Determinations

Early application of the Demand Management Incentive Scheme

AusNet Services, Ergon Energy and Energex

11 December 2018

AUSTRALIAN
ENERGY
REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

Contents

Contents 2

Shortened forms 3

1 Summary 4

2 About the new DMIS 5

2.1 The early application of the DMIS 6

2.2 Legislative requirements in making this determination 7

3 Distributors' applications 9

3.1 AusNet Services application 9

3.2 Energy Queensland's applications for Ergon Energy and Energex 9

4 AER's assessment 11

4.1 Annual compliance verification of DMIS expenditures 12

5 AER's determinations 13

5.1 AusNet Services 13

5.2 Ergon Energy 13

5.3 Energex 13

A DMIS Compliance reporting requirement 14

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
capex	capital expenditure
CESS	Capital expenditure sharing scheme
DMIA	Demand management innovation allowance
DMIAM	Demand management innovation allowance mechanism
DMIS	Demand management incentive scheme
EBSS	Efficiency benefit sharing scheme
F&A	Framework and Approach
NER	National Electricity Rules
opex	operating expenditure
STPIS	Service Target Performance Incentive Scheme

1 Summary

The Australian Energy Regulator (AER) is responsible for the economic regulation of electricity transmission and distribution systems in all Australian states and territories, with the exception of Western Australia.

In December 2017, we published an improved Demand Management Incentive Scheme (DMIS) to encourage distribution businesses to find lower-cost options to investing in network solutions. The new DMIS achieves this by encouraging distribution businesses to undertake efficient expenditure on non-network options relating to demand management. To enable greater uptake of the new DMIS, we initiated in December 2017 a rule change request to the Australian Energy Market Commission (AEMC) to amend the National Electricity Rules (NER) to allow the early application of the new DMIS.

On 3 April 2018, AEMC published the final rule determination to allow a distributor to seek application of the new DMIS during its current regulatory control period by applying to the AER. The rule commenced on 10 April 2018.[1]

Three electricity distributors have made applications to bring forward their projects under the new DMIS:

- AusNet Services, a Victorian distributor, applied to the AER on 12 September 2018 for the early application of the new DMIS.
- Energy Queensland, on behalf of Energex and Ergon Energy, applied on 27 September 2018 for the early application of the new DMIS.

On 1 October 2018, we invited energy consumers and other interested parties to make submissions on these three applications. No submission was received.

We consider that the applications meet the conditions for approval. This paper sets out our reasons for these decisions.

[1] AEMC, *Rule determination - National Electricity Amendment (Implementation of Demand Management Incentive Scheme) Rule 2018*, 3 April 2018. p. 7.

2 About the new DMIS

Distribution businesses can manage demand on their networks to reduce, delay or even avoid the need to install, replace or upgrade expensive network assets. Network assets include equipment like poles, wires, transformers and substations. When used effectively, managing demand to avoid incurring these costs can reduce upward pressure on network charges, which make up about half the cost of electricity bills.

On 14 December 2017, we published our new DMIS and Demand Management Innovation Allowance Mechanism (DMIAM). These complement our ongoing reforms targeting consumer choice and more efficient network pricing outcomes. These include our work on tariff reform, metering contestability, ring fencing and strengthening the transparency and efficiency of replacement expenditure.

The DMIS contains three elements:[2]

- a cost uplift on expected costs of efficient demand management projects
- a net benefit constraint, to ensure the incentive payment for any project cannot be higher than that project's expected net benefit
- an overall incentive constraint, which limits the total incentive in any year to one per cent of the distributor's allowed revenue for that year.

Managing demand on electricity networks can increase the reliability of supply and reduce the cost of supplying electricity. Often, electricity consumers are empowered to manage demand via price signals and enabling technology.

Price signals or financial incentives can reward consumers for using electricity in a way that allows network businesses to keep their costs down. These signals or incentives may come in the form of things like cost-reflective tariffs, congestion pricing, and rebates. Enabling technology often complements price signals by empowering consumers' use of electricity in a way that allows network businesses to keep their costs down. This technology may include things like advanced metering technology, demand response enabling devices, and energy monitoring apps.

The new DMIS only provides incentives for the implementation of demand management projects that are efficient and contribute, partially or wholly, to resolving a network constraint. In deciding whether a project is efficient, we require distribution businesses to test the demand management services market. This will increase transparency, promote competition and put downwards pressure on electricity prices, benefiting the whole community. This is because distribution business can only benefit from incentives if they address the network constraint in the most efficient way available.

---

2 AER, *Demand management incentive scheme*, *Electricity distribution network service providers*, December 2017.

Encouraging the distribution businesses to make more efficient investment decisions will help distribution businesses meet consumers' demand at the lowest cost. By providing an incentive, the distribution businesses will more actively seek out opportunities to use demand management efficiently. This should help develop the industry and make managing demand even more cost effective for the distributors as it becomes business-as-usual.

This incentive structure should encourage best-practice network planning that will deliver value to consumers via lower electricity prices. We believe our incentive scheme will achieve this because distribution businesses will be:

- selecting efficient projects that deliver the most value to consumers when solving network constraints, regardless of whether these projects constitute a demand-side or supply-side solution
- asking third parties to propose demand management solutions, and forming contracts with parties that propose solutions that deliver the most value to consumers.

The application of the DMIS should also have flow-on effects. As the demand management industry advances as a whole, it is likely that the distributors will become better at managing the risks and minimising the costs of these solutions, delivering additional consumer benefits.

2.1 The early application of the DMIS

On 14 December 2017, we submitted a rule change request to the AEMC seeking to allow distribution network service providers to apply to the AER for early application of the revised DMIS.

Before the proposed rule change, the NER did not allow for application of the new DMIS until the commencement of the next regulatory control period. However, waiting until the next regulatory control period would result in customers having to forgo earlier opportunities to benefit from the new DMIS, particularly as the next regulatory control period for some jurisdictions is two to three years away.

Application of the new DMIS midway through a regulatory control period was previously considered to require a re-opening of current distribution determinations, imposing considerable costs on distributors. Our rule change request highlighted that the design of a new DMIS could be applied earlier without requiring a re-opening of the current distribution determinations.

Under the new rules, a distributor may seek application of the DMIS during its current regulatory control period by submitting a proposal to the AER which includes:

- the proposed start date for the application of the DMIS
- a description of how the early application of the DMIS will assist the distributor in undertaking efficient expenditure on relevant non-network options relating to demand management
- such other information that the distributor considers relevant.

2.2 Legislative requirements in making this determination

Chapter 11 of the NER sets out the implementation process for a distributor to apply to the AER for the application of the revised DMIS during its current regulatory control period. The new rules under Chapter 11 include obligations on the AER in relation to the publication and consultation on a distributor's proposal, making of the final decision and notice of the final decision. The rule also provides discretion to the AER in permitting early application for a distributor and the date from which the new DMIS applies.[3]

Under clause 11.106.3 (e) of the NER, we must make a final decision on whether and how to apply the revised new DMIS to a distributor during its current regulatory control period. Under clause 11.106.3 (f), our final decision must:

(a) include a decision on the start date

(b) set out reasons for the decision, and

(c) set out any amendments to the revised demand management incentive scheme necessary to give effect to the application of the revised demand management incentive scheme.

Under clause 11.106.3 (h) of the NER requires that, in making its final decision, the AER must:

- consider the proposals submitted and any written submissions made on the proposal, and
- have regard to the factors that clause 6.6.3(c) requires the AER to take into account in applying the DMIS[4].

---

[3] Cl 11.106.3 of the NER.

[4] Cl 6.6.3(c): In developing, and applying, any demand management incentive scheme, the AER must take into account the following:

(1) the scheme should be applied in a manner that contributes to the achievement of the demand management incentive scheme objective;

(2) the scheme should reward Distribution Network Service Providers for implementing relevant non-network options that deliver net cost savings to retail customers;

(3) the scheme should balance the incentives between expenditure on network options and non-network options relating to demand management. In doing so, the AER may take into account the net economic benefits delivered to all those who produce, consume and transport electricity in the market associated with implementing relevant non-network options;

(4) the level of the incentive:

(i) should be reasonable, considering the long term benefit to retail customers;

(ii) should not include costs that are otherwise recoverable from any another source, including under a relevant distribution determination; and

(iii) may vary by Distribution Network Service Provider and over time;

(5) penalties should not be imposed on Distribution Network Service Providers under any scheme;

(6) the incentives should not be limited by the length of a regulatory control period, if such limitations would not contribute to the achievement of the demand management incentive scheme objective; and

(7) the possible interaction between the scheme and:

Clause 11.106.3(g) of the NER specifies that the start date for the application of the revised demand management incentive scheme must not be earlier than 24 months prior to the end of the current regulatory control period.

(i) any other incentives available to the Distribution Network Service Provider in relation to undertaking efficient expenditure on, or implementation of, relevant non-network options;
(ii) particular control mechanisms and their effect on a Distribution Network Service Provider's available incentives referred to in sub-paragraph (i); and
(iii) meeting any regulatory obligation or requirement.

3 Distributors' applications

We received applications from AusNet Services[5] and Energy Queensland[6] (on behalf of Energex and Ergon Energy) to apply the new DMIS under clause 11.106.3 of the NER.

3.1 AusNet Services application

On 12 September 2018, AusNet Services applied for the early application of the DMIS, with an effective start date of 1 January 2019.[7]

AusNet Services considered that the early application of the DMIS is desirable to ensure demand management solutions are brought quickly onto equal footing with traditional network solutions, unlocking their potential to generate significant long term capex savings for customers.

AusNet Services submitted that:

- It maintains a portfolio of 18 MW of commercial and industrial load curtailment contracts which it began establishing in 2012 as a pilot, managed until recently a 10MW network support contract based on embedded generation established in 2012, and operates 4MW of mobile generation that was established in 2013. These contracts have successfully deferred millions of dollars of capital expenditure and reduced risk levels on the network, benefiting customers through lower prices over the long term.[8]
- More recently, residential demand management was first tested during the 2017-18 summer under a proof-of-concept project called Peak Partners (DMIA funded). Residential demand management is typically more challenging to procure than commercial and industrial demand response, but is crucial to potential deferment of future investment in the key growth corridors, including in the suburbs of Doreen and Clyde North.

3.2 Energy Queensland's applications for Ergon Energy and Energex

On 29 June and 27 September 2018, Energy Queensland applied for the application of the new DMIS to Ergon Energy and Energex from 1 July 2018.[9] Energy Queensland submitted that:

---

5 AusNet Services, *Request for early application of the revised DMIS*, 12 September 2018.

6 Energy Queensland, *Request for early application of the revised DMIS*, 27 September 2018.

7 AusNet Services, *Request for early application of the revised DMIS*, 12 September 2018.

8 AusNet Services, *Request for early application of the revised DMIS*, 12 September 2018, p. 1.

9 Energy Queensland, *Request for early application of the revised DMIS*, 27 September 2018.

Energex and Ergon Energy both have an existing portfolio of successful demand management programs. The early application of DMIS will assist both Ergon Energy and Energex in delivering the following initiatives:

- Target Area Incentives: These incentives will be used to defer the need for future network build projects in specific areas of the network. Using load forecasting and end-use customer insights, these areas will typically be identified five years ahead to provide sufficient time for end-use customers and industry partners to participate.
- Incentive Maps: to show the location of target areas, the value of the incentives available at each target area ($/kVA), and the timing of demand response required to defer network investment in target areas.
- Non-Network Alternative Projects: in order to maximise the number of non-network alternative (NNA) solutions identified and implemented, Energex and Ergon Energy will (1) engage regularly with their industry partners to ensure the development of competitive NNA as part of network planning processes (e.g. Regulatory Investment Test for Distribution); and (2) continue to manage existing contracts for NNA projects.

Energy Queensland considered that the early application of the revised DMIS will assist Energex and Ergon Energy to undertake efficient expenditure on relevant non-network demand management options and realise the benefits of these investments without having to wait until 1 July 2020. Energy Queensland proposed a starting date of 1 July 2018.

Energy Queensland submitted that to ensure compliance with DMIS requirements, Energex and Ergon Energy will align their existing demand management processes with the requirements of DMIS.

4 AER's assessment

The DMIS is intended to encourage distribution businesses to find lower-cost options to investing in network solutions. The incentive scheme achieves this by encouraging distribution businesses to undertake efficient expenditure on non-network options relating to demand management.

We consider the proposals by AusNet Services, Energex and Ergon Energy have demonstrated a track record of implementing demand management projects and plans that meet the specific requirements under the new DMIS.

In making the new DMIS, we took into account the matters set out in clause 6.6.3 of the NER. Hence, we consider that applying the new DMIS, without any amendments, to AusNet Services, Energex and Ergon Energy is the appropriate way to satisfy clause 11.106.3 (h) of the NER, which requires that we have regard to the factors set out in clause 6.6.3(c).

We did not receive any submission from stakeholders.

Starting dates of the early application of the new DMIS

Our decision is to apply the new DMIS[10] to all three distributors from the respective start date until the end of their respective current regulatory control period, without modification. We have considered materials submitted to us by the applicants.

For the start dates of the application of the new DMIS, the rules provide that the distributor can propose a start date.[11] Further, the rules provide that the AER can make a decision on a start date which is different to the proposed start date, provided that the start date is not earlier than 24 months prior to commencement of the distributor's next regulatory control period.[12] Accordingly, we determine that:

- For AusNet Services, the start date will be 1 January 2019, as proposed by AusNet. The next regulatory control period for AusNet commences on 1 January 2021.
- For Energex and Ergon, the start date will be 15 December 2018. The next regulatory control period for these distributors commences on 1 July 2020.

We note that Energy Queensland proposed a starting date of 1 July 2018. However, we do not consider it appropriate to set a retrospective start date (that is, a date prior to making our final early application decision) as this would allow these distributors to receive incentive payments for expenditure commitments made prior to the scheme becoming applicable. Equally, we do not consider that we are constrained to set a start

[10] AER, *Demand management incentive scheme*, *Electricity distribution network service providers*, December 2017.

[11] The proposed date must not be earlier than the later of: 60 business days after the proposal is submitted, or 24 months prior to the end of the current regulatory period. (cl 106.3(b) of the NER).

[12] Cl 106.3(g) of the NER.

date at 60 business days from the date of application;[13] because we consider that the early application will have benefit to consumers and should be adopted as early as possible.

4.1 Annual compliance verification of DMIS expenditures

We will assess the demand management projects and their expenditures in accordance with assessment criteria prescribed by the new DMIS. Appendix A presents the compliance reporting requirements under the new DMIS.

All applicants will be required to provide supporting documents each year as required under the new DMIS to prove that the expenditures meet the minimum requirements. The AER will determine the eligibility and specific incentive payments for each project according to the criteria specified in the new DMIS.

[13] Cl 11.106.3(g) provides that the AER may make a decision on a start date which is different to the proposed start date, provided that the start date is not earlier than 24 months prior to the end of the current regulatory control period.

5 AER's determinations

This section outlines the AER's DMIS determinations for each distributor.

5.1 AusNet Services

In accordance with clause 11.106.3 (e) of the National Electricity Rules (NER), our final decision is to apply the new DMIS[14] to AusNet Services for the period of 1 January 2019 to 31 December 2020, without any modification.

5.2 Ergon Energy

In accordance with clause 11.106.3 (e) of the National Electricity Rules (NER), our final decision is to apply the new DMIS[15] to Ergon Energy for the period of 15 December 2018 to 30 June 2020, without any modification.

5.3 Energex

In accordance with clause 11.106.3 (e) of the National Electricity Rules (NER), our final decision is to apply the new DMIS[16] to Energex for the period of 15 December 2018 to 30 June 2020, without any modification.

[14] AER, *Demand management incentive scheme*, *Electricity distribution network service providers*, December 2017.

[15] AER, *Demand management incentive scheme*, *Electricity distribution network service providers*, December 2017.

[16] AER, *Demand management incentive scheme*, *Electricity distribution network service providers*, December 2017.

A DMIS Compliance reporting requirement

Compliance reporting

(1) For each **regulatory year**, a **distributor** must submit a **demand management compliance report** to the **AER** no later than 4 months after the end of that **regulatory year** to which the reported data pertains.

(2) The **compliance report** must be reviewed in accordance with the assurance requirements set out in the annual reporting **regulatory information notice** applicable to the **distributor**, at the **distributor**'s expense and by a person permitted to conduct such a review under that **regulatory information notice**.

(3) Each **compliance report** must include two parts—Part A and Part B. Part A includes information on **committed projects** and Part B contains information on projects that the **distributo**r has identified as **eligible projects**.

(4) Each **compliance report** must include the following information in Part A:

(a) The volume of **demand management** delivered by **committed projects** in that **regulatory year** (that is, the **kVA** per year of demand that a **distributor** controlled (either directly or indirectly) by means of **committed projects** in that **regulatory year**).

(b) The **distributor**'s estimate of the benefits realised from the **demand management** delivered by **committed projects** in that **regulatory year**.

(c) The **total financial incentive** that the **distributor** has assessed that it is able to claim in accordance with clauses 2.2, 2.3 and 2.5 of this **scheme,** for that **regulatory year**.

(5) For each **eligible project** that a **distributor** identifies as a **preferred option** in a **regulatory year**, Part B of the **compliance report** relating to that **regulatory year** must include the following information about that **eligible project**:

(d) In present value terms, the expected costs and benefits that the **distributor** determined, in accordance with clause 2.2, that the **eligible project** would deliver to electricity consumers.

(e) A description of the responses that the **distributor** received to either its **RIT–D** or its **request for demand management solutions** under the **minimum project evaluation requirements** (as relevant) including, for each response:

i. a short description of the proposed project;

ii. the proposed costs and deliverables put forward in the response to the **request for demand management solutions**; and

iii. for any response that proposed a potential **credible option**, the **distributor**'s estimate of that project's **relevant net benefit**.

(f) Identify whether, if the **distributor** decides (or has decided) to proceed with the project as a **committed project**, it is likely that this will occur via a **demand management contract,** or whether this is likely to occur via a

demand management proposal. If the former, the **compliance report** must also identify the proposed party or parties to the **demand management contract**.

(g) The expected costs of delivering **demand management**, by means of the **eligible project**, that the **distributor** used as an input into its assessment, under clause 2.2, that the project is an **efficient non-network option** in relation to **demand management**.

(h) the **kVA** per year of network demand that the **distributor**:

i. would be able to call upon, influence, dispatch or control if the project is implemented (that is, the **kVA** per year of **demand management** capacity); and

ii. expects to call upon, influence, dispatch or control, based on its probabilistic assessment of future demand, if the project is implemented.

(6) Where a **distributor** decides, in a **regulatory year**, to defer or not proceed with an **eligible project** that it has previously decided (either in that **regulatory year** or in a previous **regulatory year**) to proceed with as a **committed project**, the **distributor** must identify that decision and project in its **compliance report** for that **regulatory year**.

(7) Where a **distributor** decides, in a **regulatory year**, to proceed with a **network option** to meet an **identified need** that it had previously decided to meet by means of a project that was a **committed project**, the **distributor** must identify that **network option** and **committed project** in its **compliance report** for that **regulatory year**. The **project incentive** for an identified **committed project** will:

(a) not be payable, by application of clause 2.6(2), if the **distributor** did not undertake **demand management** expenditure.

(b) be returned via a reduction in the **total financial incentive** by the amount calculated in accordance with equation 2, if the **distributor** undertook some **demand management** expenditure, but terminated the **committed project** earlier than the end date it assumed when calculating expected **demand management** costs in applying clause 2.2(4).

Equation 2: Project *i* returnable incentive on early termination in year *x*

$$Returnable\ incentive_{i,x} = \sum_{t=x}^{T} \delta_v \times E[PV\ DMcost_{i,t}]$$

Where:

- δ_v is the effective cost uplift to project *i*, calculated as $\frac{PV\ incentive_i}{E[PV\ DMcost_i]}$. For clarity, δ_v will equal d_v if $S_i = 0$ and the constraints in equation 1 and 3 do not bind.
- *T* is the committed end date for project *i*, and *x* is the date the distributor terminated committed project *i*.

- PV is the present value at time t, which aligns with time t used in equation 1. A parameter following PV is in real dollars at time t.

(8) The **confidentiality guideline** applies to the information contained in **compliance reports**. If the **distributor**'s **compliance report** contains confidential information, the **distributor** must also provide a non-confidential version of the report in a form suitable for **publication**. The **AER** may publish the **compliance report** (or the non-confidential version of the **compliance report**, if applicable) on its website.