Ausgrid

DMIS Annual Report 2018-19

October 2019

Demand Management Incentive Scheme Submission

October 2019

Contents

1 Introduction

This submission has been prepared under the Demand Management Incentive Scheme (DMIS) applied to Ausgrid by the Australian Energy Regulator (AER).

Under Section 2.4 of the AER's Demand Management Incentive Scheme for electricity distribution network service providers 2017, Ausgrid is required to submit an annual report on expenditure under the DMIA for each regulatory year. The annual report must include:

1. Information on **committed projects** (Part A) and **eligible projects** (Part B).
2. For each **committed project**:
    a. The volume of demand management delivered,
    b. An estimate of the realised benefits,
    c. The total incentive to be claimed.
3. For each **eligible project** identified as a preferred option:
    a. The present value of costs and benefits,
    b. A description of responses to the **request for demand management solutions**
        i. Description of proposal,
        ii. Proposed costs and deliverables,
        iii. For a potential credible solution, an estimate of the project's net benefit.
    c. If the project is to proceed as a committed project, whether the project will occur via a **demand management contract** or via a **demand management proposal**.
    d. The expected costs of delivering the demand management solution.
    e. The kVA per year of network demand able to be called upon, influenced, dispatched or controlled.
4. Any projects where a decision has been made to defer or not proceed with an **eligible project** that previously (either in 2018/19 or in previous years) was to proceed as a **committed project,**
5. Any projects where a decision has been made to proceed with a **network option** to meet an identified need that previously was to proceed as a **committed project**.

This submission details DMIS projects undertaken by Ausgrid in the 2018/19 financial year.

2 Governance

2.1 DMIS projects in 2018/19

There were zero (0) **committed** demand management projects and one (1) **eligible** demand management project under development in 2018/19.

2.2 Compliance with the DMIS

This report has been written in accordance with section 2.4 of the AER's Demand Management Incentive Scheme (Dec 2017).

2.2.1 Demand management project selection criteria

Ausgrid applies cost-benefit assessment to determine whether demand management solutions can reduce demand and/or defer network investment as part of its network planning processes. The cost-benefit assessment is based on NPV assessment where all relevant costs and benefits for the preferred network option as well as various demand management deferral options are quantitatively assessed.

For the network option these costs and benefits include:

- The expected capital cost of the preferred network option;
- The expected benefits of implementing the preferred network option which include costs associated with:
    - Avoided supply interruptions to customers (unserved energy);
    - Avoided maintenance of aged network assets;
    - Avoided environmental impacts; and
    - Avoided safety risk.

For the various demand management deferral options these costs and benefits include:

- The time-value-of-money benefit associated with deferring the network option;
- The avoided unserved energy for a given quantum of demand reductions;
- The expected costs of delivering demand reductions; and
- An option value benefit.

Both the preferred network option and demand management options include a terminal value benefit in the NPV assessment.

Based on the NPV assessment, a demand management project is considered feasible if the expected available budget meets or exceeds the expected costs of delivering the demand management project.

3 PART A – Committed Projects

There were no committed demand management projects in 2018/19.

4 PART B – Eligible Projects

4.1 Gillieston Heights demand management project

4.1.1 Description of need

Based on latest demand forecasts, Ausgrid identified an emerging network constraint associated with three interconnected 11kV feeders in the Gillieston Heights area, part of the City of Maitland LGA in the Hunter Region of NSW.

Based on the assessment process described in 2.2.1, Ausgrid determined that demand management was likely to offer a cost efficient alternative to augmentation of the distribution network.

4.1.2 Expected costs and benefits

The following table summarises the present value of expected costs and benefits determined using the process described in Section 2.2.1 of this report. The figures below underpin the information published in the Request for Proposals described in Section 4.1.3 below.

Option	Deferral period	PV of Benefits ($m)	PV of Costs ($m)	NPV ($m)
network option	-	1.03	-0.65	0.38
DM	1 year	1.06	-0.68	0.38
DM	2 years	1.09	-0.83	0.26
DM	3 years	1.12	-1.04	0.08

4.1.3 Request for demand management solutions

In accordance with the **minimum project evaluation requirements** set out in Section 2.2.1 of the DMIS guidelines, Ausgrid published a Request for Proposals (**request for demand management solutions**) on 30 Apr 2019 seeking demand management solutions from non-network proponents.

The Request for proposals was published on Ausgrid's website and communicated to all parties registered in Ausgrid's Demand Management Register of Interested Parties on 30 April 2019. A reminder was communicated to all parties registered in Ausgrid's Demand Management Register of Interested Parties in Ausgrid's May 2019 Demand Management e-newsletter on 13 May 2019. Submissions closed on 28 May 2019.

4.1.3.1 Submissions

Submission No.	1
Proponent	CONFIDENTIAL
Description	Residential behavioural response
Deliverables	Demand reductions via provision of a software solution, web and app-based portal and digital customer enrolment.
Cost	CONFIDENTIAL
Assessment	Submission 1 did not offer an end-to-end solution.

	While no assessment of performance capability was completed, the proposal was assessed to determine hypothetical economic viability. Based on this assessment, Submission 1 was considered not economically viable when compared against the network option.

4.1.4 Ausgrid proposal

Proposal No.	1
Description	Air-conditioning (AC) load control
Deliverables	Demand reductions via AC load control using ripple control signals to DREDs installed on participating customer AC units. Leverages recent experience from Ausgrid's own CoolSaver program.
Cost	$55,000
Assessment	Cost-benefit assessment indicated it was economically feasible to reduce the load at risk on the relevant 11kV feeders for a single summer 2019/20. Expected NPV = $0.38 million. Deferral beyond summer 2019/20 not considered economically viable.

4.1.5 Preferred option

On the basis that the Ausgrid proposal for a 1 year deferral offers an equivalent NPV to the network option, Ausgrid has decided to proceed with the demand management project as a **demand management proposal**.

As noted above, the expected cost of demand management is $55,000.

4.1.6 Amount of demand reductions

The target demand reduction in summer 2019/20 is 190kVA.

5 Demand Management Projects That Have Changed

In accordance with 2.4 (6) and (7) of the DMIS, this section describes projects where Ausgrid has decided to either:

- Defer or not proceed with an eligible project that it had previously decided (either in 2018/19 or in previous years) to proceed with as a **committed** (demand management) **project**; OR
- 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** (demand management) **project**.

5.1 Previously committed DM projects now deferred or not proceeding

None.

5.2 Previously committed DM projects now superseded by network option

None.