Mr John Pierce
Chairman
Australian Energy Market Commission
Level 5, 201 Elizabeth Street
Sydney NSW 2000

Re: EMO0025 Strategic Priorities for Energy Market Development 2013

Dear Mr Pierce

The Energy Efficiency Council welcomes the opportunity to provide input on the discussion paper on the *'Strategic Priorities for Energy Market Development 2013 Discussion Paper'* (the Discussion Paper). The Council congratulates the Australian Energy Market Commission's (AEMC) for its work on the discussion paper, concurs with much of the analysis in the paper and has a number of recommendations for refining the strategic priorities.

The Energy Efficiency Council is the peak body on energy efficiency, cogeneration and demand-management, and represents experts in energy efficiency from industry, academia and the public sector. In the last five years there have been demand-side changes which were unforseen by energy supply experts and a profound impact on energy markets. We welcome the AEMC's increased focus on engaging with demand-side experts like the Energy Efficiency Council, as integrating demand-side knowledge into the design and operation of Australia's energy markets will improve market stability and outcomes for energy users.

The Council congratulates the AEMC on its recent work on the Stage Three Demand-Side Participation Review (DSP3). We believe that implementing these reforms, and undertaking further rounds of demand-side reform, will be critical to achieve the National Electricity Objective. Even in a business-as-usual scenario, there is a strong imperative for demand-side reform to deliver affordable energy. However, there are a number of significant technical, commercial and social changes currently underway that could significantly change the nature of the electricity sector, and increase the imperative for reform.

We have set out a number of recommendations below.

Distributed Generation (DG)

We support the statement on page two of the AEMC's Discussion Paper, that embedded generation could significantly alter the nature of energy supply over the next two decades. New generation and energy storage technologies are emerging and the relative costs of different technologies and fuels are changing. While we can't predict the technology mix for generation in the near future, there is a high chance that the technology mix will include a much higher proportion of DG, district energy and renewable technologies.

Increased penetration of DG will alter the optimal structure of the electricity network and change the delineation that currently exists between energy consumers and generators. We support the AEMC's position that regulators should not attempt to determine the mix of generation technologies in the market, but should set up market structures that facilitate the most efficient investment irrespective of what technologies come to market. This will require changes to the rules and regulation of the National Electricity Market (NEM), which currently distort the costs and returns faced by DG proponents, reducing investment efficiency.

We recommend three priority areas for action by the AEMC on DG.

Minimising the barriers and transaction costs for DG to connect to the network

There are currently substantial barriers and transaction costs for embedded generators to connect to the network, or establish private networks that are linked to the public network. The AEMC is currently reviewing a rule-change on this topic, and we believe this must be a major priority for 2013.

Network charges should reflect the costs and benefits using the network in different times and places. First, when DG owners only want to use a short section of either a public or private network to move energy between sites (e.g. two council offices) they are rarely charged a fee that reflects the actual costs of using only a small portion of the network, and in some cases they are blocked from using the network for these purposes.

Secondly, connecting a cogeneration system to some parts of the network will deliver a benefit to other users (by reducing the need to augment the network) while in other areas it will increase the need to augment the network. However, network connection and use charges are not currently calculated in a cost-reflective way, and cogeneration owners rarely secure network support payments that reflect benefits from the monopolies that manage the networks.

Third, the current system for determining network connection and use charges does not deal well with multiple connections. Depending on when a DG owner requests to connect to an area of the network they could either be subsidised (avoid augmentation costs), subsidise other users or, if the network deems an area to be 'saturated' with distributed generation, be prevented from connecting to the network.

We believe that wholesale review of the way that network connection and use charges are calculated needs an urgent review and, given the increased overlap between energy users and generators, this review will need to look at charges for both generators and energy users. This is discussed further below.

A review of the rules for retailing electricity in specific locations

When remote generators sell electricity into a common network it substantially minimises the location-specific value of that electricity. In this situation, the current rules, which require competition in electricity retail, make sense. However, DG has location specific-value, including the ability to avoid network augmentation costs. The current requirements for multiple retailers can require the construction of additional monopoly network infrastructure, and the additional costs for energy users outweigh the benefits of retail competition.

In the case of cogeneration and trigeneration, distributed generators also need to capture the value of heat and other services created by DG. Capturing the value of heat and other services from distributed generation is complex. Heating and cooling typically need to be sold to local customers using purpose-built distribution infrastructure. This means that generators typically need long-term contracts for electricity, heating and cooling with a particular proportion of energy users in an area in order to justify investment in both the generation equipment and the distribution infrastructure. The current retail rules make such coordination exceptionally difficult.

To address these issues, the UK and a number of other jurisdictions have introduced rules that allow for competition requirements to be waived in specific areas, subject to the total electricity retail price being deemed fair and comparable to the price in the competitive retail market. We recommend that the AEMC should review this issue as a priority.

Demand-side issues

The DSP3 review made significant recommendations for energy market reforms, and in the near term it is appropriate to focus on the implementation of these reforms. However, implementation of these reforms will not 'complete' the work on demand-side reform, in the same way that the supply-side reforms over the past decade have not eroded the case for further reform. Energy markets require ongoing review, particularly in the context of unprecedented technology change, and demand-side reform will need to be an ongoing process for the AEMC.

We believe that there is a case for further investigating a number of issues that were either out of scope for DSP3, or were touched on but not fully resolved. These include:

- As noted above, a detailed review of network charges for energy users and generators. Even large energy users are rarely charged in a cost-reflective way, with their network charges typically based on their highest kVA or MW use in specific period, irrespective of whether the energy users' peak was co-incident with the system peak. Furthermore, network prices are heavily smeared between regions, despite substantial variation in the cost of supplying the infrastructure. Given the increasing overlap between energy users and generators (caused by the introduction of DG), we believe that a wholesale review of network charging that encompasses both energy users and generators would be of significant value.
- A review of options to ensure that Distribution Network Service Providers (DNSPs) deliver an appropriate balance of supply-side and demand-side investment. In particular, requiring DNSPs to report a number of metrics on their overall levels of demand- and supply-side investment could support comparison of DNSP performance and encourage improved performance.

Beyond just reviews, we believe that the AEMC needs to review the way that it frames demand-side issues, both in the Strategic Priorities and more generally. At the moment, demand-side issues are largely framed around giving consumers information and encouraging them to manage their demand, despite the clear limits that consumers face in terms of information and agency, and the clear impact that market structures that can facilitate or impede demand management. As with any other sector of the economy, demand-side decisions are not taken by consumers in isolation, but are mediated by the availability, cost and simplicity of services and prices, which are affected by market structures.

The NEM implicitly recognises that the vast majority of consumers require the support of retailers to engage in the supply-side of the market, given consumers limited ability to personally engage with the complexity of wholesale markets, hedging, metering and settlement. However, there is still limited recognition in the NEM that consumers face similar processing limits on the demand-side, and therefore require similar services to manage their demand. We recommend that the Strategic Priorities should frame demand-side issues similarly to supply-side issues, focusing on establishing structures that support and facilitate demand management by both service providers and consumers.

Structure of the Strategic Priorities

The issues outlined in this submission do not fit neatly into the proposed structure of the Strategic Priorities. The Council strongly supports the need for ongoing work on gas markets, and looks forward to working with the AEMC on this topic. However, NEM issues are split into 'consumer participation' and 'market arrangements', but DG and demand-side policies fit across both these segments. For example, a review of the way that embedded generators are charged for utilising the network would fit across both 'consumer participation' and 'market arrangements'. Similarly, a review of the way that networks invest in supply-side and demand-side projects would cut across both these areas.

Our preference is that DG and demand-side issues should form their own priority in the Strategic Plan, including a number of the issues that are currently identified for the Consumer Priority and Market Priority (e.g. implementation of DSP3). A less preferred option is that the current priorities are modified to:

- **Consumer priority:** consumer participation, retail arrangements and demand-side services
- **Market priority**: market arrangements that encourage efficient investment and flexibility in demand-side and supply-side projects

Summary

The decline in recent years of both consumption and peak demand growth in the NEM has reduced the need for major new generation and network investment. This provides a small window for the significant reviews that will need to be undertaken to ensure that future investment is efficient. We look forward to working with the AEMC during this window of opportunity to adjust the market settings to unlock the full potential of supply- and demand-side activities to meet energy users needs.

Yours sincerely,

Rob Murray-Leach

Chief Executive Officer