2 September 2011

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Power of Choice – giving consumers options in the way they use electricity
Submission from Jemena Limited to the Australian Energy Market Commission

Jemena welcomes the opportunity to make this submission on the AEMC's Stage 3 Demand Side Participation (DSP) Review entitled 'Power of Choice'. We also appreciate the extension of time made available for us to complete the submission.

Jemena looks forward to further consultation on this Review. If you wish to discuss the submission please contact Sandra Gamble on (02) 9455 1512 or at sandra.gamble@jemena.com.au

Yours sincerely

Sandra Gamble

Sandra Gamble
General Manager Regulation and Strategy
Jemena Limited

Attachment:

Power of Choice – giving consumers options in the way they use electricity: *Submission from Jemena Limited to the Australian Energy Market Commission*, 2 September 2011.

Power of choice – giving consumers options in the way they use electricity

Submission from Jemena Limited to the Australian Energy Market Commission

2 September 2011

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1 Background to Jemena

Jemena directly owns Jemena Gas Networks (NSW) Ltd (the major NSW gas distribution network) and Jemena Electricity Networks (Vic) Ltd in Victoria. Jemena partially owns the United Energy Distribution electricity distribution business in Victoria (34%) and the ActewAGL gas and electricity distribution business in the ACT (50%). Additionally, Jemena owns two major gas transmission pipelines.

Jemena provides widespread services to a range of gas and electricity assets in Australia. Overall, Jemena manages $8 billion worth of gas and electricity assets.

2 Key messages

Communication with customers

The emergence of the active demand side participation (**DSP**) is the next important stage in the evolution of the national electricity market. In time, it will enable the market to strike better balance between cost and quality of electricity supply, a balance that reflects what customer value and are prepared to pay for.

At its most basic level, DSP is all about communication between customers and the businesses that operate in the supply chain. In a well-functioning market, customers would clearly signal their needs and wants in a range of ways, and most fundamentally through their choice when they use energy and how much. Customers' needs for quality and reliability of supply are more difficult to gauge, but are still important. Businesses would communicate with customers (collectively or individually) through the choices they offer in terms products and prices.

The more a market enables this communication, the more effective it will be in finding the right balance of DSP.

It is fair to say that, at this point in time, communication between customers and electricity businesses is still in its formative stage. The reason for this is two-fold. Up to now, with the exception of retail contestability, reforms in the electricity market have understandably been focussed on the creation of a highly competitive wholesale market. Secondly, the technology, expertise and business models needed to cost-effectively enable customers and businesses to interactively communicate with one another are still emerging.

Through the current public debate about the rising price of electricity, customers are seeking a better opportunity to communicate how much they are willing to pay for electricity and how the electricity businesses respond to apparent customer demands. As a business with a large investment on electricity distribution assets, with the need to continually invest more to maintain reliability and meet customer demands, JEN accepts that it must increasingly provide that communication opportunity in a range of ways starting with customer engagement during the preparation of its next regulatory proposals.

Innovative technology and products

Building on its advanced metering infrastructure (**AMI**), JEN is also taking a number of simple steps to enable increased (and inexpensive) access by customers to information about their consumption, which they can use to better exercise their choices in the market. Over time, JEN is eager to offer innovative pricing structures and load management products which reflect its costs of supply.

As JEN understand how customers respond to these prices and products, it will optimise the utilisation and cost of its network and, in turn, its prices to customers.

It is important to understand that investing in technology and business models to establish these new regimes of customer communication brings new costs and risks, especially where the benefits are uncertain and, almost invariably, much longer term than the costs. Ideally, these investments would be made by entities that see an opportunity to provide value to customers and are willing to take commercial risk.

Balanced policy settings

The AEMC has an important role to play in advising policy markers on the policy settings that could enhance DSP. For example, we understand that, in the broader public interest, policy makers may want businesses to accelerate that investment in DSP-enabling technology and products by placing investment obligations on businesses (e.g. AMI in Victoria) or creating new regulatory incentives. We encourage policy decisions of this type to be made with caution and only after considering the risks to customers and businesses and securing a broad consensus. The AEMC is well placed to analyse the current market, consider the factors that affect its pace of development, and the extent to which policy or regulatory intervention is wise or warranted. This is particularly important in an environment in which prices for electricity are increasing and there is little public appetite for more costs without immediate benefit.

We submit that the AEMC considers not only the current shortcomings of the retail electricity market. Some of these shortcomings exist for valid reasons and, in time, the market itself will progressively overcome them. Conversely, if cost-effective opportunities exist to remove obvious impediments to this development, JEN would support these. An example would be to enable businesses like JEN to offer customers more innovative pricing structures within appropriate consumer protections.

Other than that type of incremental reform, a prudent approach would be to allow business and customers and businesses take the opportunity to build on what we have already, take advantage of technologies and business models that are only just emerging, and progressively learn from one another. With more experience over the next few years, there will be a better view of whether the market requires more intrusive intervention.

3 Introduction

3.1 Context of this review

As noted in the introduction to the issues paper, the AEMC Stage 2 Review of DSP focused on the National Electricity Rules (**rules**) and concluded that, in the context of the current technology and other related work, the rules do not materially bias against the use of DSP in the NEM. In addition, overall, the costs and opportunities to participate in demand side activities provided by the rules framework were seen as appropriate.

Jemena sees these conclusions as important backdrops to the current review, and would not expect the rules to be revisited in any material way. The issues paper also cites several other matters as out of scope[1].

3.2 Jemena response to AEMC issues paper

The issues paper is structured to invite responses to some 38 questions located within its subject matter chapters.

Jemena has structured its response so as to address the chapter headings generally, whilst answering individual questions where we can.

[1] AEMC, July 2011, p.3.

4 Chapter 2 issues – Demand side participation in the electricity market

4.1 Previous Jemena response

Although chapter 2 poses no direct questions, it does discuss a number of electricity market issues, one being that 'stakeholders have expressed concerns that assets are not utilised efficiently because of the "peaky" nature of electricity demand'[2].

Jemena addressed this issue extensively in its response to the AEMC's Strategic Priorities paper in May 2011, and considers that response to be still valid and appropriate to many of the matters raised in the current AEMC issues paper. Since our response contained a succinct summary of our views, we reproduce it (in part) below.

Jemena said[3]:

> 'Jemena recognises that growing peak demand capacity in line with increased consumer peak demand usage will come at a high eventual cost to consumers.
>
> The issues from Jemena's network perspective are therefore:
>
> - what are the best ways to communicate the real costs of peak demand electricity to consumers?
> - what should be expected from networks in facilitating consumer responses to the underlying costs of electricity supply?'

Jemena endorsed the view that correct price signalling is essential to promoting efficient demand response by consumers, and elaborated on the future role of distributors as follows:.

> 'While demand side participation in the broad sense covers many subsidiary issues, Jemena submits that correct peak time pricing signals to consumers are the key to efficient and effective consumer responses. Jemena submits that tariff reform, allied with appropriate metering technology and carefully targeted information for consumers, are the tools to deliver effective consumer responses at peak demand times.
>
> Over the longer term, energy network businesses will need to be alive to the significant changes occurring in their markets, such as new entrants,

[2] AEMC, July 2011, p.11.

[3] Strategic Priorities for Energy Market Development, *Submission from Jemena Limited to the Australian Energy Market Commission*, 20 May 2011, pp 15-17.

products and services. Their business strategies will need to adapt to change as new commercial pressures are brought to bear. The interplay between efficient network investment, product offerings, pricing, customer response, new forms of competition, and the role of economic regulation will become increasingly complex and dynamic.'

Jemena noted that, while it will be important for the AEMC Stage 3 DSP review to consider the role of demand side participation under our current market conditions, it would be worth thinking about what lies ahead and how to leave room for market innovations and evolution.

This last point should be an important consideration for the Stage 3 review. Several parts of the issues paper appear to recognise that the technology that could be applied to DSP applications is evolving. Given that we do not know what future innovative solutions might be available, it would be premature to lock in rigid market and regulatory prescriptions now and leave little room for future adaption and developments in DSP. Many of the "smart" technologies are still being trialled which means that now is not the right time lock in perceived long term DSP solutions.

4.2 Other demand side measures and regulatory/market frameworks

Jemena also supported using other measures to encourage efficient energy consumption, such as well designed energy efficiency and greenhouse gas emissions policies.

However, Jemena submitted that these measures must be cost efficient, evidence-based and be complementary to, but operate outside of, the regulatory and market frameworks. Jemena considered that it was not the role of the network regulatory frameworks to be a conduit of energy efficiency schemes or social policy objectives.

4.3 Other distributor issues raised in chapter 2

4.3.1 Distributor obligations to consider DSP

The issues paper chapter 2 also says:

> Distribution networks may also deploy DSP solutions and there are various obligations on distribution networks to consider non-network options when engaging in further investment in their networks. Also, in some states, the AER has applied a demand management incentive scheme to particular distribution determinations to encourage the uptake of DSP[4].

[4] AEMC, July 2011, p.14.

Jemena's current regulatory experience in Victoria is that the requirements of the Victorian Distribution Code and the latest application of Regulatory Investment Test – Distribution (RIT-D), plus the Demand Management Incentive Scheme (DMIS), have provided incentives to further improve on the consideration of non-network options as part of investment planning. We support constructive development of these initiatives within the current rules.

4.3.2 Large network users

The issues paper notes that[5]:

- There is anecdotal evidence that large users (notably, major industrial users) engage in DSP as well.
- Previously, AEMO has also utilised the services of demand side providers in contracts for reserves to increase reliability of supply.

Jemena can cite examples similar to the above:

- Jemena is aware that a large Victorian industrial user has contracted with a Victorian network for the relief of network congestion by running their generator on request, for which the network pays.
- There are demand aggregators in Australia - such as Energy Response – who aggregate capacity from large industrial and commercial companies, and hold it in reserve for retailers to use during peak demand periods. The retailers pay for this service, since it avoids blackouts and supply failures during peak periods.[6]

[5] AEMC, July 2011, p.14.

[6] See Business Review Weekly, July 14-20 2011.

5 Chapter 3 issues - Methodology and assessment criteria for identifying and evaluating market and regulatory arrangements for DSP

Chapter 3 of the issues paper is directed to establishing a cost-benefit framework for evaluating DSP options, described as follows:

> in order to assess whether the benefits of particular market conditions outweigh the costs of establishing them, estimates will be needed of the magnitude of response that is expected to occur as a result of those conditions and the consequent effect on future investment requirements. This will largely be based on existing studies and surveys of how electricity demand (at an aggregated level) varies in response to changes in prices, information, technology etc.[7]

Jemena fully agrees that that a cost benefit exercise must inform any proposed changes to market arrangements to support DSP. However, Jemena questions whether the existing stock of information on how electricity demand varies in response to changes in prices, information and technology will allow definitive judgements to be made. We also note that much of the existing information is quite dated. We think there is scope for considerably more practical information to be obtained in Australia – for example, experience with the application of correct peak time pricing signals to consumers.

Jemena notes that while there is a considerable body of overseas evidence in relation to matters such TOU and CPP (critical peak pricing), its relevance to future Australian applications needs to be critically evaluated.

[7] AEMC, July 2011, p. 20.

6 Chapter 4 issues - Consumer participation and DSP opportunities

6.1 Consumer participation

The issues paper highlights factors explaining reasons for low consumer participation in DSP[8]. These include:

- electricity spend being a relatively small proportion of total household or businesses costs (i.e. management of electricity consumption has not necessarily in the past been seen as a priority)
- the presence of regulated retail prices
- variation in the ability of different parts of the supply chain to access capital
- lack of information on potential benefits from taking up DSP opportunities
- limited technical capability (e.g. measurement of energy consumption), and
- lifestyle and behavioural factors.

Jemena agrees that these are plausible explanations for a relatively low uptake of DSP by consumers, but reiterates the point we made is section 4 that correct price signalling is essential to promoting efficient demand response by consumers. We agree with the issues paper that as electricity prices increase and become a greater proportion of business and household expenditure, consumers will seek more innovative ways to manage consumption. Jemena notes that there are a number of long term drivers of increased prices, such as replacement of aged assets, renewable energy initiatives and the costs of reliability and safety standards imposed by jurisdictions.

The issues paper states that "in order to manage their electricity costs, consumers have the choice to take up DSP if they see value in doing so"[9]. This is an important observation, and is explored more fully in chapter 5 of the paper. Jemena notes that value for consumers is quantitatively driven on at least two important fronts:

The expenditure savings side: the dollar savings that a consumer can make from uptake of DSP

[8] AEMC, July 2011, p. 22.

[9] AEMC, July 2011, p. 23.

The cost side: the full cost to the consumer of DSP uptake, including costs of new or additional equipment, transaction costs and costs of any foregone opportunities from adopting DSP.

The issues paper lists a number of DSP actions that consumers – or intermediaries acting as agents for consumers – can undertake. These are:

- energy conservation
- energy efficiency
- peak demand shifting
- fuel substitution
- generation of own energy
- selling energy or load back to the market

Jemena notes that, for households, a few of these options may involve relatively little or no outlay; for example, conservation, or peak demand shifting from simply installing timing devices on appliances. Where some outlay is required (e.g. to purchase more efficient appliances) the cost may not appear as a burden when the time comes to replace an older appliance with a more efficient one.

Jemena observes that there are a large number of potential cost/savings trade offs available to consumers which could feature in the proposed cost-benefit analysis.

7 Chapter 5 issues - Market conditions required for efficient DSP outcomes

7.1 Introduction

Chapter 5 is a central focus of the issues paper and addresses the adjustment by consumers of their electricity consumption patterns in relation to their incentives, willingness and ability to adjust. We follow the chapter heading in our response below.

7.2 Consumer incentives to respond – pricing

The issues paper says that part of the Stage 3 review will consider the operation of efficient price signals in the NEM, including matters such as:

- the level of incentives for, and any limitations to, retailers reflecting efficient price signals in customer tariff structures
- alignment of incentives between the participants in the electricity supply chain to facilitate cost-reflective prices
- the potential for smart meter, smart grid and load control technologies to enhance the provision and operation of efficient price signals (both directly or by facilitating the entry of new market participants)
- the incentives for, and ability of, different customer groups to adjust their demand patterns in response to a price signal.

Given that most jurisdictions regulate retail prices, and that retailers have incentives to structure tariffs for purposes other than (say) within-day cost reflectivity, Jemena agrees that price signals to consumers are constrained and that this inhibits informed choice.

The issues paper highlights the four components of regulated retail prices as:

- energy cost
- network costs (transmission and distribution)
- retail operating costs
- retailer margin

The two most variable underlying components are likely to be (under normal circumstances) the energy cost derived from the wholesale market and a distribution cost which reflects network peak constraints. Neither of these is

reflected in current retail pricing (with limited exceptions where TOU pricing is being trialled).

Jemena therefore submits that cost reflective pricing needs to be introduced as a basic condition for efficient adjustments in consumption (although it may not be the only condition).

The issues paper raises the matter of vulnerable stakeholder groups and their ability to adjust their demand patterns in response to a price signal. Jemena agrees that these groups need special consideration, but the means of their support should not be through distorted price signals (i.e. non-cost reflective tariffs for these groups), but rather through a model of a "universal social obligation" administered by government. There may be scope for at least some consumption response by these groups under efficient pricing without detriment to their welfare, and this could be a matter for investigation.

7.3 Consumer willingness to respond

7.3.1 Provision of information

The issues paper identifies range of factors which may result in consumers being inadequately informed or unable to access necessary information to make efficient consumption decisions. These include:

- consumer lack of interest and awareness regarding electricity consumption
- costly and complex information
- information is not always available
- lack of robust and relevant information regarding cost and benefits of demand side options available in the market
- lack of ability by parties to provide real time information regarding cost of electricity supply due to technology limitations such as metering and/or billing systems.

Taking these points in turn:

- As noted in section 6, Jemena considers that as electricity prices increase consumers will seek more innovative ways to manage consumption.
- Regarding deficiencies in information (cost, complexity, availability and relevance) Jemena sees these as all education-related issues that will need to be addressed in a forceful and coordinated fashion. It will not be possible for any single stakeholder to provide the full range of information required by consumers. Jemena suggests that a "national partnership" approach, coordinated by governments but with industry and consumer input, should

develop a national reference source or sources for the cost and benefits of demand side options available in the market.

For households, this information should be simply presented, practical and useable.

- The lack of real time information regarding cost of electricity supply due to technology limitations such as metering and/or billing systems is perhaps the biggest issue to address. However, this aspect is closely linked to education. As the Victorian experience with smart meters has shown, the introduction of new technology - particularly to households – without a clear explanation of how to use its potential benefits risks creating consumer opposition to the technology.

  Regarding billing issues, Jemena observes that there may be scope to give household consumers some cost-related information (albeit limited), even without deployment of new technology. At present both retailers and distributors use a mix of fixed and consumption-related charges in their tariffs. If the retail bill differentiated between fixed and consumption charges both for the network and retail components, consumers could see how much of their total bill was consumption related and act on this if they so wished.

7.3.2 Pricing options, products and consumer incentives

The issues paper observes[10]:

> As electricity supply costs increase……retailers, networks and other parties may need to consider more innovative end pricing approaches including products and incentive offers.

This is a valid observation. The issues paper discusses the scope for more innovative mechanisms and we address some of these matters below.

- <u>The ability of business service models to consider DSP opportunities</u>

  The paper notes that these models may be focused on “a mechanism to attract or keep customers”. Jemena notes such mechanisms would be more appropriate for retailers rather than distributors.

- <u>Alignment of incentives between parties (such as retailers, network businesses and other parties).</u>

  The issues paper queries whether the benefits of investment in demand side options are captured in the value of the asset and whether incentives are split between parties.

[10] AEMC, July 2011, p. 31.

Jemena agrees that split incentives can be an issue – a DNSP may be incurring the cost for newly applied technologies and systems while retailers/generators and other market participants may be the key beneficiaries. The issues paper has recognised that a major driver for DSP will new technology and Jemena notes that much of this is likely to be network driven, at least in its initial stages.

- Ability to obtain access to consumers and their information

  Jemena agrees that appropriate access to consumer information (e.g. consumption data and associated demographics) is vital to designing effective DSP offerings. One challenge is the ability to access this information without infringing consumer rights. Informed consent, aided by objective consumer education, may be the key here.

- Existing frameworks for network regulation

  The issues paper cites revenue regulation as compared to price regulation as potentially more innovative for consumers[11]. Although economic regulation frameworks have been stated to be out of scope for this review, this suggestion invites reopening of a wider debate. Jemena submits that the current review should not pre-empt official inquiries, e.g. the AER's forthcoming review of the rules.

7.4 Consumer ability to respond

7.4.1 Incentives to invest and access to capital

The issues paper notes that lack of access to infrastructure may result in consumers not considering DSP or prevent consumers from changing their consumption. However, incentives may not be sufficiently aligned across various parties for efficient investment to take place. This is the issue of split incentives where the benefits may be dispersed across a range of parties, such that the rewards to any individual party are insufficient to justify the investment.

Smart meters (including communications) are an example of an investment with significant split incentives. There have been a number of cost-benefit studies in Victoria and nationally to identify the benefits of smart meters. While some of these studies have not been without controversy, they all identified benefits across the supply chain – to distributors, retailers and customers. The Victorian approach has been for government to initiate a mandated rollout of smart meters to capture the available benefits. The Government's role has been described as follows:

> The Government's role in the AMI Program is to develop and implement an efficient legislative and policy framework, provide strong leadership, secure

[11] AEMC, July 2011, p. 31.

public and investor confidence in the initiative, manage emerging risks, and ensure effective coordination and alignment of the AMI Program activities across government, industry, regulators, market operators and other stakeholders in order to assist in delivering successful outcomes.

Consistent with this role, in 2006 the Victorian Government initiated the 'AMI Program' to deliver core infrastructure and, subsequently, realise a raft of benefits from that infrastructure. In 2008, through Orders in Council, the Victorian Government established obligations on the electricity distribution companies to install smart meters, together with the supporting communications infrastructure, IT systems and processes (AMI Rollout). This initial phase of the AMI Program, viz. the AMI Rollout, apart from involving the installation of specific AMI functionality, also obliges electricity distribution companies to provide a set of defined services that benefit the community[12].

The Victorian AMI Program represents an example of government initiating a major large-scale investment program in the belief that individual supply chain stakeholders would not undertake the state-wide investment required to capture the benefits.

7.4.2 Technology and system capability

The issues paper notes that in order to optimise the value to consumers of services enabled by technologies such as smart grid/smart meter and load control capability, there are various challenges that need to be addressed[13]. We comment on some of these challenges below.

- The need to ensure that the benefits of smart grid technologies are accrued across the electricity supply chain and ultimately benefit consumers

  This is again the split incentives "quandary" where the investments required are substantial, but the benefits accrue to a number of parties across the supply chain.

  In this regard, Jemena notes that the Victorian AMI regulatory framework established under the Orders in Council (discussed in 7.4.1 above) explicitly addresses benefit sharing as follows:

  > Effective regulatory price-setting processes will be responsible for delivering a significant proportion of the benefits of the AMI Rollout and AMI Program to customers. The most important of these processes, in terms of ensuring that the benefits of AMI accrue to customers, is the Australian Energy Regulator's (AER) review of the

[12] Oakley Greenwood, *Benefits and Costs of the Victorian AMI Program*, August 2010, p. 2.

[13] AEMC, July 2011, p. 32.

costs that are likely to be incurred by the electricity distribution businesses in delivering electricity to customers, and therefore their determination of the amount that the distributors can charge for these services. In this process, which seeks to act as a proxy for the workings of a competitive market and the details of which are available to the public, the AER seeks to ensure that the costs incurred by the electricity distribution companies are prudent and deliver value to customers[14].

Jemena notes that since the regulatory process acts as a proxy for competition, it would not be appropriate to apply this kind of regulation to address split incentives in a competitive market. The issues paper has elsewhere suggested that split incentives could be addressed through various parties being able to strike contracts which enable the risks and benefits of an investment to be appropriately shared[15], but that the existence of transaction costs and imperfect information may prevent the striking of such contracts.

Jemena suggests that may be a role for government in reducing transaction costs to the parties and coordinating the full information needed to facilitate the contracts which are necessary to bring about investment.

- <u>The need to ensure that there are complementary price signals or tariff arrangements faced by consumers.</u>

  The issues paper notes that the efficient operation of price signals will be a key area for investigation in the Stage 3 review. Jemena has discussed the need for complementary network and retail price signals in section 7.2 above (with appropriate consumer protections).

- <u>Promoting efficient investment in new technologies and services in the face of technological risk</u>

  The issues paper cites the example where technologies may not be mature or where technologies may become obsolete.

  Although issues of economic regulation are out of scope, Jemena notes that new technology is one area where regulated businesses will need accommodating rules to undertake investment which may not meet the usual investment tests.

  Referring again to the Victorian AMI Rollout, Jemena notes that distribution businesses were given certainty of cost recovery by an Order in Council which provided for full recovery of efficient costs associated with the rollout within a specific timeframe. This mechanism is unlike usual economic

[14] Oakley Greenwood (2010), p. 9.

[15] AEMC, July 2011, p. 33.

regulation for distribution, where a business is given an opportunity but not a guarantee that it will be able to recover its efficient costs. The Victorian AMI framework recognised that distributors were being asked to take considerable risks in designing and deploying the new technology.

8 Chapter 6 issues - Market and regulatory arrangements required to facilitate an efficient demand-supply balance

8.1 Jemena comment

The issues paper notes that whilst the AEMC is seeking initial views on the market and regulatory arrangements, the Directions Paper (to be published in November) will consult in more detail on this aspect.

Having reviewed our submission, Jemena considers that the chapter 6 issues have to some extent already been covered, and we would prefer to wait until the November Directions Paper to comment in more detail.

9 Chapter 7 issues - Energy efficiency measures that integrate with or impact upon the NEM

9.1 Energy efficiency measures and policies

As part of this review, the MCE has specifically requested that the AEMC assess the potential for energy efficiency measures to promote the efficient use of, and investment in, DSP in the stationary energy sector[16].

Jemena supports in principle, the premise that energy efficiency policies have the ability to complement DSP measures in contributing to greenhouse gas (GHG) emissions reduction outcomes, creating infrastructure cost savings and delivering downstream cost benefits to consumers. However when adopted at the national level they can only be considered as a complementary and secondary approach to achieving cost-effective DSP outcomes.

This is because most energy efficiency policies lack the flexibility in locational and timing signals to deliver the most cost effective DSP responses which are targeted towards the constrained areas of networks at the right time to appropriately capture network infrastructure cost savings benefits.

Jemena believes that smart meters, when complemented with TOU tariff price signals and effective customer communication, can be used to empower customers to make informed energy use decisions and produce the most effective and efficient DSP outcomes.

9.1.1 Task Group on Energy Efficiency

The issues paper specifically cites the Prime Minister's Task Group on Energy Efficiency (TGEE) which in its final report proposed a number of recommendations to deliver a step-change improvement in energy efficiency to 2020. The paper says that 'as part of (this) review, we will take into account any outcomes of these and other relevant processes as necessary'[17].

The Australian Government has, as part of its Clean Energy Future (CEF) announcement, provided its response to the TGEE final report. Jemena offers the following observations on that response:

- Jemena welcomes the government's decision to expedite the development of a national Energy Savings Initiative (ESI) in the form of a "white certificate system". Jemena submits that policy makers should ensure that the cost-effective environmental benefits of switching from electric appliances to

[16] AEMC, July 2011, p. 38.

[17] AEMC, July 2011, p. 39.

natural gas appliances (e.g. to low GHG emissions intensity hot water heaters) are captured in the scheme.

- Jemena notes that the Minister for Climate Change and Energy Efficiency and Minister for Resources and Energy will undertake further work on national energy efficiency governance arrangements for the consideration by the end of 2012 in response to the TGEE governance recommendations.

  Jemena encourages the Ministers and their respective departments to consult in the necessary depth, in particular with all NEM participants, to ensure that all aspects of governance changes are appropriately considered.

- Jemena notes and supports the Government's focus on providing advice to households, small and medium businesses and the community sector to assist them with rising costs. This could include advice of practical DSP measures.

- Jemena notes the Government's intention to extend the scope of the Energy Efficiency Opportunities (EEO) program to include energy distribution and transmission networks. The EEO model is effective when applied to companies with operational activities that can be isolated in discrete boundaries. However, it is not an efficient or effective way to report on energy efficiency projects and performance for energy network infrastructure.

  Jemena submits that any future energy efficiency reporting requirements and compliance activities for energy networks, deemed necessary after comprehensive analysis, debate and consideration, should be facilitated via the Australian Energy Regulator (AER).