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11 December 2015

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

ERC0186 - *NATIONAL ELECTRICITY AMENDMENT (DEMAND RESPONSE MECHANISM AND ANCILLARY SERVICES UNBUNDLING) RULE 2015* - CONSULTATION PAPER.

Ergon Energy Corporation Limited (Ergon Energy) in its capacity as a Distribution Network Service Provider (DNSP) in Queensland welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) on its *National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2015* – Consultation Paper.

Ergon Energy considers the introduction of a Demand Response Mechanism (DRM) has the potential to provide important market benefits for both customers and DNSPs. It is important DNSPs are not excluded from directly utilising DRMs, as the capability has the potential to improve network efficiency and reduce costs for our customers. This is particularly relevant for Ergon Energy as cost barriers may prevent new entrants and business models from operating in regional and remote areas.

Notwithstanding the benefits associated with the introduction of a DRM, there are also a number of risks associated with a DRM that must be carefully managed for unintended consequences, such as increased augmentation to manage new and swinging periods of peak demand, which could counteract these benefits.

These positions and issues are explored in our attached submission and in the responses to the questions raised in the Consultation Paper. Furthermore, as a member of the Energy Networks Association (ENA) Ergon Energy has contributed to and supports the ENA's submission.

Should you require additional information or wish to discuss any aspect of Ergon Energy's submission, please do not hesitate to contact either myself on (07) 3851 6416 or Trudy Fraser on (07) 3851 6787.

Yours sincerely

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Enc: Ergon Energy's submission

Submission on the *National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016* – Consultation Paper

11 December 2015

Submission on the *National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016* – Consultation Paper

Ergon Energy

11 December 2015

This submission, which is available for publication, is made by:

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Introduction

Ergon Energy Corporation Limited (Ergon Energy) in its capacity as a Distribution Network Service Provider (DNSP) in Queensland welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) on its *National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016* – Consultation Paper (Consultation Paper).

Demand Response Aggregators

Ergon Energy broadly supports the development of a Demand Response Mechanism (DRM). Such a market is capable of providing network management opportunities, particularly in mitigating the impacts of significant and growing penetration rates of solar photovoltaic (PV) systems and, importantly, in managing network costs. Increasing solar PV installations will, over time, increase network volatility. Providing capability to counter this trend is critical to the on-going delivery of a safe, secure, reliable and efficient electricity supply.

Furthermore, as DRM can reduce peak demand, the potential exists for the mechanism to mitigate augmentation needs and therefore defer expenditure which can reduce network costs. However, notwithstanding, there can be no assurance that Demand Response Aggregators (DRA) will offer to DNSPs the services specifically required in this regard (i.e. mitigation of adverse network impacts associated with solar PV, or demand response in specific constrained areas). This is particularly so in regional locations such as those forming a significant proportion of Ergon Energy's distribution area, where competition is limited and the economics around providing the service may not be positive. For these and other reasons detailed in our response to the questions raised in the Consultation Paper, Ergon Energy considers it is vital that DNSPs are able to act as DRAs. Alongside the NEO, enabling DNSPs to become DRAs would be consistent with the intent of the *Competition in metering and related services* rule change; which allows for DNSPs to utilise network devices to monitor, operate or control networks, including load control equipment, for the purpose of providing network services.

Ergon Energy notes that the Oakley Greenwood analysis is only marginally positive and there are already mechanisms which could realise some of the network benefits captured in this analysis, for example cost reflective tariffs. Further, there already exists other demand management mechanisms and programs such as the Demand Management Incentive Scheme and Regulatory Investment Test. Ergon Energy also notes that it has an obligation under jurisdictional legislation to prepare and comply with a Demand Management Plan. The AEMC should take these existing mechanisms into account when developing the DRM. Further, detailed scheme design should minimise the risk of demand response capacity providers being paid twice for the same service.

Network Impacts

It is also critically important systems and processes are developed in close consultation with DNSPs to manage the shedding and restoration of load via a DRM. Ergon Energy acknowledges the Commonwealth of Australian Government's Energy Council (COAG Energy Council) recommends such a work program needs to occur, and strongly supports the development of a Load Management Protocol and connection agreements between DNSPs and DRAs.

Restoration load can significantly exceed the shed load, due to loss of diversity, and as such needs to be carefully managed by the DRA to respect constraints within the distribution network so as not

to impact the stability and security of electricity supply. Additionally, Ergon Energy notes that negative impacts could also result from restoration of loads based on pricing that is not cognisant of network constraints. This could require DNSPs to augment networks due to the swinging of load to new and unpredictable patterns; changing the load shapes on which DNSPs have based their development plans, and thus potentially impacting reliability. A DRM will consequentially require careful implementation to ensure augmentation, and thus customer, costs do not increase. Furthermore, 'gaming' risks are also apparent in that a DRA; in knowing that a network service payment will be required to address a peak (as a result of published data), the DRA could create a peak which could have been avoided through better management of their switching. As such, a form of oversight and enforcement / penalty regime to manage such issues may be required.

Further information is provided in response to the AEMC's feedback questions below. As a member of the Energy Networks Association (ENA) Ergon Energy has contributed to and supports the ENA's submission.

Consultation Paper Feedback Question	Ergon Energy Comment
Question 1: **Assessment Framework**	
1. Would the proposed framework allow the Commission to appropriately assess whether the rule change request can meet the rule making test?	Yes.
2. What changes to the proposed assessment framework would stakeholders' consider appropriate, if any?	No comment.
Question 2: **Potential barriers to demand side participation relevant to this rule change request**	
1. What are stakeholders' views on the potential barriers to demand side participation that have been set out in this consultation document? How relevant might they be? Should they be considered in the Commission's assessment?	Barriers should be considered to the extent any mitigation options do not increase the cost of demand side participation. New entrants with innovative business models may not face the same barriers or cost drivers as market incumbents and thus should be able to utilise potential market advantages for the benefit of customers via competition.
2. Have stakeholders identified other barriers to DSP that should be considered in the Commission's assessment? Please, explain	Ergon Energy considers it most important that the DRA has the ability to use domestic loads in the ancillary services market as an aggregator. While it is stated that loads that do not meet the DRM requirements can be aggregated and used in the ancillary services market, it is not clear if domestic loads aggregated, at for example a bulk supply point, can

and provide evidence where possible	be used in this market. This capability is important, particularly in Ergon Energy's network (where as discussed there may be a lack of DRAs in the market), to utilise DRM for network operational purposes.
3. What are the costs and benefits of removing the barriers that are identified as significant to this rule change request? Which barriers are the most problematic and/or more cost-effective to remove?	No comment.
4. Are there any current or upcoming changes in the market that would mitigate or address any of the identified barriers?	The framework must be flexible enough to enable new entrants / business models a streamlined entry into the market.
5. Might there be any unintended consequences from addressing such barriers?	As noted in the introduction to this submission, load restoration must be managed by the DRA to respect network constraints and therefore avoid any adverse impacts on the security and stability of electricity supply.
Question 3: **Questions on the overall DRM design proposal**	
1. Would the proposed DRM generate useful demand-side information in relation to improving wholesale pre-dispatch and dispatch prices? How significant would this improvement be?	As the DRM mechanism is DRA initiated, and not a bid system, it is not expected that any new pre-dispatch information would be generated. Information generated would be post event only, and market participants could only use historical performance and capability as a guide to expected responses.

2. Would the proposed DRM generate useful demand-side information in relation to improving the management of transmission constraints through the dispatch process? How significant would this improvement be?	No Comment.
3. Would the proposed DRM generate useful demand-side information in relation to improving the provision or procurement of ancillary services? How significant would this improvement be?	Possibly. The ability of a load to participate in the DRM, does not automatically qualify it for participation in the ancillary services (FCAS) market. However, it is a good indicator of potential load available for participation in the FCAS market (assuming that the only ancillary service suitable for the load is the FCAS Raise services).
4. Would the proposed DRM operation result in a technology neutral approach between demand response and generation resources?	Likely, as the rules and value are technology agnostic, each technology provider would structure their offering to suit their technology / capability and costs. Ultimately the most cost effective solutions will prevail irrespective of the technology utilised.
5. Do stakeholders think that there exist any relevant gaming risks or unintended consequences from implementing the overall proposed DRM operation? If so, how could they be mitigated in a cost-effective way?	Ergon Energy is concerned that under the proposal there is a gap which could enable a DRA to impact a distribution network by exacerbating peaks or creating new constraints. The DRA could; in knowing that a network service payment will be required to address a peak, create a peak which could have been avoided through better management of their switching. Consequently, if the proposal were to proceed as suggested, some form of oversight and enforcement / penalty regime will be required to address this issue.
6. Would the DRM result in system-wide benefits and/or costs that might impact the operation and investment in electricity transmission and distribution networks? What aspects of the design would contribute to this?	As noted, significant negative impacts could result from restoration of loads based on pricing that are not cognisant of network constraints which could require DNSPs to augment networks due to the swinging of load to new and unpredictable patterns; changing the load shapes on which network service providers have based their development plans.
7. Would the DRM result in improved ability for AEMO to manage system security and	Possibly. It is anticipated that as renewables increase, the market will become more volatile, and the rate of change of load will increase. The provision of additional demand

reliability? What aspects of the design would contribute to this?	response capability amid a high rate of change may provide a cost effective solution to this emerging problem.
Question 4: **Accredited baseline consumption methodologies**	
1. In stakeholders' views, are there any alternative demand response mechanism options that would not require the use of baseline consumption methodologies?	Ergon Energy is not aware of any current alternative options for energy reduction. However, notwithstanding this, the level within the network at which the baseline is calculated could vary (i.e. it may be possible to baseline at a higher aggregation point than the individual customer National Metering Identifier).
2. What might be the costs, benefits, and consequences from having an administrative baseline developed and then managed by AEMO?	Ergon Energy notes that the development of an administrative baseline, for ongoing management by AEMO would come at a cost and as such, any benefits accruing from such an arrangement would need to outweigh that cost.
3. What are stakeholders' views on the proposed baseline methodologies, and the proposed assessment criteria to be applied when assessing baseline consumption methods?	These appear reasonable.
Question 5: **Restrictions on the provision of demand response**	
1. In stakeholders' views, how effective would the proposed DRM design be in preventing the exercise of potential gaming opportunities?	Registration is an important element to prevent gaming and must include details of DRM load on a DNSP region / sub region basis. This will ensure the network operators are aware of where and how much load is under control (for network security, safety and reliability purposes).

2. Are there alternative options to improve upon the current design to manage gaming risks?	An oversight and monitoring role may required to identify load shifting that is taking place purely for 'gaming' purposes, along with significant financial penalties as both deterrent and enforcement mechanisms.
Question 6: **Interactions with demand side participation mechanism**	
1. Does the proposed DRM design appropriately capture and address all potential interactions between the DRM and other demand side participations options in the NEM?	Yes.
Question 7: **Prudential requirement**	
1. Are the proposed prudential requirements on DRAs and retailers appropriate?	No comment.
Question 8: **Settlement charge**	
Do stakeholders have any observations over the proposed changes to the way the costs of ancillary services would be recovered from DRAs and/or retailers?	No comment.
2. Do stakeholders have any observations regarding the proposed changes to the	No comment.

compensation cost recovery from retailers?	
3. Do stakeholders have any observations regarding the proposed changes to the way the operating costs would be recovered from DRAs and/or retailers?	No comment.
Question 9: **Implementation issues in relation to the DRM**	
1. The Council proposes a voluntary approach for retailers to enable their customers to participate in the DRM. How effective do stakeholders think this voluntary approach will be in encouraging retailers to enable their customers to opt-in into the DRM?	No comment.
2. What are stakeholders' views on allowing manual billing as a viable short term solution to encourage retailers to enable their customers to opt-in the DRM?	No comment.
Question 10: **Voluntary and staged approach**	
1. The Council proposes a voluntary approach for retailers to enable their customers to participate in the DRM. How effective do stakeholders think this voluntary approach will be in encouraging retailers to	This is a repeat of Q9

enable their customers to opt-in into the DRM?	
2. What are stakeholders' views on allowing manual billing as a viable short term solution to encourage retailers to enable their customers to opt-in the DRM?	This is a repeat of Q9
Question 11 **Potential barriers to demand side participation in FCAS markets**	
1. Do stakeholders agree that current market arrangements where only market participants that purchase or sell electricity on the wholesale spot market can participate in FCAS markets are a barrier to entry that restrict DSP in the FCAS markets?	Yes.
2. Do stakeholders agree that facilitating entry via greater DSP, either as individual or aggregated loads, can result in lower cost and higher quality provision of FCAS services while minimizing the scope to exercising market power in these markets? Do stakeholders have any particular evidence to support their views?	Yes. It is anticipated that as renewables increase, the market will become more volatile, and the rate of change of load will increase. The provision of additional demand response capability amid a high rate of change may, if implemented correctly, provide a cost effective solution to an emerging problem.
3. In which category ancillary service provision do stakeholders believe that entry will be more likely? Are there any foreseeable future changes that might broaden the scope of entry in markets where demand response	Ergon Energy expects that entry to the FCAS Raise services (fast, slow, delayed) will be most likely.

has generally not been able to provide ancillary services?	
Question 12 **Questions on the overall ancillary services unbundling (ASU) proposal**	
1. In stakeholder's view, how would the ASU proposal impact on the cost of balancing supply and demand in the NEM?	The unbundling will reduce the barriers to entry to the ancillary services markets, providing for more competition in the market.
2. Would the ASU proposal result in improved ability for AEMO to manage system security and reliability? What aspect of the rule change would contribute to this?	Possibly, as outlined in response to question 11.2.
3. Would the ASU proposal result in reduced ability for AEMO to manage system security and reliability? What aspect of the rule change would contribute to this?	Ergon Energy does not expect the proposal would result in reduced ability for AEMO to manage system security and reliability.
Question 13 **Interactions with the DRM**	
1. Does the ASU proposal appropriately capture and address all potential interactions with the proposed DRM?	No comment.