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11 October 2012

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Reference: EPR0022

www.aemc.gov.au

To whom this may concern

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

Essential Energy appreciates the opportunity to respond to the Australian Energy Market Commission's (AEMC's) draft report - *Power of choice – giving consumers options in the way they use electricity*.

Attached to this cover letter is Essential Energy's response to the AEMC's questions.

Essential Energy would be pleased to discuss this matter further. Should you require further information or clarification please feel free to contact Natalie Lindsay, General Manager Regulatory Strategy and Compliance, on 02 6589 8419.

Yours sincerely

Col Ussher
Executive General Manager Infrastructure Strategy

Att. 1.

Essential Energy's specific response to the AEMC Draft Report:

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

Reference: EPR0022

Response to the AEMC draft report: Power of Choice
11 October 2012
Prepared by: Essential Energy

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Overview

Essential Energy is pleased to provide a response to the Australian Energy Market Commission (AEMC) *Draft Report, Power of choice – giving customers options in the way they use electricity* (The Draft Report).

Essential Energy is a New South Wales (NSW) Government-owned Distribution Network Service Provider (DNSP), with responsibility for building, operating and maintaining Australia's largest electricity network - delivering network services to more than 800,000 homes and businesses across 95 per cent of NSW, parts of southern Queensland and northern Victoria.

Essential Energy agrees with many of the proposed reforms outlined in the draft report particularly those that will empower families, business and industry to have more control about the way that they use electricity and manage their bills. The key to providing families, business and industry with this ability is by means of education, information, incentives and technology. Essential Energy believes that the best technology to incentivise customers in their electricity use is via smart meters.

The implementation of a smart meter solution would be a first step. However this would need to be undertaken in conjunction with easily understood information and education programs which would ensure that customers are given the opportunity to choose an option that best suits their needs. Essential Energy is not entirely comfortable with the view that Retailers be free to decide how best to include network tariff options into their retail offers as customers may not necessarily gain the full network price signal/benefit of the network tariff.

A smart meter solution would enable DNSPs to introduce efficient and flexible prices that could reduce the need for expensive network upgrades and would also allow the DNSP to incentivise particular customer segments in their utilisation of the network. Essential Energy considers the recent announcement by the Victorian Government to allow customers greater pricing choice through their smart meters as a progressive initiative and feels that this is an option that may be used throughout the National Electricity Market should a smart meter solution be implemented in other jurisdictions.

Essential Energy believes that the soon to be released Rule change – Distribution Network Planning and Expansion Framework will facilitate improved uptake of demand side participation (DSP). Although we as a DNSP consider DSP in our planning processes, there is a need to encourage and incentivise a broader approach to the investigation of DSP solutions with the understanding that not all DSP options have the reliability and security standards required under DNSP licence conditions.

Facilitating consumer access to electricity consumption information

Facilitating consumer access to electricity consumption information

1.	What should be the minimum standard form and structure of energy and metering data supplied to consumers (or their agents)? Should these arrangements differentiate between consumer sectors (ie industrial/commercial and residential)
2.	When do you think it is appropriate for a retailer (or responsible party) to charge a fee for supplying energy and metering data to consumers or their agents?

Question 1

Essential Energy understands that the Draft Report discusses energy data and metering data. Energy data is the data stored within the meter; once it is extracted from the meter it is considered to be metering data. The customer should be provided with access to validated meter data. This allows for metering configurations to be applied to energy data where relevant, for example, for current transformer installations with meter multipliers.

Essential Energy believes that to allow customers to best utilise information, the minimum standard form and structure of metering data should be graphical including time profile splits where available. Source meter data should also be provided with the ability to export the meter data for further review and analysis, for example, in spread sheet software. Source meter data may be accumulation or interval and available by individual register. Where register data is provided, customers will need to be provided with details of register mapping and primary use within each business to provide an explanation to the customer of what the register is capturing, as this may vary between Distribution Network Service Providers (DNSPs).

A minimum specification should be developed to ensure all customers have access to the same base level of information irrespective of who their retailer or DNSP is. Ideally this meter data would be provided through a portal solution for ease of consumer access.

As pricing models become more sophisticated (both DNSP and Retailer) and customers become better educated to the way that they utilise electricity the minimum specification should also make provision for the splitting of the energy component (kWh) and the demand for network capacity (kVA), and the timing of network constraints. To facilitate this, a minimum date requirement should include interval data containing – kWh, kVA, kW and kVAr. Inclusion of these data elements will allow prices to be developed that better reflect the underlying costs of supply and provide the necessary price signals to customers to make better decisions regarding their energy usage.

Currently under the National Electricity Rules (NER) 7.7(a)(7) the DNSP cannot provide meter data except where requested by the Financially Responsible Market Participant (FRMP). The draft report proposes that changes are made to the NER and National Energy Consumer Framework (NECF) to provide consumers with better access to their meter data.

Although the recommendations in the Draft Report discuss Retailers providing consumers' energy and metering data, a Retailer may not have access to the historical data set for a customer (due to customer churn). In these instances, a DNSP is better placed to provide meter data directly to consumers or Retailers. However, the provision of this data will be reliant on accurate customer details provided by retailers. Retailers

are obliged to provide customer details' notification to the DNSP – the DNSP needs to be able to rely on the currency of the customer details to ensure data is provided to participants that are entitled to the metering data (customer move in and out).

Question 2

Essential Energy believes that customers should have access to their meter data free of charge, where this is developed according to a minimum specification. Meter data should be readily available through a secure self-service solution, for example, a portal. Should the customer request data in a format outside the standard format it would be reasonable to charge the customer, for example, if the data is above and beyond the minimum specification or the format requested varies to enable it to be loaded into a customer's data repository.

Market information to develop DSP products and services

3.	Do you agree that general market information should be published on consumer segment load profiles to inform the development of DSP products and services to consumers?
4.	Is AEMO the appropriate body to publish such information, or should each DNSP be required to provide such information particularly where data will be at the feeder level where accumulation meters are installed?

Question 3

General market information would be useful for DNSPs and other entities in the development of DSP products, however this creates inherent risk that the Net System Load Profile (NSLP) may not apply to all customer situations. The NSLP is useful in deeming load profiles across the DNSP as a whole, but may not necessarily apply effectively on an individual customer basis. Consumer load profiles ideally should be either specific to a general load type or more usefully, location specific.

It should also be noted that the introduction of the Distribution Annual Planning Report (DAPR) will also assist with the development of some DSP products.

Question 4

Essential Energy believes that if data is to be provided, it would be reasonable for the Australian Energy Market operator (AEMO) to provide this information for the market.

If data at a feeder level were to be provided through AEMO, further investigation and analysis will be required as market systems do not currently identify sites at a feeder level within a DNSP area. Market systems will need to be modified to support this information. From Essential Energy's perspective, additional network monitoring equipment may need to be installed to provide this level of information.

It is worth noting that the information in the DAPR will assist DSP proponents in identifying areas in the DNSPs network where potential DSP projects may be situated.

Engaging with consumers to provide DSP products and services

Energy services to residential and small business consumers

5.	What specific criteria could be used to determine whether elements of the NECF (ie marketing code) apply to third parties providing DSP energy services to consumers? That is, beyond Australian Consumer Law?
6.	What requirements should be in place for these third parties? For example, what should be the form of authorisation/accreditations?

Essential Energy believes that the NECF should be amended to recognise the existence and roles of service providers operating in the DSP space. This recognition should also deliver transparency and expected levels of service for service providers' work practices through an accreditation framework, thus providing customers with a greater level of confidence when engaging services providers in DSP products and services.

Role of retailers and distribution network businesses – engaging with consumers

7.	Do you agree that existing rules and guidelines should be amended to clearly outline the circumstances when distribution businesses are able to directly contract with residential and small consumers to deliver DSP network management services/programs?

Yes. The existing rules and guidelines should be amended to clearly outline the circumstances where DNSPs are able to directly contract with residential and small consumers to deliver DSP network management services/programs.

A DNSP will have different drivers for engaging with customers for network related DSP services/programs. For example, feeder based incentives may be more problematic if a DNSP needs to provide incentives through multiple retailers. An example is where a DNSP considers a feeder specific DSP program would be more financially beneficial than network capital expenditure. Having a direct relationship with customers would allow DNSPs to play a significant role in shaping customer behaviours.

The NECF clearly identifies that there is and should be a direct relationship between customers and the network businesses. Moreover, direct engagement with customers should provide customers with an opportunity to inform network business investment. A common set of guidelines would assist in ensuring customers and businesses are well aware of when and how they interact.

However, this should not limit a DNSP from also separately qualifying for and being accredited as a third party 'DSP energy services' provider. If a DNSP, with its experience, capabilities and drivers, can operate successfully in what will be a competitive market for DSP energy services, it should not be restricted from doing so via regulatory constraints.

Enabling technologies for DSP

Functional specification of meters in the NER

8.	Should the minimum functionality specification for meters be limited to only those functions required to record interval consumption and have remote communications? Alternatively, should the minimum functionality include some, or all, of the additional functions specified in the SMI Minimum Functionality Specification?

The functional specification for meters is really a cost versus benefits question. If cost is not an issue, a Smart Metering Infrastructure (SMI) functional meter could be rolled out to all customers to enable the customer, DNSP and Retailer access to this functionality.

An interval meter with remote communications will really only provide access to data. The additional cost to roll out the remote communications network can be offset by expenditure reductions in meter reading, billing accuracy and any additional benefits of customer data access (which would still incur additional costs in providing ready access to interval data).

To install remote communications on isolated meters within a location, for example, on a replacement basis, will be at a higher per unit cost compared to a roll-out across the entire location. Meter communications networks will need to be introduced in order to support the small number of sites utilising the technology. Telemetry devices tend to have a higher per unit rate than other communications solutions.

In order to increase take up of DSP, technology will need to be available. DSP contains many facets and is not confined to a standalone metering technology solution.

Arrangements to support commercial investment in metering technology

9.	Does the separation of the provision of metering services from retail energy contracts remove the need for meter churn when a consumer changes retailer? Does this cause any unforeseen difficulties or create any material risk? Are there any alternative approaches to reducing the need for meter churn?
10.	Are there sufficient potential metering service providers to facilitate a contestable roll out of AMI? Does the proposed model mitigate all the material risks of a contestable roll out? If not, should a monopoly roll out be adopted?
11.	What should the exit fee be when a consumer upgrades their meter form one provided by the local distribution business? Is the proposed fixed 30% of the cost of a replaced meter appropriate?
12.	Does the option of a government mandating an AMI roll out within its jurisdiction act as a strong disincentive to a commercial roll out? Should the ability for these governments to mandate an AMI roll out removed from the NEL?

Question 9

The separation of the provision of metering services from retail energy contracts does not remove the need for meter churn when a customer changes retailer. This is effectively the arrangement currently in place for the commercial and industrial market (type 1-4 meters); a retailer will have a contract with a Metering Service Provider to provide the Meter Provision and Meter Data Agency services. As has been experienced in

this market, significant meter churn is evident when customers churn to Retailers who have a different preferred Metering Service Provider.

Essential Energy believes the only way to minimise meter churn is to provide this service through a monopoly metering service provider or the DNSP.

It should also be noted that should the installation of interval metering become contestable consideration needs to be given to load control specifications and DNSP control of frequency injector signals to the load control devices. Essential Energy has conducted 'Notch tests' (controlled loads left cycling, then turned off at a designated time) across the network to better understand the effect of load control on demand within the network. This testing indicated that should the business lose control of load control devices the business will incur substantial capital expenditure. Controlled load within the Essential Energy network area acts as a valuable and important DSP product.

Question 10

AEMO's current list of accredited metering providers indicates that each of the DNSPs has the ability to provide, install and maintain metering services in their distribution area. AEMO's current list shows approximately seven non DNSP metering service providers who can install metering services only. This would indicate that at present there are insufficient potential non network metering service providers should a contestable roll-out of metering occur.

DNSPs have qualified and experienced metering service employees situated throughout their network areas. This ensures the efficient and effective operation and management of the metering assets to customers.

There are few alternate metering service providers available in the market to provide this service without significant sub-contracting arrangements in place. These businesses generally rely heavily on the DNSP to assist with provision of these services.

Essential Energy fully supports the monopoly provision of metering services within the DNSP network area. The Australian Energy Regulator (AER) subjects DNSPs to cost benchmarking as part of the AER regulatory determination process to ensure costs are efficient and comparable to other DNSPs. This provides adequate rigour to ensure that costs are prudent and efficient.

The Role of Metering in Managing Safety

Most importantly, a network led rollout ensures that certain network performance and safety issues can be managed into the future. As metering technology develops, it is playing an increasing role in the monitoring of network performance and the safety management of the network. For instance, Essential Energy has invested a significant amount of resources into the trialling of smart meter technology that monitors the integrity of the network and provides early indication of network conditions that may lead to the public being exposed to unacceptable safety risks.

Question 11

Essential Energy generally does not support the installation of metering for Type 5 & 6 by providers other than as accredited under the NSW Accredited Service Provider guidelines.

The 30 per cent proposed remaining life value only takes into account the anticipated remaining life of accumulation meters presently installed in a DNSP's network area. This proposed recovery value is dependent on the meter type and meter age. Essential Energy is undertaking meter replacement programs which will effectively lower the

average age of the metering stock within the network area. Any cost recovery needs to take into account hardware and installation costs and the remaining life of the metering equipment.

The proposed exit fee only looks at the cost of a replacement meter which means it is only looking at the recovery of the asset hardware costs. If a DNSP has chosen to implement a Smart Meter where justified, cost recovery principles will be quite different.

Question 12

Essential Energy does not support a commercial roll-out of advanced metering infrastructure (AMI), except where this is delivered by a DNSP as we see this as the most economically viable option. A commercial roll-out of AMI lead by a Retailer may be at a significant and inefficient cost.

Meter churn will be a significant issue under a commercial roll-out of AMI lead by a Retailer as is currently experienced in the commercial and industrial sector for type 1-4 meters. It should also be noted that there may be a number of Retailers involved with a commercial roll-out of AMI meters in a network area which may lead to customer confusion.

The government having the ability to mandate an AMI roll-out in the NEL does not inhibit a DNSP from undertaking a commercial roll-out. A DNSP would undertake analysis of the feasibility for proceeding with a commercial roll-out and would only proceed were the benefits outweigh the costs.

Demand side participation in wholesale electricity and ancillary services markets

Demand side participation in wholesale electricity and ancillary services markets

13. Participants in the wholesale market:

a. Do stakeholders agree that the proposed demand response mechanism is likely to result in efficient consumption decisions by end-users? If not, are there any changes you recommend to the mechanism to facilitate this?

b. On balance, is a new sub-category of market generator required for consumers providing a demand that enables aggregation? What types of issues should be considered when developing the registration process?

14. Consumer baseline consumption:

a. What factors should be taken into consideration when developing a baseline consumption method?

b. Have we identified the correct three key principles for developing a baseline consumption method (data refresh, accuracy, metering)?

c. Are there any substantial changes to metering and settlement arrangements required for this mechanism to be implemented? Can these issues be resolved through AEMO's consultation process and procedures or are broader amendments to the rules required?

15. Incorporating demand response into central dispatch:

a. Do you agree that similar arrangements for generation should apply, to demand resources in terms of thresholds for registering as scheduled or non-scheduled basis?

b. What are the ways in which the regulatory arrangements can be adapted to facilitate the participation of scheduled and non-scheduled load in AEMO's central dispatch process? Are there any specific changes to reporting, telemetry and communication requirements?

c. Should both market and non-market loads above a certain size be required to provide information to AEMO regarding their controllable (and therefore interruptible) load blocks?

d. Should there be a trigger in the monitoring and reporting framework that requires consumers to provide greater detail regarding their demand resources to AEMO or affected DNSPs?

Essential Energy would agree that the proposed demand response mechanism is likely to drive more efficient consumption decisions for the wholesale market. However, consumer education will be paramount to the outcomes from this response mechanism. To facilitate this mechanism a new sub-category of market generator will be required as this will enable all market participants to readily identify which customers are to participate in the mechanism.

Reporting requirements for demand forecasting

16.	How should AEMO's powers be expanded to improve demand forecasting? Should retailers and other market participants be obliged to provide information regarding DSP capabilities? Will non-obligatory requirements achieve the desired accuracy in reporting requirements?
17.	In what ways can AEMO improve its survey questions regarding DSP capabilities? How often should AEMO be required to update its expectations on DSP capabilities in the NEM?
18.	Would a pre-dispatch that includes active and price-responsive DSP improve decision making processes for C&I users and aggregators? If not, do you have any other suggestions for improving the ability for AEMO to accurately forecast demand?

Retailers and other market participants should be required to advise AEMO of relevant information regarding DSP capabilities. If this is not the case then any forecast produced by AEMO will be of little relevance to the market.

DSP capabilities should be provided to AEMO at least on an annual basis. Should the DSP capability of a customer have the potential to skew the demand forecast then the information should be immediately communicated.

New category of market participant for non-energy services

19.	Do you agree that a new category of market participant should be established for the provision of non-energy services?
20.	What types of issues should be considered when developing the registration process, such as eligibility, obligations and liabilities?
21.	What metering arrangements need to change to implement this mechanism?

Essential Energy sees no reason why a new category of market participant should not be established for the provision of non-energy services as this could potentially accelerate the take up of such services.

In regard to considerations of registration processes, all market participants should be treated equally.

With regard to metering arrangements they should be in accordance with the National Electricity Rules (NER).

Efficient and flexible pricing options

Phasing in time varying pricing

22.	Do stakeholders agree with our approach for phasing in cost-reflective pricing? If not, how can the policy be improved to transition to cost-reflective pricing?
23.	Have we identified the main issues with transitioning to cost reflective pricing? If not, what other issues need to be considered?
24.	How should consumption thresholds be determined?

Question 22

Essential Energy agrees with the phased approach for cost-reflective pricing but only to the extent that prices can be developed to encourage customers to respond to time-based price signals to shift demand. Cost reflective tariffs that fully reflect the true underlying cost of the service provided can create significant differences between urban and rural customers. There is however an opportunity for all urban and rural customers in a broader geographic area to see similar price signals that are consistent with the demand management needs of that area without the need for granular cost reflective network prices.

This approach will allow consumers the opportunity to be educated on how cost-reflective pricing works. Additionally it will allow the DNSP to monitor the impacts and issues on a segment by segment basis. The phased approach will allow for issues to be identified and addressed in an organised and orderly timeframe which can address concerns in increasing tariff options, pricing, resources and training.

The impact of cost-reflective pricing on a DNSP's revenue and tariff structure will be significant in the first stages, with the uncertainty of customers switching between time varying tariffs and flat network tariffs with either opt in or opt out options available.

The retailer should also be obliged to offer a tariff where cost reflective pricing is a direct pass through (as opposed to bundling the risk into a flat tariff) in order for the price signal to reach those who can react.

Question 23

The draft report has identified the main issues with transitioning to cost reflective pricing for a DNSP whose network area is primarily residential. Essential Energy's geographical area is quite diverse; that is we have a number of residential areas, both large and small, as well as a large rural customer base, spread over 95 per cent of NSW.

As discussed above, the impact of transitioning to cost-reflective pricing on the certainty of DNSPs revenue will be significant in the first stages, due to the uncertainty of customers switching between time varying tariffs and flat network tariffs.

Essential Energy has only one NSLP. As customers opt in (those that will benefit from a time of use tariff) the residual NSLP will become more peaky (the smoothed benefit will be lost). The loss of smoothing associated with the NSLP across the network area will potentially disadvantage remote regional customers thus impact the cost of energy to those customers. Additionally, due to having one NSLP for the majority of Essential Energy customers, Essential Energy's customers would be further placed on the extremes when compared to the NSLP. That is, the impacts on a customer's bill may be

more significant due to the consumer's load profile pattern relative to the average net system load profile used in settlement.

Question 24

Consumption thresholds should be determined by understanding the customer base of the DNSP network area. Each DNSP network area is different and it is important these differences are captured when determining consumption thresholds.

Strengthening arrangements for network tariffs

25.	We seek stakeholder comments on appropriate pricing principles for distribution businesses and the appropriate time period for stakeholder consultation on distribution network pricing proposals.

The AEMC is currently consulting on changes to the NER which will facilitate customer and retailer consultation as part of the DNSPs pricing proposals in the NER. The Independent Pricing and Regulatory Tribunal in NSW is also proposing a change to the NER which will ensure that DNSPs consult with customers and retailers. Additionally this change to the NER requests that the AER prepare guidelines outlining the approach that the DNSP must undertake.

Distribution networks and distributed generation

How should the reformed incentive scheme be applied?

26.	Would it be beneficial to include reference to the suggested mechanisms and provide more guidance and an overall objective in the Rules governing the demand management incentive scheme?

Essential Energy believes that the two factors outlined in the draft report to address the development of an incentive scheme with a wider scope and which provides the stated opportunities would be beneficial if included in the NER.

Innovation allowance

27.	Should separate provision for an innovation allowance be included into the rules? Given that the costs of the allowance would be borne by electricity consumers, is it more appropriate for such innovation to be funded through government programs?

Separate provision should be included in the rules as a simple method of splitting the requirements for the DMIS and DMIA, however the allowance should be borne by electricity consumers given that any benefits will roll on to consumers. It should also be noted that in order to have strong, well planned, beneficial investment in research and development of Demand Side initiatives, the level of allowance available must be predictable and secure many years in advance (i.e. if the DMIA was a government program, the entire process becomes a higher risk category and with less reliable funding sources, resource constraints and shorter time periods for planning would most likely result in less valuable outcomes).

Network tariff structure influencing incentive to do DSP

28.	What amendments are required to the current distribution pricing principles as set out in clause 6.18.4 of the national electricity rules?

Essential Energy believes clause 6.18.4 as currently written is appropriate.