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COMMENTS ON THE NATIONAL FRAMEWORKS FOR DISTRIBUTION NETWORKS, AUGUST 2007

Thank you for the opportunity to comment on the National Frameworks for Distribution Networks Report dated August 2007

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

- Substantial economic and enabling benefits to the market (estimated to be from \$3bn to \$5bn per annum)
- Unique environmental benefits (including Greenhouse Gas abatement and water savings from reduced generation, and lower transmission and distribution losses at peak times)
- Significant consumer benefits (including lower prices and improved reliability for electricity)

It is heartening from our reading of this report to see positive recommendations that promote improved efficiency through DSR. However, several of these recommendations go short of our expectations and some, if adopted would be totally ineffective or retrogressive to improving efficiencies in the Distribution Networks.

Energy Response is now active in three electricity markets. 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 for Networks.

DSR is the ability for an end use customer to reduce their demand when requested 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 and their advisors understand how it works or the benefits for Networks using DSR or the benefits for consumers.

We note that the RFP process is recommended for Networks to contract DSR in recommendations 3, 4 and 5 and yet in page 27 of the report it is noted that the RFP process as mandated by ESCOSA in South Australia has not produced any non-network alternatives and barely any submissions via the RFP process.

Simply recommending an RFP process without due consideration of how it is intended to work is flawed.

An example of our experience with RFPs for aggregated DSR clearly shows some of the deficiencies:

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 understand 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 it needed 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 over 60 companies),
- Explain the RT process to these companies and other prospective suppliers of DSR,
- Produce a contract for the suppliers of the DSR to sign that mirrored our contract with NEMMCO (for pricing, terms and conditions),
- Verify that each company could deliver what they said they could, and
- Submit their data to NEMMCO before 16 January, when the contract with NEMMCO was signed, just three days before on Friday 13 January.

The key lessons here are:

1. Regardless of how much time the utility has for the RFP process (in this example it is NEMMCO but it could be a Network company), it is the time they will take to follow due process, not time for the end user (those that provide the DSR) or the Aggregator to get themselves in order to be able to provide the DSR. This is one of the main reasons why the RFP process (as suggested) does not work for DSR provision.
2. Utilities generally are ill prepared when tendering for non-network solutions and this is clearly evident in their RFP documentation. In some cases, such as a recent DNSP RFP, the tender documentation was written such that a DSR solution could not comply with the requirements yet it was asking for a DSR alternative. Standard documentation templates must be used by all NSPs to ensure uniformity in all RFPs for non-network solutions and so there is fair and equitable treatment for all types of solutions.

To make any process work one must understand what the tenderer needs to do to comply and consider the end to end process; for instance how does an end use customer contract with a Network either directly or through a DSR Aggregator? What are the contract obligations on the end user that must be in place at the start of the contract, can the end user provide the DSR when required and how much time do they require to be able to contract their DSR, etc. Networks are not aware of these factors the Report ignores them too.

Another example that highlights a deficiency in the RFP process:

One contract we have recently won with a TNSP in the NEM has surprised us when we found that even though the TNSP has pass through provisions for non-network solutions in their price determination they can not apply for AER approval (for the pass through) until after the RFP process is completed – the

RFP closed 12 months ago and we are told that their submission to the AER and funding approval could be another four months away. Clearly, the end users that are party to our bid have been left in limbo for at least 16 months. This is not just poor business practise; this is the TNSP following the rules to make sure they can claim the pass through!

In another electricity market where we are active (not the NEM), the TNSP recently wanted a non-network solution so they applied to their regulator for \$8.4m in advance of the RFP process. Within two months of the close of the tender end users were dispatching under that agreement.

The key lessons here are:

1. If a national framework is to succeed (whether it is for DNSPs or TNSPs or both), it must identify how the funding arrangements are secured ahead of the RFP being issued.
2. Networks appear to have no regard or empathy for the end user, let alone for the Aggregation company. Network engineering staff and their management must be made aware of commercial realities when tendering and dealing with end users.
3. NSPs in the NEM have a very a poor attitude towards non-network solutions.

It should also be noted from the examples we have provided that there is an enormous effort required by the Network company issuing the RFPs. Keeping in mind that some 30% of all 1,250 zone substations in the NEM are stressed or shortly will be beyond their reliability limit an NSP could be managing tens of RFPs concurrently involving possibly hundreds of individual end users. Imagine what the Network will have to do to dispatch 50 to 100 end users in a summer and what might be involved in the financial settlement of those end users at the end of each summer/winter month. Network companies are not set up to do this; they don't have the systems nor the skills or people to spare. Again the Report has not given this matter any more than superficial consideration.

The Report should also consider how a Network implements the most efficient outcome when it is more than a single alternative, namely; where there are non-network solutions proposed but they do not fully meet the project requirement. The Networks should still consider these and accept the non-network solution if the non-network solution can be combined with another non-network solution (like an energy efficiency program or DG) and/or smaller build program, that in combination produce a more economic and efficient outcome. This is exactly what TransGrid have done for the Newcastle-Sydney-Wollongong project, but such action by NSPs is extremely rare.

The negative attitude by Networks to non-network solutions is the greatest issue for a DSR Aggregation company to overcome and is not addressed by the Report. This poor attitude is reinforced by the current regulatory frameworks in all states except New South Wales, where a better Demand Side framework for DNSPs exists. Energy Response has witnessed the poor attitudes and we believe they exist because:

- Several Networks (practically all of them) have highlighted that their greatest fear is that the Regulator will not approve payments for non-network solutions, even if there are pass through provisions (or equivalent) in their price determinations;

- Networks do not want to manage several contracts from non-network providers, when it is far simpler to build the assets that then react automatically (but not efficiently) to peak stresses;
- Some Networks, particularly in Victoria, are actively disinclined to even consider non-network solutions (the Citipower Melbourne CBD project is a case in point and Powercor's build program in Laverton North in 2005 was another example).

We suggest that there should be an awareness program for Network engineering staff and their management, coupled with regulatory and policy support that actively promotes non-network solutions ahead of build options. To this end Energy Response is developing just such a training course that we will offer to NSPs, regulators and policy makers in particular.

The Report appears to be trying to level the playing field between non-network and build options but this is not necessary. Recommendation 6 is a case in point; it is well intended but our business cases show that DSR used in a \$2m zone substation augmentation has a positive NPV return to the Network of about \$500,000 after paying for the DSR. This has been confirmed by several NSPs, so there is no need to try and level the playing field as long as a determining comparison is made on cost effectiveness; we are confident that the DSR option will be far more cost effective.

We have found a myriad of economic models used by Networks, so it would be helpful if there was a standard economic model that compares network solutions against non-network alternatives. Such modelling will also dispense with ambit considerations of a viable threshold to the RFP process and determine the economic threshold. To us any build program greater than \$2m and where the demand growth in that area is less than about 6% should first consider DSR. The growth rate is not considered by the Report as a determinant of non-network programs, yet it is a key factor for a Network to consider when looking at options during the planning process.

What is needed from a National Framework for Distribution Networks is affirmative action and we do not see that readily in any of the Report's recommendations. We point to California where NSPs are compelled by the "Loading Order" in that state which mandates that the utility must first exhaust opportunities from Energy Efficiency and DSR programs (or Demand Response programs as they are called there), solar options and other renewables before embarking on a build program. While this sounds severe it is driving that state to record reductions in CO₂ production and the achievement of ever greater network efficiencies. Mike Peevey, the President of the California Public Utilities Commission will be in Sydney in May 2008 for a yet to be advertised conference as will Bruce Foster, a Vice President of Southern California Edison. It would be worthwhile to seek their views on how to promote non-network alternatives based on their direct experience. We can assist you with arrangements to meet these individuals.

The Report must consider how Networks can:

1. Be mandated as a first action and/or incentivised to use non-network solutions where they provide better returns to Networks and benefits to their customers – we recommend the New South Wales D-Factor process as a model that can be adopted and improved under a national framework;
2. Undertake proper economic modelling using a national standard formula;
3. Develop standard tender documentation for non-network solutions and follow through with agreements that suit the services being purchased;

4. Ensure that a non-network solution is actioned within 60 days of the close of the RFP.
5. Be assured that a non-network solution that goes beyond a price reset period can continue to be claimed through the regulatory process;
6. Raise greater awareness among their engineering and management staff that non-network solutions are better for our environment, better for consumers and produce a more efficient outcome than build options;
7. Accept that the best alternative may be a combination of a network and non-network solutions (including DSR, DSM, Energy Efficiency, Distributed Generation) and plan to implement the most efficient combination; and
8. Consider how best to contract for non-network solutions and manage those end users – we believe that a Network must be open to use a DSR Aggregator that has the purpose built systems, relationships with end users and in-house skills;

We look forward to further discussion on these matters raised and hope our submission has adequately met your expectations.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Michael Zammit', with a stylized flourish at the end.

Michael Zammit
Managing Director