The Hon Tom Koutsantonis MP
Member for West Torrens

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Government of South Australia

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Mr John Pierce
Chairman
Australian Energy Market Commission
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Dear Mr Pierce John,

Thank you for the opportunity to provide comment on the Australian Energy Market Commission's (AEMC) Directions Paper 'Power of Choice – giving consumers options in the way they use electricity'.

Please find attached for the AEMC's consideration, a response to the Directions Paper prepared by the Energy Markets and Programs Division within the Department for Manufacturing, Innovation, Trade, Resources and Energy.

The submission highlights some areas of concern for the AEMC's consideration and some suggestions for reflection, as well as commentary on key aspects of the Directions Paper.

Should you wish to discuss the Division's submission, please contact Ms Rebecca Knights, Director, Energy Markets, on (08) 8204 1715 (rebecca.knights@sa.gov.au) or Ms Anne Hill, Director, Demand Management and Advisory Services, on (08) 8204 1699 (anne.hill2@sa.gov.au).

Yours sincerely

Hon Tom Koutsantonis MP
Minister for Mineral Resources and Energy

11 May 2012

Attachment: Energy Markets and Programs Division Submission

Energy Markets and Programs Division Submission to the Power of Choice Review: Directions Paper (EPR0022)

The Energy Markets and Programs Division (the Division) of the South Australian Department for Manufacturing, Innovation, Trade, Resources and Energy welcomes the opportunity to provide comment on the Australian Energy Market Commission's (AEMC) Directions Paper – Power of Choice: giving consumers options in the way they use electricity. The information provided below is for the AEMC's consideration in drafting their Draft Report.

Consumer Engagement and Participation

The Division agrees that where pricing incentives exist for consumers to shift their consumption away from peak demand periods, the provision of timely, clearly presented consumption data and consumer education is a critical element to a demand side participation (DSP) program.

Through the National Energy Retail Rules (NERR) there is a clear policy that consumers own their load data and data holders can impose reasonable charges for access to the data if the data request is for a period beyond that prescribed. If it was found that these rules do not adequately provide for data provision by a retailer and/or distributor, particularly where a consumer has a smart meter, the Division would support an amendment or inclusion of a new rule under the National Energy Customer Framework (NECF) to allow for this.

The Division considers that in some circumstances, parties other than retailers may be more effective in engaging consumers in DSP activities. While retailers have a clear role to play in liaising with and informing consumers, it is important not to unnecessarily constrain opportunities for innovation and competitive energy services. Fundamentally, retailers exist to sell power, and other services are ancillary to this objective or are mandated by legislation or licence conditions.

The Division suggests that there is potential for the development of a market in independent energy advice and services. These services may span energy efficiency, demand-shifting, demand response aggregation, micro-generation and energy storage. Services of this type are already offered by energy service companies to commercial and industrial consumers. Technological advances and more flexible and responsive business models may allow extension of such services to the small-use consumer segment. Consumer uptake of these services would reflect the value provided in terms of achieving energy cost savings. Rising energy bills should provide the incentive for this to occur, and the roll-out of more cost reflective and dynamic, and consequently more complex, pricing models will provide further impetus.

The Division notes greater facilitation of DSP in the wholesale market would provide a greater capacity for the wholesale market to efficiently meet demand and maintain reliability of supply, particularly at peak demand periods such as summer. The Division therefore supports the AEMC's further investigation of opportunities for aggregators to have increased participation in the wholesale market. The risks and liabilities faced by aggregators differ from those faced by retailers, and the Division supports further research into whether the particular risks and liabilities faced by them warrant the development of a new category of market participant.

The merits and disadvantages of a regulatory framework (e.g. consumer protection measures, need to license practitioners) tailored to demand aggregation services, within the context of likely aggregation consumer profiles, should be assessed.

Technology

The AEMC has concluded that high upfront costs pose an important market barrier to investment in DSP technology, especially for the residential sector. The Division considers that the capital cost of effective DSP technology may be a barrier, particularly since the benefits can be difficult to quantify with confidence or attribute because of the many influencing factors. The Division recommends the AEMC investigate further potential financial support schemes that would assist in addressing the issue of DSP capital costs. For example, the 'Green Deal (UK)' and new solar PV system leasing products allow investment to be amortised over time through the electricity bill. While it is too early to judge the effectiveness of these, and the length of the financing contracts may be unattractive for many residential consumers, innovative financing options could be a viable tool for increasing DSP.

The AEMC's view is that there should be open standards[1] and a communications gateway to make it possible for consumers to invest in in-home control and information devices that would automatically communicate with their meter. The Division supports the concept of open standards and a communications gateway to enable consumers to increase the level of DSP in their homes and limit the risk of consumer capture by suppliers using proprietary systems. Educating consumers on how to use automated DSP technology and addressing their concerns is a key issue.

Pricing

South Australia has the 'peakiest' electricity demand profile of any jurisdiction in the National Energy Market (NEM). That peak grew between 2004-05 and 2008-09 by 29 per cent, with growth in demand from residential air conditioners a significant contributor. South Australia's annual growth is also expected to continue at 1.9 per cent per annum for the next 10 years which will intensify the issue for South Australia. The introduction of cost reflective pricing including capacity charges may be part of a solution in addressing this peak demand.

Tariffs for small-use consumers in Australia are almost invariably based solely on energy consumption, although capacity charging is used for larger commercial and industrial consumers. Capacity charging or capacity limiting for small-use consumers is sometimes used as a more certain method of ensuring fixed costs are recouped with minimal consumption risk. This also delivers price signals to consumers when systems are constrained. Because capacity charges are not consumption-based, there is less risk of retailers blurring the price signals through averaging.

There are several models already in use for capacity charging, and the Division suggests that the AEMC examine a variety of capacity charging (and billing) models for their relative effectiveness in reducing peak demand and their suitability within the NEM framework.

[1] 'open standards' refer to the manner in which various technologies, such as meters and in-home enabling technologies, communicate between different market participant systems

Clarity is needed on the implications of cost reflective pricing being voluntary or mandatory. The Division notes the AEMC's discussion on the impact of more cost reflective retail tariffs on consumers, should they elect to take them up. As retailers are currently able to smooth any network price signals to end use consumers within their pricing structures, the Division recommends the AEMC explore possible options that ensure retailers pass on these price signals to those consumers.

The investigation of appropriate protections for consumers from the impact of cost reflective tariffs, particularly vulnerable consumers is essential. For example, the AEMC could explore options that linked in with the customer hardship framework under NECF to protect vulnerable consumers from the impact of cost reflective tariffs.

One such protection in South Australia is to ensure the existence of a regulated 'safety-net' tariff. As noted in the Division's submission to the AEMC's Power of Choice Issues Paper the standing contract regulatory framework has enabled consumers to feel confident that the prices charged have been subject to stringent review by the independent economic regulator (ESCOSA). Vulnerable consumers particularly can be confident that together with regulated terms and conditions they have an appropriate level of protection. Consumers who have entered market contracts also have the comfort of returning to the standing contract tariffs at any time.

The Division argues that regulated pricing is compatible with the provision of signals to consumers of the higher costs of supplying electricity at certain times. The Division does not consider that price regulation is a restriction limiting retailers from offering innovative retail options, including DSP, to consumers who would value those options. In the South Australian retail market there are a number of market offers available that vary from the ESCOSA determined standing contract price. ESCOSA has reported that 75 per cent of electricity consumers have elected to enter into market contracts[2].

South Australian consumers can obtain prices significantly below the standing contract rate, as well as other conditions such as early payment discounts, by researching the competitive retail offerings. Third party service providers and ESCOSA offer comparative advice on retail offers available in the market. From the commencement of the NECF, the Australian Energy Regulator will also provide this service.

The Division also notes that the South Australian regulated standing contract price is also now more reflective of market conditions and the resulting market contract offers. ESCOSA's new Relative Price Movement methodology for setting standing electricity contract prices incorporates consideration of both market price movements and the traditional cost-stack.

It must also be recognised that cost-reflective pricing may in some circumstances result in unintended consequences. For example, the settlement pattern in South Australia is driven by the State's geological, climatic and economic features. It is in the public interest to minimise the divergence between the costs of living in

[2] ESCOSA, *Annual Performance Report: South Australian Energy Supply Industry*, November 2011, p. 7

major population centres and in South Australia's regional and remote locations to ensure the continued viability of regional economies.

Acknowledging the importance of regional areas to the State's economy, South Australia has a policy of postage stamp pricing for small consumers (i.e. those consumers whose annual electricity consumption is less than 160MWh). This means that there is no regional price separation for consumers connected to the grid in South Australia and rural consumers are not charged more than their metropolitan counterparts as a consequence of the higher cost of supplying them.

Investing In and Valuing DSP

The Division supports investigations into greater incentives on distribution network businesses to pursue DSP projects. To facilitate DSP as an alternative to network investment, the regulatory framework needs to appropriately consider all the costs and benefits of the DSP project and align a network business's profit incentive to ensure that the network business is motivated to implement DSP projects. The current Demand Management Incentive Scheme offers an opportunity to investigate such incentives, noting that the majority of efficiency savings in operating expenditure tend to be recurrent and permanent while capital expenditure efficiencies tend to be driven by one-off savings.

The AEMC has also suggested that the disaggregated electricity supply chain hinders the advancement of DSP because of the difficulty in assigning costs and benefits. The Division notes that a disaggregated supply chain is not unique to electricity and the examination of solutions used in other industries may reveal potentially relevant options for influencing consumer choice about levels and patterns of electricity demand.

The Division notes that the Directions Paper primarily focuses on influencing end-use consumers to make choices for the benefit of the system and canvasses a number of ways to bring about changes in end-user energy use. If the over-arching objective is to achieve efficient investment, then DSP at all levels of the supply chain need to be facilitated.

In theory, all businesses have an incentive to reduce input costs including energy costs. In practice, a number of factors may reduce this imperative, including the materiality of energy costs in the cost structure of the business. Providing incentives for businesses in the energy supply chain to engage in DSP themselves will not only encourage more efficient investment, but could stimulate innovation, which may have flow through benefits to retail customers.

The Division notes the AEMC's argument that the aggregated response of 'all consumers in the program' provides some DSP certainty for network operators, but does not believe that this argument will hold true during a heat wave. After a few hot days, evidence has shown that consumers will revert back to high energy use. In addition, the Division notes that even if consumers do reduce their usage, if they are not in a constrained area the response is of little value to the network. Consumption pattern diversity supports efficient network management when the network is not operating close to capacity, but diminishes in effectiveness during extreme weather.

Energy Efficiency

Within the Directions Paper, the AEMC states that

> *'In undertaking its work, OGW will also be undertaking some market simulation modelling to understand the impacts of energy efficiency policies and measures on the NEM, particularly on the maximum demand and energy consumption (i.e. loadshape).*
>
> *We note that there is likely to be some limitations to the assessment given lack of data and ability to quantify some benefits. We are seeking stakeholder feedback on any data that may be available, and the parameters for best practice approach for energy efficiency in the context of facilitating efficient DSP in the electricity market.'*

When it comes to modelling the Residential Energy Efficiency Scheme (REES), Oakley Greenwood (OGW) is invited to contact the Division to discuss its data needs. The Division has undertaken some modelling of the REES to advise the Minister for Mineral Resources and Energy on REES target setting.

In relation to the consultancy report 'Stocktake and Assessment of Energy Efficiency Policies and Programs that Impact or Seek to Integrate with the NEM: Stage 1 Report', the Division has noted a number of factual errors in relation to the REES. The Division has provided details of these below:

- On page 5 the report states '*The REES is legislated to continue indefinitely*'. The regulations that establish the REES (the Electricity (General) Regulations 1997 and the Gas Regulation 1997) both expire on 31 December 2014, though they also require a review by the end of 2013 which is to consider whether the scheme should continue.
- On page 6 the report states '*All three of the state-based programs use tradable certificates*'. The REES does not use certificates, though the regulations do allow for energy retailers to transfer energy credits to other energy retailers.
- On page 32 the report states '*The REES places direct obligations on retailers, requiring them to perform both household energy audits and implement a number of energy efficiency measures for their customers*'. Energy retailers can meet their REES obligation by delivering energy efficiency activities to any South Australian household, not just their customers.
- On page 32 the report states '*Its targets rise from an annual reduction of 155,000 tCO2-e in its initial year of operation, to 410,000 tCO2-e in 2014*'. This is only one of the three targets set under the REES. The other two relate to a priority group target and an energy audit target.
- There are a variety of errors contained within Table 1 of the report including:
    - Objective - the report states that *the specific objective of the REES is 'Greenhouse Gas Reduction'*. This is not complete. On page 32 of the report the multiple objectives of the REES are presented.
    - Delivery Mechanism - the report states that '*The REES requires gas and electricity retailers to offer financial assistance and other incentives to*

households'. Whilst financial and other incentives are a dominant means by which energy retailers meet their REES obligations, there is no explicit requirement for retailers to offer them.

- Obliged Parties – the report states that REES obligations are placed on *'Retailers with more than 5,000 customers'*. Specifically, the 5,000 threshold relates to residential customers.

- Applications - the report states *'The Minister for Energy has set the list of eligible energy efficiency activities'*. Whilst the Minister established the initial list of activities, ESCOSA is responsible for maintaining this. In late 2011 ESCOSA updated the list.

- Timelines - the report states *'The scheme commenced on 1 January 2009 and is legislated to continue in three-year phases indefinitely. Targets have been set up until the end of the second phase (i.e. until the end of 2014)'*. As stated above, the REES regulations expire on 31 December 2014 and a review in due by the end of 2013 will consider whether the scheme should continue.

- Targets - the report shows total and electricity reduction targets. The REES does not have such an overall 'electricity reduction target'. The REES targets are described at http://www.escosa.sa.gov.au/residential-energy-efficiency-scheme-rees/rees-targets.aspx.

- Rationale for Target - the report states that the REES targets were set by ESCOSA. Rather, the Minister with portfolio responsibility for energy gazettes the overall REES targets. ESCOSA's role is then to apportion these to energy retailers.

- Energy Efficiency Assessment Method - the report states *'Each approved energy saving activity has a deemed energy use reduction for residential purposes'*. The deeming values for REES activities are expressed in lifetime greenhouse gas abatement, not energy use reduction. The two approaches differ for activities such as fuel substitution.

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3 May 2012