

20 June 2008



Dr John Tamblyn
Chairman
Australian Energy Market Commission
PO Box A2449
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Dear Dr Tamblyn

Response to the Review of Demand-Side Participation in the National Electricity Market Stage 2: Issues Paper

ENERGEX welcomes the opportunity to respond to the Review of Demand-Side Participation in the National Electricity Market (NEM) Stage 2: Issues Paper.

Please find attached ENERGEX's submission in response to the AEMC's Issues Paper. ENERGEX looks forward to engaging in further discussions in relation to demand-side participation in the NEM.

Should you have any queries regarding ENERGEX's submission please do not hesitate to contact Sarah Connolly – Senior Regulatory Analyst on (07) 3407 4367.

Yours sincerely

A handwritten signature in black ink, appearing to read "L. Dwyer".

Louise Dwyer
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RESPONSE TO

THE AUSTRALIAN ENERGY MARKET COMMISSION

REVIEW OF DEMAND-SIDE PARTICIPATION IN THE
NATIONAL ELECTRICITY MARKET

Stage 2: Issues Paper

20 June 2008

ENERGEX LIMITED
ABN 40 078 849 055



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1. INTRODUCTION

1.1 Background

On 23 October 2007, the Australian Energy Market Commission (Commission) wrote to the Ministerial Council on Energy (MCE) to advise of its intention to investigate the potential for amendments to the *National Electricity Rules* (Rules) in order to better facilitate demand-side participation in the National Electricity Market (NEM).

Under its policy development role, the Commission is conducting a review of Demand Side Participation (DSP) in the NEM under section 45 of the National Electricity Law (NEL), which authorises the Commission to conduct reviews into the operation and effectiveness of the Rules. More specifically, the Commission's work program will consist of the following stages:

- Stage 1 – considered DSP in the context of the Commission's current work program in order to develop recommendations that can be considered in the context of the relevant Rule change proposals and Reviews;
- Stage 2 – is reviewing the Rules more broadly in order to identify where there may be barriers to the efficient integration of the demand-side in the NEM and to develop proposals for Rule changes to reduce or remove them where efficiency would be improved; and
- Stage 3 – in recognition of ongoing reforms in the sector, this stage will seek to identify any additional, or remaining, barriers to efficient DSP in the NEM and to develop proposals for Rule changes to reduce or remove them where efficiency would be improved.

The objective of the three-stage Review is to identify whether there are barriers or disincentives within the Rules which inhibit efficient demand-side participation (DSP) in the NEM.

ENERGEX is pleased to provide this submission in response to the Commission's *Review of Demand-Side Participation in the National Electricity Market Stage 2: Issues Paper* (Issues Paper). ENERGEX's response to this Issues Paper is as a Distribution Network Service Provider (DNSP).

1.2 General Comments

ENERGEX supports in principle the Commission's objective to identify and remove impediments to achieving efficient DSP and more importantly, supports the Issues Paper's position that a NSP's obligations in relation to reliability, security and quality of supply should not be considered as impeding DSP.

A major focus for ENERGEX is demand management initiatives; given that South East Queensland is currently experiencing significant growth, particularly

in peak demand. Furthermore, over the last five years, maximum electricity demand in South East Queensland has increased at a far greater rate than electricity consumption. As a result, in 2006-07, around 12.5% of ENERGEX's network capacity was used for only one percent of the time during the year.¹

As such, ENERGEX believes there is merit in exploring non-network alternatives to assist in managing demand growth and customer expectations and publishes opportunities for demand management solutions to support its supply side initiatives in its Network Management Plan (*NMP*).

ENERGEX strongly supports the position to improve DSP in the NEM. However, the Rules need to incentivise NSPs to undertake demand-side options. The planning regime required needs to be broadly focused so that it covers all options, not just DSP.

2. ECONOMIC REGULATION OF NETWORKS

2.1 Balance of incentives may not encourage the efficient inclusion of demand-side options.

ENERGEX submits that attention needs to be focused on the risk/reward imbalance that is inherent in the current regulatory framework in the treatment of demand management options.

In order to encourage DSP, DNSPs need to have sufficient incentives to adopt demand side options over investing in network infrastructure. ENERGEX supports an incentive scheme that rewards rather than imposes penalties for implementation of efficient demand management solutions.

Demand management is still maturing and the impact of demand-side options on network reliability is still evolving. ENERGEX believes that this uncertainty may result in service incentive targets as being seen as a potential barrier to DSP because failure to meet service targets may result in financial penalties. ENERGEX submits that the impact of demand management on service targets should be factored into any financial analysis and that a degree of flexibility be maintained if demand management solutions fail to meet reliability standards.

In a recent response to the AER's Issues Paper for Demand Management Incentive Schemes, ENERGEX supported a Demand Management Innovation Allowance and / or recognition through forecast capital and operating expenditure of demand management projects.

¹ ENERGEX (2007) *ENERGEX Network Management Plan 2007-08 to 2011-12 (August)* p80

2.2 Building blocks control setting method may limit the incentives for innovation on DSP.

The Rules need to provide sufficient incentives for network businesses to undertake research and development as well as consumer education campaigns for demand management projects. Funding for this should be provided for as a component of building block costs as part of business-as-usual.

ENERGEX supports the idea of undertaking trial projects and 'learning by doing'.

ENERGEX agrees that there needs to be financial support through seed funding for research and development to limit the risks and uncertainties associated with DSP. ENERGEX emphasises that the regulatory treatment of the expenditure for research and development and consumer awareness needs to be clarified in the Rules.

2.3 The form of price control may not facilitate efficient DSP.

ENERGEX believes that depending on the control mechanism applied, additional incentives may be warranted to encourage DSP. However, the form of price control should be determined on the basis of the most appropriate approach for the network in question, rather than the incentive or otherwise that it may deliver for DSP.

As mentioned previously, ENERGEX has recently commented on the appropriate DMIS that should apply to ENERGEX during the next regulatory period. Given the form of regulation proposed, ENERGEX does not believe a D-Factor scheme (e.g. as currently applied in NSW) is appropriate for ENERGEX. ENERGEX considers that its proposed hybrid control mechanism, which applies a fixed revenue cap to its shared network services and a weighted average price cap to a tariff basket of its connection and customer services, will maintain a reasonably neutral incentive to pursue demand management initiatives. This will occur through the decoupling of electricity throughput from revenue earned in relation to shared network services, the largest component of ENERGEX's allowable revenue reflecting significant fixed network costs.

However, the decision on the appropriate form of control should be considered on the basis of the most appropriate approach for the relevant network service provider, rather than the incentives that may be delivered.

2.4 The structure and components of tariffs may not provide customers with efficient signals about electricity use.

There is scope within the current regulatory arrangements to pursue more efficient pricing structures. In particular, capacity pricing has the ability to offer more efficient pricing outcomes.

Cost reflective tariffs are important because they create strong incentives and help signal the underlying factors driving network costs. However, these signals may not be reflected in the final retail prices as there is no requirement for retailers to pass on the price signals.

In ENERGEX's view, efficient pricing structures are one of a suite of tools capable of improving network utilisation and / or reducing network maximum demand. Through the use of more efficient pricing structures, such as time of use tariffs, consumers can be provided with a transparent and direct signal about their energy consumption pattern. ENERGEX considers that there is scope within the current regulatory arrangements to pursue more efficient pricing structures, such as further application of demand tariffs and / or time of use tariffs.

ENERGEX is investigating the merits of demand tariffs based on kV.A (instead of kW) to provide cost incentives for large customers with poor power factor to improve power factor, resulting in improved network efficiency. Consultation has been conducted with industry participants to inform of the benefits of demand tariffs. Throughout 2008-09, ENERGEX will continue to consult with key stakeholders and will conduct a paper trial to ascertain the appropriateness of introducing kV.A-based network charges in the future.

However, whilst distribution pricing can be an effective tool to change consumer behaviour, there are existing and prospective constraints on efficient pricing structures being introduced for all customer classes, in particular, smaller customers. Even with the introduction of advanced metering technologies, bundled retail prices mean that some customers will not see the real cost signals. ENERGEX believes that price structure on its own will not produce sufficient signals to customers. There is a role for demand management programs to supplement pricing, such as encouraging the use of direct load control and associated tariffs with small domestic customers.

3. REGULATORY TEST

3.1 The regulatory test threshold may be limiting the ability for alternatives to smaller network augmentations to be considered

ENERGEX recently responded to the Commission's National Transmission Planner review and strongly supports a review of the minimum Regulatory Test threshold for public consultation.

Since 2001, there have been substantial increases in the input cost of materials used in transmission and distribution assets and in construction labour costs. As such, ENERGEX believes that the minimum Regulatory Test thresholds should be raised from \$1 million to \$5 million, to reflect more realistic levels and improve market efficiency.

In addition, ENERGEX strongly argues that the \$10 million public consultation threshold should be increased as the costs associated with the administration of consultation and additional assessment required are not generally outweighed by any financial benefits or savings achieved by assessing a non-network option. ENERGEX strongly believes that the public consultation threshold should be increased.

Like other DNSPs, it is ENERGEX's experience that effective and reliable demand management solutions are identified and investigated well before the proposed investment reaches a Regulatory Test consultation. However, if the use of demand management solutions is in the economic interests of a DNSP and is effectively incentivised through the regulatory regime, then it is more likely that DSP will increase, regardless of the Regulatory Test consultation requirements.

3.2 Planning arrangements may not allow sufficient time for demand-side options to integrate in the planning process.

ENERGEX supports the provision of planning information through its *NMP* to assist demand management providers in identifying potential opportunities, but recognises that there may be merit in aligning the information provision requirements into a single national approach.

Currently, ENERGEX is actively pursuing further opportunities for demand management solutions to support its supply side initiatives and publishes such details in its Network Management Plan (*NMP*) in accordance with clause 2.3 of the *Queensland Electricity Industry Code*.

However, there are differences in the level of planning information being provided to demand management proponents and as such there may be a case for streamlining these jurisdictional requirements to improve DSP. But to be successful, it is crucial that the information disclosure and planning

requirements are focused on stakeholder requirements and that the costs to NSPs is not disproportionate to the benefits expected.

3.3 Consultations on augmentation options rather than on the needs of the network may create bias against demand-side options.

ENERGEX believes that the Regulatory Test should require both network and non-network options to be considered on an equal basis, allowing each solution's risk profile to be considered in parallel.

Network planning needs to consider a number of criteria, including cost, reliability, safety and demand. Comparison of network and non-network solutions must proceed in parallel while addressing each of these criteria.

Despite the demand management market immaturity, ENERGEX is continually investigating suitable demand management options in partnership with our customers. Through these investigations, ENERGEX develops a greater understanding of the reliability characteristics of certain demand management solutions, which will allow future application in the network planning process. But the pace of these developments and application will be affected by the regulatory treatment of network versus non-network solutions.

4. NETWORK ACCESS AND CONNECTION ARRANGEMENTS

4.1 Arrangements for avoided TUOS and DUOS may under/over value demand management options.

ENERGEX supports the position that the Rules should remove the requirement for DNSPs to make avoided TUOS payments to embedded generators.

ENERGEX believes that the Rules should remove the requirement for DNSPs to make TUOS payments to embedded generators. Avoided DUOS / TUOS is administratively inefficient. Instead, the Rules should provide for distribution businesses to make network support payments.

4.2 Minimum technical standards for connection to the network may provide a barrier to potential embedded generation options.

Technical standards should be consistent across the jurisdictions and the Rules should include technical standards for embedded generation.

ENERGEX does not agree that the minimum technical standards are consistent across all jurisdictions and has recently responded to the AEMC's Reliability Panel Technical Standards Review. ENERGEX has requested that a Queensland specific derogation in Chapter 9 of the Rules be removed to allow

consistency across the jurisdictions and reflect the current Australian Standard AS/NZS 61000.3.7.

In addition, the specification for generators in the Rules does not include the technical requirements for embedded generation. ENERGEX has experienced an increase in requests from customers to incorporate embedded generation within its distribution network. This is due to Commonwealth and State Government policies and rebate schemes, energy rating schemes and savings in renewable energy sources. It is for this reason that ENERGEX considers that technical requirements for embedded generators connected to a distribution network should be inserted into the Rules.

4.3 Deep connection costs to the network may be a barrier to potential embedded generation options.

ENERGEX supports a nationally consistent framework for the connection arrangement of embedded generation and where the embedded generation proponents pay for all the costs associated with their connection.

5. CONCLUSION

ENERGEX strongly supports the position to improve DSP in the NEM. However, the Rules need to incentivise NSPs to undertake demand-side options. The planning regime required needs to be broadly focused so that it covers all options, not just DSP.

Demand management is still maturing and the impact of demand-side options on network reliability is still evolving. As a result, ENERGEX believes that a cautious approach to DMIS should be taken. With this in mind, ENERGEX supports the idea of undertaking trial projects and 'learning by doing' as it is often unclear whether a demand management project will be effective or not prior to its implementation.

Importantly, ENERGEX submits that attention needs to be focused on the risk/reward imbalance that is inherent in the current regulatory framework in the treatment of demand management options. The regulatory framework needs to reflect that NSPs successfully generate demand management solutions themselves, and that with the right economic incentives in place will continue to develop DSP.