Determination

Early application of the Demand Management Incentive Scheme

United Energy

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AUSTRALIAN ENERGY REGULATOR

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Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
capex	capital expenditure
DMIA	Demand management innovation allowance
DMIAM	Demand management innovation allowance mechanism
DMIS	Demand management incentive scheme
NER	National Electricity Rules
opex	operating expenditure

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 a greater and timelier 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 an electricity 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]

United Energy, a Victorian electricity distributor, submitted an application on 7 June 2019 to the AER to bring forward its projects under the new DMIS.

We invited energy consumers and other interested parties to make submissions on this application. No submissions were received.

We consider that the application from United Energy meets the conditions for approval to commence the new DMIS in its current regulatory period. This paper sets out our reason for these decisions.

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[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 downward 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.

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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 these businesses meet consumers' demand at the lowest cost. By being provided with incentives, 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 the 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 who has sought to apply the revised DMIS 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.

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].

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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.

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.

(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:

(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 United Energy's application

On 7 June 2019, we received an application from United Energy to apply the new DMIS under clause 11.106.3 of the NER.

United Energy proposed an effective start date of 1 November 2019.[5] This is within 24 months of the current end date of its current regulatory control period (31 December 2020).[6]

United Energy submitted that it currently undertakes demand management programs where economically viable. United Energy cited as an example its ongoing Summer Saver demand response program for residential customers. This program targets network areas with highly utilised distribution transformers and low-voltage circuits with a high risk of overloading during summer months. Participants are offered financial rewards to voluntarily reduce electricity usage when asked by United Energy. United Energy claimed that, to date, the Summer Saver program has resulted in deferring more than $10 million in capital expenditure.[7]

United Energy contended that if it is able to implement the DMIS from 1 November 2019, it will be able to assess a wider range of demand management programs, and allow the market for non-network solutions to develop faster and deliver benefits to consumers sooner.[8]

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5 United Energy, *Re: Application for the revised DMIS to start from 1 November 2019*, 7 June 2019.

6 The Victorian Government, through its Minister for Energy, has announced its intention to make changes to the timing of the Victorian electricity and gas network resets from a calendar to financial year. Assuming that the Victorian Government give effect to the change of commencement date of the next regulatory control period (RCP), the current RCP for Victorian electricity distributors will be extended by 6 months (to 30 June 2021). For more details, refer to the AER website at: United Energy - Determination 2021-25. Assuming that this amendment occurs, the commencement date for early application of the DMIS will still be within 24 months of the end of United Energy's current regulatory control period (30 June 2021).

7 United Energy, *Re: Application for the revised DMIS to start from 1 November 2019*, 7 June 2019, pp. 1-2.

8 United Energy, *Re: Application for the revised DMIS to start from 1 November 2019*, 7 June 2019, p. 2.

4 AER's assessment

The DMIS is intended to encourage distribution businesses to find lower-cost alternatives 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.

Reasons for our decision

In making this decision, we are required to:

- review the proposal submitted by United Energy
- consider written submissions made on the proposals, and
- have regard to the factors in clause 6.6.3(c) of the NER.[9]

We consider the proposal by United Energy for the possible expansion of its range of demand management projects is likely to contribute to the achievement of the scheme objective, and have the potential to meet the specific requirements of the new DMIS.

United Energy's reference to its Summer Saver program, as an illustrative current example of its demand management projects, is supported by its latest publicly available compliance report for DMIA for regulatory year 2017. During its current regulatory control period, United Energy has utilised 42 per cent of its approved allowance for DMIA projects such as virtual power plants and the Summer Saver project.[10] United Energy's rate of utilisation of its approved DMIA allowance is comparable to that of some distributors, and better than other distributors.

We invited stakeholders to provide submissions on United Energy's application. We did not receive any submission.

In making the new DMIS in 2017, we took into account the matters set out in clause 6.6.3 of the NER. Hence, we consider that, in applying the new DMIS without any amendments to United Energy, we have had regard to the factors specified in clause 6.6.3(c).

Starting date of the early application of the new DMIS

Our decision is to apply the new DMIS[11] to United Energy from the start date until the end of its current regulatory control period, without modification. We have considered materials submitted to us by the applicant.

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[9] NER, cl. 11.106.3(h)

[10] AER, *Decision – Approval of Demand Management Innovation Allowance (DMIA) expenditures by distributors in 2016–17 and 2017*, July 2018, p. 9.

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

For the start date of the application of the new DMIS, the rules provide that the distributor can propose a start date.[12] 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 the end of the distributor's current regulatory control period.[13] We note that we have not received any submission regarding the commencement date. Our decision is to accept United Energy's proposed commencement date of 1 November 2019.

The current regulatory control period for United Energy currently ends on 31 December 2020.

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 revised DMIS. Appendix A presents the compliance reporting requirements under the revised 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.

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[12] 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).

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

5 AER’s determination

This section sets out the AER’s DMIS determination for United Energy.

5.1 United Energy

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 United Energy from 1 November 2019 until the end of its current regulatory control period, without any modification.

14 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 **Error! Reference source not found.**, 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 1, 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 1: 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 **Error! Reference source not found.** 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 **Error! Reference source not found.**. 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.