

linking **demand** with **supply**

in the Australian energy market

28 September 2007

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COMMENTS ON THE SECOND INTERIM REPORT, AUGUST 2007

Thank you for the opportunity to comment on the Second Interim Report dated August 2007

Energy Response is a Demand Side Response (DSR) Aggregation company and as such has a keen interest to see greater use of Demand Side alternatives in the NEM because they deliver:

- Substantial economic and enabling benefits to the market (estimated to be up to \$3bn per annum and growing to over \$5bn per annum by 2020)
- □ Unique environmental benefits (including Greenhouse Gas abatement and water savings from reduced generation at peak times and from reduced line losses)
- Significant consumer benefits including lower prices for electricity when all other factors point to significant increases in the price of electricity in the foreseeable future.

It is disappointing from reading this Report that, if our interpretations of some of the proposed changes are correct, these proposed changes would negatively impact the progress of Demand Side activities in the NEM by at least three years. It is also disappointing that;

- □ there is no evidence in the report that the Panel has considered any of the information we provided in response to the First Interim Report,
- no one from the Panel or their agents have asked Energy Response (as the only DSR Aggregator active in the NEM) what we think or have taken any notice of the points we have made to them,
- no one from the Panel has accepted or acknowledged any information on Demand Side and its potential as presented to the Panel on 22 February 2007,
- no modelling on the impact of Demand Side activities on the NEM has been published.

Energy Response is now active in three electricity markets, and very likely, before the end of this financial year, we will add another market. As such we are in a position to compare between markets and this comparison shows the NEM in very poor light in regard to the treatment and use of Demand Side potential. In fact we have found that the New Zealand electricity market in particular encourages innovation to reduce costs, such innovation, from a Demand point of view, is stifled in the NEM.

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Demand Side Response (DSR) is the ability for an end use customer to reduce their demand when asked to do so and be paid for their actions. While this is a very simple concept, the reality is that very few policy makers, policy bound agencies or their advisors understand how it works or the benefits and dynamics of using DSR.

The following is an example of how agencies do not understand the processes involved in DSR aggregation:

Energy Response was successful in contracting 125MW of firm DSR to NEMMCO for Reserve Trader (RT) in January 2006, and we remain the only DSR Aggregator to successfully tender for RT. We believe that the tender and associated approvals process took NEMMCO six months to execute. We received that tender in October 2005 and found that the draft contract NEMMCO provided was totally inadequate for DSR aggregation and required considerable effort to make it suitable. Eventually, we signed a contract with NEMMCO on Friday 13 January 2006 for a start to the provision of services on Monday 16 January 2006.

For our part, we had to find 125MW of firm DSR from almost 60 companies, explain the Reserve Trader process, produce a contract for the provider of the DSR to sign that mirrored the Reserve Trader contract (in terms of pricing, terms and conditions), verify that the provider could deliver what they said they could and submit their data to NEMMCO by 16 January 2006.

This means that the six months required for Reserve Trader is for NEMMCO to follow due process, it is not for the end user (those that provide the DSR) or the Aggregator to get themselves in order to be able to provide the DSR. If we want to think seriously about Demand Side, then we must appreciate how we encourage end users to participate – this is not the way!

We note that the Panel believes that providing a longer lead time will "increase the range of entities that want to participate". Clearly from the example above that is a purely naive statement. If NEMMCO or any agency has 6 months lead time, as they do with RT it will take them 6 months to achieve what they need to achieve. This lead time has nothing to do with what the end user needs to achieve nor is the lead time used to actively solicit companies to provide DSR; the RFP process used by all utilities is a passive process and that is partly why it fails to deliver results in the NEM. If we increase the lead time to 12 months would we achieve any better outcome for the end user or more end users participating? The stark reality is NEMMCO had 6 months to get what it needed to get into place for RT, but the companies that provided the DSR through Energy Response had only a weekend. RERM will need to consider how it will contract with end users over a prolonged period but there is insufficient detail about how RERM will work to comment further at this stage.

The RERM must seek DSR from the market and any single contract for DSR/reserve must be for a minimum of 3 years. That is not to say that availability fees will be paid for every month of those three years but this length of time will give greater certainty and hence reliability to the program, ensure end users invest in their processes to improve their DSR output and the NEM will get a first class outcome. There are several items noted in the Report that are misleading and must be immediately addressed:

- 1. The first is the perceived high cost of the RT program. Actually in parts of the Report it is stated that some consider it a high cost and in other parts of the Report it is considered a low cost. The fact is that in the NEM we do not know the cost of reserve, because it is bundled up in the cost of energy. So what ever the cost is of RT is in fact the true cost of reserve at that time through a competitive tender. Also, it should be remembered that almost all of the funds spent in the RT program found their way back to end users. So the cost of RT was the cost of reserve at the time and that cost was returned (in the main) to the end users that provided the reserve capacity as fees for service the system works and we should celebrate that not question it.
- 2. The Report mentions the concept of "double dipping". Of course no end user should be paid twice for providing reserve. However, only those uninformed of the way the RT program works could possibly raise this non-issue. When successful in the RT program, a DSR Aggregator is obliged to submit all NMIs to NEMMCO for them to check if those NMIs appear in any other programs (eg via a Retailer) so as they are not double counted. Mentioning "double dipping" only raises doubts and may initiate unnecessary actions from this review. We encourage the Panel to focus only on those matters that are real and of a material nature to the discussion.
- 3. The Report mentions a lack of DSR identified for use as reserve capacity. Our findings are quite the opposite; we have sourced close to 1,000MW of DSR in the NEM and we estimate there is significantly more available, but we need a contract (RT or RERM or some other mechanism) that allows it to be brought into the NEM. In terms of guarantees as to whether it would be available when required, we have built a business in three markets based on our ability to deliver firm DSR. Companies that provided the DSR for our RT contract in 2006 told us after the event they would be happy to provide DSR all the time for reserve capacity. Energy Response would be happy to put the Panel in contact with these energy users to confirm what we are saying.

We agree the RT mechanism is too restrictive but we see that RERM program as proposed (assuming consideration is given <u>to allow end users time to contract with an Aggregator</u>) as only a marginal improvement beyond the existing RT program. Any mechanism that is purely for reserve capacity (and only activated when there is a reserve shortfall) is far too specific and denies the market much of the benefits of DSR. What about when there is a water shortfall? If there is a reserve alternative that uses significantly less water, shouldn't we use that instead of using generation for reserve, even when there is that generation available? That would also free the generator from providing (some or all of) their reserve capacity and it therefore could sell more of its output into the market. What about after a major blackout when NEMMCO needs to manually shed a couple of hundred of MWs after the initial automated load shed? Voluntary load shedding is far more convenient to end users than indiscriminate load shedding. There is a very large and completely untapped DSR capacity available (estimated to be between 3,000-4,000MWs in the NEM) that should be used ahead of manual load shedding

We believe that many of NEMMCO's current issues associated with DSR namely; identifying DSR and reporting or advertising its availability stem from the fact that

Retailers must report to NEMMCO the DSR they have contracted for dispatch at times when there is a price peak. But, once the Retailers do that the reported DSR is not acceptable for RT, hence their hesitance to fully report the DSR available to NEMMCO via retail contracts.

With regard to Retailers:

We believe that Retailers themselves have significant issues managing end users DSR. Currently Retailers only contract for DSR from very large consumers who require only one call to dispatch as they do not have the systems and skills required to manage an extensive portfolio of companies that provide DSR. As we saw on 16 January 2007 in Victoria two large users (as reported by the press at that time) were not dispatched by their Retailer even though they are contracted with that Retailer for their DSR and the prices were above \$1,000/MWh for a substantial time before the blackout. But for the good sense of Paul Eddy at Smorgon Steel their plant would have continued to operate while vast sections of Victoria were blacked out stranding public transport passengers and inconveniencing homes and costing businesses millions of dollars.

Four of the major Retailers are actually Gentailers (including the one that failed to dispatch the large energy users on 16 January), and as such their end use customers are natural hedges for their main interest (ie generation or gas supply) and high electricity prices are good for generation and gas supply.

So the fundamental premise that Retailers should be responsible for managing DSR and that they should have anything to do with Reserve is commercially flawed.

We understand that the recovery of costs for RT comes from Retailers but it is more logical to us that this cost should be met by the Generators on the basis that they have failed to deliver their full Reserve requirements at that time.

If it is intended that RERM be administered by NEMMCO and that NEMMCO manage what could ultimately be hundreds of DSR provider contracts then a whole new department will need to be established within NEMMCO to manage these contracts, to verify and dispatch them, and to enable NEMMCO to financially settle with end users after each dispatch (effectively all the aggregation functions). Careful consideration must therefore be given to how RERM will ultimately work without creating an additional administrative burden on the market. Our experience shows that while NEMMCO have considerable empathy in Demand Side activities their ability to develop Demand Side potential is limited by the NERs and policy, which must change through this Review process. Clearly, NEMMCO need to learn more about Demand Side potential but to date there has not been an imperative to do so.

There are simple answers to many of the points raised in the Report but <u>the Panel needs</u> to be better informed about the real capabilities of well organised DSR. Energy Response stands ready to support changes to the NEM that bring an improved and informed platform for end user participation, but please provide sensible alternatives within a meaningful framework. Any thoughts that the NEM is an efficient market certainly do not apply to the Demand Side and this major deficiency manifests as a cost of least \$3bn per annum on the Australian economy and growing. This is equivalent to

the last round of tax cuts provided by the Federal Government or, in other terms, it is15% of the cost of retail electricity to end users.

With the aforementioned efficiency savings in mind we encourage the Panel to take a look at the NEM Objective¹:

The objective of the National Electricity Market, as stated in the National Electricity Law is:

To promote efficient investment in, and efficient use of, electricity services for the long-term interests of consumers of electricity with respect to price, quality, reliability, and security of supply of electricity and the reliability, safety and security of the national electricity system.

In summary we suggest the following:

- The Panel should economically model the impact of Demand Side activities (for Reserve and other purposes) on the NEM, with a view to considering whether these activities can improve efficiencies and identifying where these improvements are.
- 2. RERM or any other mechanism that introduces reserve into the NEM must allow DSR to be used as Reserve at any time of the year and not just for specific months.
- 3. This same mechanism should allow NEMMCO to use the DSR for any other reasonable purposes including response to an emergency such as a major or localised blackout or to conserve water or to reduce CO2 emissions.
- 4. Contracts for the provision of DSR must be of a form that makes sense to an end user, must consider the process required to contract with the end users and for a minimum term of 3 years to allow end users time to invest in their processes.
- 5. Generators should be allowed through the Rules to outsource part or all their reserve commitment (eg to approved DSR Aggregators), thereby empowering them to sell their full generation capability at the market price unencumbered by reserve restrictions.
- 6. NEMMCO should declare the DSR that is <u>contracted</u> for RERM or the equivalent mechanism.

Yours faithfully

Michael Zammit Managing Director

¹ http://www.aemc.gov.au/electricity.php