provide DSR (as if they have found a way to take advantage of the market – absolutely not correct) if their DSR is not dispatched. The inference is that cost of this RT is a waste of money when actually it is an insurance policy against the market's failure to provide enough capacity. This is just the same sort of cost as comes from the investment in supply side capacity some of which creates Reserve. Suggested solution: Provide awareness programs that encourage more DSR.
6. The real cost of Reserve is unknown – The NEM bundles the cost of Reserve in the Energy price. The RT process at least establishes and publishes the overall cost of the Reserve it creates. It is a competitive process and so sets the price for the short term safety net supply of Reserve.
7. Single focused nature of RT – RT has a very narrow definition but DSR when well organised and managed can provide benefits across a range of market aspects including security, reliability and network constraint management.
8. If the existing supply side cannot provide sufficient Reserve - Suggested solution: Allow generators to contract firm and appropriately located DSR to provide the reserve so they can supply energy or undertake required maintenance.

In the mid term (say within 1 to 2 years we must have a significantly better process for providing reserve in the NEM, eg, a Standing Reserve (SR) mechanism or similar:

1. This needs to be a competitive process for sourcing the Reserve required
2. We think the principles for establishing this should be along the lines of –
    a. Unbundle the pricing of Reserve from the pricing of Energy
    b. Based on NEMMCO's forward Reserve projections NEMMCO call for tenders for the provision of all Reserve 2 years ahead (rolling ahead each year)
    c. Minimum blocks of 30MW
    d. Initially (say for 2 years) a minimum amount of say 20% of the Reserve must come from the Demand Side (to encourage this to develop)
    e. Enable generators to have a choice of providing the reserve or if they prefer to contract firm and appropriately located DSR to provide the reserve so they can supply energy

3. Alternatively use Virtual Peaking Capacity (VPC) – Blocks of a minimum of 30MW of firm DSR (aggregated or from any single source) should be contracted for a minimum of three years but preferably for say 5-10years ahead (as commonly happens in the North American market) to serve the SR requirements.
4. Funding arrangements – The price for reserve capacity should be calculated on the true cost of providing reserve all the time or fixed by the offers for the provision of VPC. Calculation of the true cost of reserve must account for the capital cost of the generation plant that provides it (no cross-subsidies). Funding needs to be raised by NEMMCO as part of its operational budget and carried forward if not required to be spent
5. Payments should be on the basis of "availability" fees and "dispatch" fees (for longer term contract arrangements there is no need for the enabling or setup fees)
6. SR to provide greater flexibility – this DSR based Reserve should be available for any requirements that the ISO / IMO considers valid, not just reserve provision. As long as funding arrangements are secure and the policy allows greater innovation then NEMMCO should make economic decisions on whether to use the SR for any purpose that supports security, reliability or network constraints.
7. Registration as a DSR aggregator – DSR aggregation is a complex and difficult operation but the assets are always secure because they remain owned by the end users and under contracts to the aggregator. As such a simple registration process should be available to create accredited DSR aggregators.

What we have suggested here for improvement in RT could also be an effective transition to SR.

It should also be noted that DSR does not require any water (or reserves of water) to undertake this role. Nor does it create as much CO_2 as large generation does and it of course is considerably cheaper than building power stations and network capacity to provide the Reserve.

By the way, when SR is fully established it will substantially reduce the need for involuntary load shed. It is therefore essential to get a significant amount of DSR involved in providing Reserve now.

We are available to elaborate or clarify any of the above points.

Yours faithfully

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