Revised Proposal

Attachment 3.02 Network Innovation Advisory Committee

DRAFT TERMS OF REFERENCE

January 2019

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Draft Terms of Reference

This draft terms of reference supports the establishment of Ausgrid's Network Innovation Advisory Committee.

1.1 Background

The electricity industry is undergoing a significant transformation. For over a hundred years energy flows have been predominantly one directional, with energy moving from large thermal generators to households and businesses along high voltage transmission lines and lower voltage distribution lines.

This paradigm is changing quickly. Households, communities and businesses now want to generate, consume, and store their own electricity, and sell any excess back into the grid. This is resulting in two-way flows across the network and creating challenges in terms of managing a growing mix of distributed energy resources (DER).

Networks need to adapt to cater for the changes in market conditions and consumer expectations. In 2017 Energy Networks Australia (ENA) and the CSIRO published the Electricity Network Transformation Roadmap (the Roadmap) to outline how networks need to evolve to cater for these changing conditions. Ausgrid participated in the development of the Roadmap, which was supported by expert reports and analysis.

In a nutshell, the Roadmap explains that Australia's electricity network can help lower emissions, keep the lights on and lower costs, through the efficient use of the shared network. However, the Roadmap also noted that there is a limited window of opportunity to transform Australia's electricity system to deliver efficient outcomes for customers.

Importantly, the Roadmap identified the critical role of the grid in the adoption of new technologies. Customers can only realise the full value of their distributed energy resources in a connected environment that enables multi-directional exchanges of energy, information and value.[1] The optimal use of these distributed energy resources will allow future investment in network infrastructure to be lower than otherwise needed.

The Roadmap also acknowledged the critical role of pricing and incentives in the transformation of the electricity sector. More cost reflective network tariffs have an important role to play in ensuring that the adoption of distributed energy resources and other new technologies does not create new constraints on our network. As part of our 2019-24 Revised Proposal we proposed a new approach to tariffs that will promote more efficient use of our network.

1.2 Consumers expect a greater role in driving network transformation

During stakeholder consultation prior to submitting our Regulatory Proposal, consumers told us that they want to see more use of innovation and demand management options to help avoid unnecessary capital investment into the future. While demand management has traditionally been used to reduce the need to build additional capacity, consumers want to see how it can be used to defer or avoid replacing aged assets, which drives the bulk of our replacement capital expenditure program.

Stakeholders also said that they want a greater role in driving the direction of innovation in electricity networks. In its submission to our April 2018 Proposal, the Consumer Challenge Panel stated:

> *CCP10 expects distributors to demonstrate active engagement with developers, technology providers, retailers and consumers with a clear commitment to not only carry out trials but reflect a genuine and intentional focus on demand management, new technologies, customer engagement and non-wires solutions in their planning for growth and asset replacement.*

The Roadmap came to similar conclusions about the importance of customer engagement. One of the Roadmap's key findings was that networks need to enhance their relationships with customers built on improved data analytics and a

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1 ENA/CSIRO, Energy Networks Transformation Roadmap 2017, p10

deeper understanding of customer needs. The Roadmap also recognised that networks will play a key role in the delivery and connection of an expanding range of innovative products and services to customers.[2]

In Chapter 2 of the 2019-24 Revised Proposal, we made a number of commitments about engaging more meaningfully with our customers. These commitments recognise that as a business we will make better decisions if we work collaboratively with those who use our network. As we develop our innovation program, it is important that we consider how to improve the customer experience for all our customers, including those who cannot or do not want to adopt new technologies.

1.3 Capital expenditure to support the evolution of our network

As recognised by the Roadmap, timely action is required to ensure our network evolves to meet the changing needs of customers. If networks move fast enough to support the efficient uptake of lower carbon choices, fairer and more reliable outcomes will be achieved for all customers. There is a risk that if our network does not evolve fast enough, inefficient customer outcomes may result, including the curtailment of DER output.

Consistent with the Roadmap, our April Proposal contained several initiatives to improve our network monitoring capability, trial new technologies and implement demand management options. All these projects have the goal of reducing capital and maintenance expenditure on traditional poles and wires solutions, thereby placing downward pressure on network prices:

- Network Innovation program – the Network Innovation program covers a diverse range of innovative technology pilots which has the potential to deliver better value for customers.
- Advanced Distribution Management System (ADMS) – the ADMS project will transform Ausgrid's network management environment by implementing a world class ADMS with more robust, adaptable and effective processes and tools. This will help mitigate obsolescence risks associated with our current processes. The ADMS is being implemented in a three-staged approach, of which stage 3 – advanced applications presents the greatest collaboration opportunities with customers.

1.4 Purpose of Network Innovation Advisory Committee

The purpose of the Network Innovation Advisory Committee (NIAC) is to place the customer at the centre of investment decisions as we transform our network. This will ensure that our network becomes one that supports efficient investment and greater choice and control, things that customers expect from a network of the future.

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The NIAC puts in place formal arrangements to give customers a role in driving our innovation investment program. The NIAC will provide a forum for Ausgrid to collaborate with consumers in deciding the future direction of the network.

Importantly, where it is agreed that capital expenditure is to be overseen by the NIAC, the Capital Expenditure Sharing Scheme (CESS) will not apply to that expenditure.

1.5 NIAC collaboration goal

The International Association for Public Participation (IAP2) public participation spectrum helps define the public's role in an effective participation process. In our circumstances, the NIAC is not being established as a forum to simply consult with customers. The aim is for the NIAC to be a forum where Ausgrid can **collaborate** with customers about the future direction of the network. This recognises that while Ausgrid will retain decision making responsibility, consumer views will be incorporated to the maximum extent possible.

On the public participation spectrum, collaboration has the following characteristics:

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2 ENA/CSIRO, Energy Networks Transformation Roadmap 2017, p16

Public participation goal	Promise to the public
To partner with the public in each aspect of the decision including the development of alternative and the identification of the preferred solution	*We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.*

1.6 Establishment and operation of NIAC

The NIAC will be established as follows:

1. The NIAC will be established by Ausgrid and will be a sub-committee of the Ausgrid Consumer Consultative Committee (CCC).
2. Membership will be agreed upon by Ausgrid and consumer representatives.
3. The NIAC will be formally constituted at the commencement of the 2019-24 Regulatory Period.
4. The NIAC will provide a forum for Ausgrid to collaborate with consumers on innovation investment. Opportunities for collaboration with other networks may also be identified and acted upon. Specifically, the investment to be overseen by the NIAC includes:
    a. Network Innovation program funding (forecast at approx. $42 million in our 2019-24 Revised Proposal)
    b. Stage 3 ADMS Advanced Application funding (forecast at approx. $10 million of which Ausgrid proposes to self fund a significant proportion in our 2019-24 Revised Proposal)

    Committee members may propose additional projects for the Committee's consideration
5. Where capital expenditure is to be overseen by the NIAC, the Capital Expenditure Sharing Scheme (CESS) will not apply to that expenditure.
6. The NIAC will meet at least three times per year, or as needed, at Ausgrid's offices.
7. Ausgrid will supply the NIAC with information, business cases, decision documents, reports and other material that will allow the NIAC to perform its role.
8. At its inception, the NIAC will discuss the need for further governance arrangements such as:
    a. a robust process of risk/cost benefit analysis and management in considering proposed investments. Such processes should operate at various stages of projects (e.g. project conception, planning, implementation and evaluation)
    b. a committee charter
9. Confidentiality arrangements will be put in place at the NIAC's commencement to ensure that members can be provided will confidential material as needed.
10. Outcomes and reports of the NIAC will be published on the Ausgrid website.
11. The NIAC may engage independent advice as required, the funding of which will be discussed by the NIAC.
12. The NIAC will make decisions in accordance with the guiding principles for innovation (see section 1.7).

1.7 Guiding principles for innovation

All innovation projects must be in the long-term interests of consumers with respect to price, quality, safety, reliability and security of supply. In relation to innovation, this means that all projects must be safe and create value for customers.

The NIAC will consider projects in accordance with the following principles:

- Maximise economic utility of new and existing assets
- Lower costs for customers
- Solves a specific problem
- Unique-ness of problem and collaborative opportunities
- Accelerate cost effective decarbonisation
- Improve fairness
- Reliability and price