



## **DEMAND MANAGEMENT INCENTIVE SCHEME**

Response to AEMC Consultation Paper – ERC0177

19 March 2015

## CONTENTS

Executive summary .....	1
Background .....	1
Changing market conditions and regulatory framework.....	1
Design of proposed scheme .....	2
Demand management innovation allowance.....	3
Demand management incentive scheme.....	4
Scope of issues considered .....	5

## EXECUTIVE SUMMARY

The Energy Networks Association (ENA) welcomes the opportunity to respond to the Consultation Paper of the Australian Energy Market Commission on changes to the *National Electricity Rules* proposed by the COAG Energy Council and the Total Environment Centre.

This response addresses the questions raised in the Consultation Paper. The energy network sector is supportive of reforms which would strengthen *National Electricity Rules* arrangements and promote efficient demand management activities and projects, and directly support higher risk innovation projects with the potential to bring forward significant benefits to consumers over the long-term.

ENA strongly supports the active progression of these rule change proposals, and encourages the Commission to consider targeted workshops through the rule change process to consider more detailed design and implementation choices and align stakeholder expectations around any changed arrangements.

As a further element of ENA's support for the proposals, ENA encourages consideration by the AEMC of broadening the scope of the rule change process to consider the regulatory framework for demand management by electricity transmission businesses.

While the nature and scale of opportunities for demand management projects and innovation may differ between electricity distribution networks and electricity transmission networks, there does not appear to be a compelling reason to exclude the potential realisation of these opportunities in electricity transmission. Such an outcome would not be in the long-term interests of electricity consumers.

## BACKGROUND

The Energy Networks Association (ENA) is the peak national body representing gas distribution and electricity transmission and distribution businesses throughout Australia.

Energy networks are the lower pressure gas pipes and low, medium and high voltage electricity lines that transmit and distribute gas and electricity from energy transmission systems directly to the doorsteps of energy customers.

Twenty-five electricity and gas network companies are members of ENA, providing governments, policy-makers and the community with a single point of reference for major energy network issues in Australia.

With more than \$100 billion in assets nationally and 13 million customer connections across the National Energy Market (NEM), Australia's energy networks provide the final step in the safe and reliable delivery of gas and electricity to households, businesses and industries.

## CHANGING MARKET CONDITIONS AND REGULATORY FRAMEWORK

***Having regard to current and potential future market conditions, and in light of recent changes to the regulatory framework for distribution businesses, is there a gap in the current framework which may be discouraging distribution businesses from pursuing demand management projects as an efficient alternative to network investment?***

There is a gap as identified in the AEMC's *Power of Choice* review, and the COAG Energy Council and Total Environment Centre rule change proposals for a more comprehensive innovation allowance and demand management incentive arrangement.

While recent changes to the framework may positively impact on the overall incentives for demand management activities, they do not directly address some important issues that remain as a barrier to efficient levels of demand management occurring, and which have driven under-utilisation of the existing schemes.

Beyond incentives within the revenue building blocks, there may also need to be wider consideration of how current market arrangements impact the ability for network businesses to implement demand management or distributed generation solutions where they are the most efficient and effective solutions in their own right. For example, the current framework is unclear as to how it would treat network businesses implementing distributed generation supply solutions for remote customers. In a number of circumstances, demand management and distributed generation are more than just substitutes for network augmentation.

It is natural that the contemplated scope of these incentive schemes are incremental but a longer term view of the future role of demand management and distributed generation should also be developed. While this would not be within the scope of the AEMC's current review, it needs to form part of a broad vision for the future of the energy sector which is becoming increasingly necessary.

Recent decisions across New South Wales and the ACT electricity distribution networks, where significant demand management programs proposed by networks have been subject to major cuts by the AER, also demonstrate that more positive regulatory incentives and guidance are needed.

***If a gap does exist, where does it lie? Is it a product of the provisions in the NER or a result of the current design of the DMEGCIS applied by the AER?***

The design of DMEGCIS reflected the rule provisions and framework at the time of the revised Rules, and network businesses consider it represented reasonable 'first step' in evolving incentive and innovation funding allowances, taking into account pre-existing schemes where the AER assumed responsibility for distribution network regulation.

Experience to date, however, including the relatively modest practical uptake of this scheme to date, indicates that review and reexamination of both the governing rules for these schemes and their design is warranted. In particular, ENA considers it appropriate that the Rules specify clearer policy objectives and guiding principles for the separate innovation allowance and demand management incentive scheme components, critical features absent from the current framework.

## **DESIGN OF PROPOSED SCHEME**

### **Appropriate level of prescription**

***In making its decision on the network regulation rule change request, the AEMC considered how much prescription the NER should include. In this context, we welcome the views of stakeholders on the appropriate level of prescription to include in the NER to enable the AER to develop and apply an effective DMEGCIS. In particular:***

***a) Having regard to the level of flexibility and discretion afforded to the AER in designing and applying other incentive schemes under Chapter 6 of the NER, is the level of flexibility and discretion currently afforded to the AER in relation to the DMEGCIS appropriate?***

***(b) If there is benefit in providing more prescription in the NER, is the level proposed by the COAG Energy Council and the TEC in their rule change requests appropriate?***

The particular balance of flexibility and prescription in the current rule does not appear optimum. On the one hand, the Rules provide wide discretion over some core elements,

such as the overall objective and whether the scheme needs to be consistent with guiding design principles. On the other, the AER lacks discretion under the rules to recognise net market benefits attributed to a demand management project. This suggests that the COAG Energy Council and TEC rule changes raise legitimate questions on the need for revisions to the rules in this area.

Consistent with other elements of the *National Electricity Rules*, ENA considers it appropriate for clear objectives and principles to guide the discretion in the design and implementation an incentive scheme or regulatory approach.

Both Rule changes appear to be broadly consistent with this past approach by the Commission. Under a 'fit for purpose' regulatory approach, the degree of prescription and flexibility is adapted to match the specific context. As an example, there may be relatively lower levels of overall prescription around the 'small scale incentive scheme' provisions in recognition of the limited financial penalties and rewards applicable under those schemes, but relatively greater prescription around more material issues such as principles for the rolling-forward of capital bases.

### **Need for additional financial incentives**

***Having regard to recent changes made by the AEMC to Chapter 5 and 5A of the NER in relation to the arrangements for connecting embedded generators, are additional financial incentives for innovation in the connection of embedded generators through the DMEGCIS required?***

Yes. While the connecting embedded generators rule changes enhanced and simplified access terms for new embedded generation facilities, financial incentives to support innovative network sponsored projects still have an important role to play.

As a practical example of some of the issues that can be encountered, should a demand management solution fail to address the network constraint, distribution network owners may be exposed to corresponding Service Target Performance Incentive Scheme penalties. Similarly, the failure of a demand management solution carries reputational risks. These issues have the potential to increase the threshold for approval of demand management solutions relative to network alternatives.

Both the DMIA and the DMIS should encompass all forms of demand management, including connecting and exporting of distributed generation units. Demand management can

take a number of different forms, consequently it is important that the overarching incentive scheme provisions reflect this and remain technologically neutral. It would be inappropriate to predicate the forms of demand management permitted under the scheme, as this may act to “pick winners” by precluding different forms of demand management, thereby stifling innovation.

ENA considers that there is no need to distinguish embedded generation projects from other demand projects conducted under the DMIA and/or DMIS. Networks have been conducting demand management projects under the DMIA with embedded generation and energy storage as a component for some time. Example projects include:

- CBD embedded generator pilot, exploring protection and connection design barriers for embedded generation connections in the Sydney CBD;
- Newington grid battery trial;
- Trials to mitigate the negative impacts of intermittent generation.

Therefore, while it is recognised that embedded generations can provide an effective form of demand management they should not be treated more favourably than any other form of demand management under the incentive scheme. To do so, could give rise to the risk of cross-subsidisation and distort investment decisions.

## **DEMAND MANAGEMENT INNOVATION ALLOWANCE**

***Given that the proposed amendments in relation to the innovation allowance are largely reflective of existing AER practice, what additional benefits are likely to be gained by codifying these in the NER?***

As the Consultation Paper points out, the existing DMEGCIS arrangements put in place by the AER have two components, an explicit user funding of relatively high risk innovation projects that might otherwise not occur due to uncertain payoffs, and an incentive designed to provide for the equalisation of incentives between network demand management projects and traditional asset based network investments.

It is appropriate for these two components, which have different objectives, parameters and funding methodologies, to be separately and clearly represented in the Rules.

***What impact, if any, will the proposed amendments have on distribution businesses incentives to utilise a greater proportion of their allocated allowances on innovative demand management projects, relative to current practice? For example, would greater certainty increase the likelihood of distribution businesses participating in this scheme?***

Greater certainty around guiding framework of the scheme’s objectives and core design principles would improve certainty for networks seeking to make significant multi-year investment in demand management projects which may have high upfront costs.

The proposed amendment by the COAG Energy Council - by providing scope for recognition of leading edge innovative projects and activities - has the strong potential to increase utilisation of any future allocated allowances.

Similarly, by increasing the scope of innovation allowance projects to tariff based projects, the rule amendments would position networks to undertake a range of additional experimental trials and programs in a new area not provided for under existing schemes. This is likely to increase future utilisation of allowances.

***Are the proposed amendments likely to address concerns raised by stakeholders around the size of the innovation allowances allocated by the AER to the distribution businesses (noting that, to date, these amounts have been considered to be modest)?***

The overall size of innovation allowances is appropriately an issue for determination by the AER in close consultation with affected consumers, taking into account the regulatory proposal and perspectives of network businesses. It is not an appropriate matter for rule specification, for example.

***Given the new DAPR and DSES arrangements are now in place, what additional benefits will the proposed annual reporting requirements deliver to the market? Is there a risk of duplication in reporting for the distribution businesses?***

Given that the innovation allowance is funded by network consumers with the explicit goal of producing a ‘public good’ of access to information and data on innovative projects, it is appropriate for tailored arrangements for reporting in a highly accessible form are in place.

While there may be some overlap with elements of the DAPR and DSES, ENA recognises that these documents primarily seek to cater to different audiences than those who may seek to access and use information created by projects under the proposed scheme and allowance.

A specific implementation issue requiring addressing in the rule change process is providing scope in the rule design for additional reporting obligations to be proportionate to the scale of the project and resources employed, so as not to result in unnecessary regulatory burden. There may be cases where the cost-benefit assessment of extremely small trial projects may be adversely affected by additional reporting obligations. In these cases tailored high level reporting requirements or exemptions may be appropriate, to avoid a introducing a bias against proposed small scale projects.

***Should the innovation allowance be a time-limited measure? If so, should the AER be given the flexibility and discretion to determine the appropriate timeframe?***

The ENA seeks further discussion and clarity from the AEMC on the concept of time-limiting the proposed innovation allowance. In particular, it is not immediately clear from the Consultation Paper (or original rule change application) what is meant by time-limited.

If what is referred to is the time of operation of the entire scheme, then in general it is sound regulatory practice to have an assessment and review or 'sunset' phase specified. Due to the staggered nature of network determinations it should be recognized that an innovation allowance should be operating for a sufficient period to enable trialing in at least one network regulatory period. This suggests that a minimum period of operation of 5-7 years may be appropriate.

An alternative to the above interpretation is a suggestion that while the overall scheme should not be time-limited, the nature of projects which could be considered eligible for inclusion in an innovation allowance could shift through time. This would avoid funding of 'business as usual' activities through a scheme designed to enhance innovation and experimentation. This goal is supported by the network sector, but its implementation would benefit from further discussion of practical options to achieve this.

## **DEMAND MANAGEMENT INCENTIVE SCHEME**

***If distribution businesses are able to receive a payment based on a proportion of the market benefits produced by a demand management project, is this likely to increase investment in projects that will deliver broader market benefits that are in the long term interests of consumers?***

Yes. The capacity to share in part of the additional market benefits being created by a demand management incentive project is likely to promote greater investment in such

projects, to the long-term benefit of consumers. This represents a positive enhancement to existing arrangements.

***Given that the majority of distribution businesses are expected to be regulated under a revenue cap in the near future, is there value in amending the rules to explicitly require the inclusion of a payment for any foregone revenue resulting from implementing a demand management project approved under the innovation allowance? Should the AER retain discretion as to whether this component is appropriate?***

On balance, providing explicitly in the Rules for the recovery of revenue or profit impacts of innovative demand management projects is warranted to provide certainty to a network proposing to make significant investments in demand management initiatives.

The form of regulation is a matter for separate decision by the AER in consultation with the network service provider within each framework and approach review. Any new demand management incentive scheme rules need to genuinely provide for a choice between, for example, weighted average price caps and revenue cap approaches to be made without a subsequent consequential need to amend the Rules governing incentive schemes. For this reason, the specific provisions should be carefully framed so as to not implicitly or explicitly assume one form of regulation over another.

***In light of the recent changes to the distribution network pricing arrangements, what are the potential benefits of requiring that the DMEGCIS include tariff based demand management options, in addition to non tariff based options?***

There is significant net public benefit in measures that provide incentives to undertake innovative tariff design and trial initiatives to support demand management, including direct load control and rebates or incentives to reduce demand at critical peak. ENA supports the inclusion of both tariff and non-tariff based demand management projects to be included within the scope of the scheme.

Networks are more likely to utilise demand management tariffs to manage critical peak loads in the short term, and where network constraints are evident. They are additional to the general network tariffs to be offered to mass market customers which signal the long term cost of supplying capacity. However, under the new rules, other factors than long-run marginal costs must be considered, including customer impacts and jurisdictional obligations, and the need for retail customers to be able to understand and

respond to the tariffs. Demand management tariffs provide an opportunity for innovation in sending sharper price signals to customers of the value of reducing peak demand, in locations where the value could be high.

With the passage of the AEMC's recent network tariff rule changes, networks and customers will be more closely engaged than ever before in developing new and revised tariff offerings that drive lower system costs for consumers in the long-term. In this environment, mechanisms which promote and encourage a trialing of range of innovative tariff design options will serve as a useful empirical base of knowledge for future network tariff approval processes.

## **SCOPE OF ISSUES CONSIDERED**

ENA supports consideration by the AEMC of broadening the scope of the rule change process to consider the regulatory framework for demand management by transmission businesses.

While the nature and scale of opportunities for demand management projects and innovation may differ between electricity distribution networks and electricity transmission networks, there does not appear to be a compelling reason to exclude the potential realization of these opportunities in electricity transmission. Indeed, broader consideration would achieve regulatory certainty across both network levels (transmission and distribution) and potentially maximise total system benefit, to the long-term benefit of all consumers..

In this regard, ENA notes that similar innovation allowance schemes established by Ofgem explicitly allow for projects across both the transmission and distribution delivery chain.