



Jemena Electricity Networks (Vic) Ltd

2026-31 Electricity Distribution Price Review Revised Proposal

Attachment 03-02

Response to the AER's draft decision - Innovation Fund



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Abbreviations

AER	Australian Energy Regulator's
BESS	Battery Energy Storage Systems
BTM	Behind the Meter
CER	Customer Energy Resources
CSIS	Customer Service Incentive Scheme
DEECA	Department of Energy, Environment and Climate Action's
DMIAM	Demand Management Innovation Allowance Mechanism
DMIS	Demand Management Incentive Scheme
DNSP	Distribution Network Service Provider
DPV	Distributed Solar Photovoltaic
EBSS	Efficiency Benefit Sharing Scheme
EV	Electric Vehicles
EVC	Electric Vehicle Council
EVCI	Electric Vehicle Charging Infrastructure
JEN	Jemena Electricity Network Vic Ltd.
NEO	National Energy Objectives
PMM	Project Management Methodology
PTRM	Post Tax Revenue Model
R&D	Research and Development
RCP	Regulatory Control Period
STPIS	Service Target Performance Incentive Scheme
V2X	Vehicle to grid
VPP	Virtual Power Plants
WACC	Weighted Average Cost of Capital

1. Overview

This document outlines refinements to Jemena Electricity Networks (Vic) Ltd's (**JEN**) Innovation Fund proposal in response to two key developments: the Australian Energy Regulator's (**AER**) draft decision and the rapidly evolving external innovation landscape.

AER Feedback

- The AER provisionally accepted 3 of JEN's 15 proposed innovation projects.
- Projects not provisionally accepted are included on the basis that they did not meet the AER's innovation criteria.
- The AER did not approve the proposed 'use-it-or-lose-it' handback mechanism

Updates to Address Feedback

- JEN accepts AER's feedback. The revised Innovation Fund includes the 3 accepted projects and 1 additional project which was not included in our initial submission.
- JEN has provided additional details around the benefits of these projects.

Following the Australian Energy Regulator's (**AER**) draft decision on JEN's 2026-31 regulatory proposal (initial regulatory proposal) for the 2026-31 regulatory control period (next regulatory period), JEN has reassessed its proposed initiatives to ensure alignment with regulatory expectations and sectoral priorities.

The revised Innovation Fund now comprises four projects, with a total expenditure (**totex**) budget of \$5.4 million (direct costs, FY26\$) \$1.9m operating expenditure (**opex**), \$3.4m capital expenditure (**capex**). This increase above the allowance approved by the AER reflects both the inclusion of the fourth project and a revised scope for the remaining initiatives, accounting for the non-progression of previously considered projects and extraneous influencing factors.

Table 1: Summary of Revised Innovation Portfolio

Project	Accepted in Draft Decision
Bidirectional EV Charging Demonstration Project (V2X)	✓
Grid Edge EV Managed Charging Project	✓
Customer Interface with Flexible Markets	✓
EV Grid 2.0	Not assessed in the draft decision

This document sets out the revised Innovation Fund portfolio, the associated costs, and the delivery/governance framework. The framework ensures investments remain prudent, efficient, and aligned with strategic objectives, even as individual projects evolve. By maintaining this disciplined approach, JEN can adapt to changing priorities while continuing to deliver innovation that accelerates the energy transition and creates lasting value for customers and the market.

Supporting Material:

- *JEN – RP – Att 03-03 Innovation Fund – Letters of Support – 20251201 – Confidential*
- *JEN – RP – Att 03-03 Innovation Fund – Letters of Support – 20251201 – Public*

2. Background

2.1 Summary of influencing factors

Table 1 outlines key changes and events influencing JEN's revised Innovation Fund portfolio. These factors have influenced which projects are included in the revised portfolio and their scope

Table 2: Summary of Factors Influencing Change in Revised Proposal

Factor	Summary of impact
AER draft decision	<p>The AER's draft decision provided clear guidance on acceptable and not-accepted expenditure in the proposed Innovation Fund.</p> <p>Additionally, several projects included in JEN's wider submission were not accepted. When costing the Innovation Fund it was assumed that these projects would be delivered.</p> <p>Removing these foundational capabilities has resulted in a minor increase in costs to all projects. This is predominantly to support customer engagement and education as well as digital workarounds.</p>
<p>Policy and governmental interest including:</p> <ol style="list-style-type: none"> 1. National CER roadmap¹ 2. Australian Net Zero plan (energy sector)² 3. Cheaper home batteries program³ 4. Grid Enhancing Technologies program⁴ 5. Regulatory reform to reduce red tape and ease burden on businesses⁵ 	<ol style="list-style-type: none"> 1. The National CER roadmap outlines key areas of CER integration, including bidirectional EV charging. Active development across sectors supports JEN's proposed bidirectional charging demonstration project. 2. The Australian Net Zero plan was announced with more aggressive targets than those of the past. The Energy sector plan strongly supports the electrification of transport, and this aligns with the key projects in JEN's innovation fund. With public announcements for future funding, it is justified to expect grant funding may be available to support projects identified in this innovation fund. 3. The Australian Government's Cheaper Home Batteries scheme opened in July 2025 and has driven a significant increase in home battery uptake. It is expected that the efficiency from homes taking up this offer will help support the grid by reducing peaks and increasing minimum demand. There is no need for JEN to incentivise this uptake further, further, and so this was removed from the portfolio. 4. The Australian Government developed and rolled out a grant program known as Grid Enhancing Technologies in mid-2025. JEN submitted a bid for this grant for the EV Grid 2.0 project, seeking approximately \$1m in grant funding in addition to JEN's co-contribution. Consequently, EV Grid 2.0 has been added to JEN's Innovation Fund. As of the time of publication, the outcome of the grant submission remains pending. 5. The AER's submission to this Federal Government inquiry highlighted the value of innovation and its potential to improve network utilisation. The letter also committed to consulting on introducing a standard innovation allowance for all electricity network businesses with no ex-ante proposal and assessment required under a 'use it or lose it' funding arrangement.

¹ [National Consumer Energy Resources \(CER\) Roadmap Implementation Plan Update August 2025](#)

² [Net Zero - DCCEEW](#)

³ [Cheaper Home Batteries Program - DCCEEW](#)

⁴ [Grid Enhancing Technologies grants program - DCCEEW](#)

⁵ [DCCEEW - AER - Response letter - C Savage_Redacted.pdf](#)

Factor	Summary of impact
Battery uptake including home batteries and community batteries	<p>As noted above, home battery adoption has increased dramatically. Whilst JEN recognises a continued need for energy storage, this reduces the priority given to community batteries.</p> <p>A number of community batteries supported by the Victorian Government's Vic 100 neighbourhood batteries program are expected to be connected in JEN from 2026.</p>
EV Uptake	EV uptake continues to increase in JEN; however, the installation of public EV charging falls further behind recommended ratios. ⁶
Customer & representative group feedback	<p>JEN's customers and representative groups have shaped the framework and projects proposed in this Innovation Fund. They have remained engaged even after helping us to develop our initial regulatory proposal.</p> <p>JEN has committed to our customer and industry reference groups that they will be critical in the delivery of JEN's Innovation Fund.</p>

2.2 Projects

2.2.1 Initiative: Bidirectional EV Charging Demonstration Project (V2X)⁷

Total Cost: \$1.44M

Description: This cornerstone project will transform EVs into batteries-on-wheels, enabling vehicle-to-grid, vehicle-to-home, vehicle-to-business, and vehicle-to-load power transfers. This project will involve analysis, research, including customer research, possible trials, etc., to establish the requirements necessary to deploy this at scale. (By 2035 JEN expects over 300,000 electric vehicles to be registered in the JEN geography. Enabling bidirectional EV charging unlocks up to 14GWh in storage potential without investment in stationary Battery Energy Storage Systems (BESS).

The scope is expected to include customer subsets, techniques or technologies not already involved in existing trials.

⁶ Energy Networks Australia, [EV charging update draft](#).

⁷ Previously named "Vehicle-to-x (V2X).

Driver: Unlocking additional value for customers to electrify their vehicles will further incentivise take-up of EVs across JEN with secondary benefits to JEN and customers and enable bidirectional charging that can contribute to resilience and grid stability.

Proof of Innovation: Involves technology, techniques or concepts that differ from those previously implemented or used in the relevant market.

Influenced by change since draft proposal: Increased focus on bidirectional charging in the national CER roadmap, technology costs refined, increased need for customer engagement and education to enable project success. Digital workarounds are required for flexible connections to enable benefits, resulting in an increased totex budget. Terminology updated from V2X to “bidirectional charging” to align with industry terminology.

2.2.2 Initiative: Grid Edge Managed EV Charging Project

Total Cost: \$0.95M

Description: This initiative will investigate opportunities to use managed charging to benefit network operations and reduce customer costs. The project will look to determine how customer benefits can be achieved through “grid aware” and “grid active” technologies particularly at the “grid edge.” It is expected that this project will focus on a customer segment not addressed in previous or ongoing trials.

Driver: Managed charging can reduce connection and consumption costs to customers.

Proof of Innovation: Is focused on customers in a market segment that significantly differs from those previously targeted by implementations of the relevant technology, in relevant geographic or demographic characteristics that are likely to affect the future network.

Influenced by change since draft proposal: EV uptake steadily increasing, large users committing to electrification targets, new business models emerging for EVCI, increased need for customer engagement and education to enable project success. Digital workarounds are required to enable flexible connections and realise benefits, resulting in increased totex budget.

2.2.3 Initiative: Customer interface with flexible markets

Total Cost: \$1.36M

Description: This initiative considers testing how JEN customers may interact with flexible markets. It may involve trialling a product or a short-term subscription. The learnings from the project are expected to inform the benefits of future flexible market participation.

Driver: This project builds upon learnings from other DNSPs to test how best JEN customers may interface with flexible markets, recognising that customer (or agent) experience is critical to delivering the benefits of flexible markets.

Proof of Innovation: Focused on customers in a market segment that significantly differs from those previously targeted by implementations of the relevant technology, in relevant geographic or demographic characteristics that are likely to affect the future network.

Influenced by change since draft proposal: Increased need for customer engagement and education to enable project success. Digital workarounds are required to enable flexible connections and to realise their benefits, resulting in an increased totex budget.

2.2.4 Initiative: EV Grid 2.0

Total Cost: \$1.61M

Description: EV Grid 2.0, led by JEN in collaboration with Monash Energy Institute, will demonstrate how smart, grid-integrated EV charging can unlock network capacity and reduce costs without compromising stability. The project includes deploying pole-mounted and smart pole chargers plus a study on BESS-integrated charging. Key features include dynamic import control to manage peak demand and battery buffering for fast charging while protecting the grid.

Driver: As EV uptake increases EV Grid 2.0 transforms public EV chargers from passive loads into active grid assets, reducing cost barriers and increasing value to charge point operators and customers.

It is recognised that public EV charging infrastructure is increasingly needed in areas of higher than average EV uptake and also lower off-street parking stock. This project aims to address known difficulties with the costs of public EV charging.

Proof of Innovation: Involve technology, techniques or concepts that differ from those previously implemented or used in the relevant market

Influenced by change since draft proposal: This project was not part of JEN's original innovation fund proposal. It was developed as a submission for the Grid Enhancing Technologies program partially funded by DCCEEW (outcome not yet known). This exemplifies the rapid evolution of innovation in the energy sector.

2.3 Costs

Table 3 and Table 4 below summarises the total revised project expenditure and spend profile across the next regulatory period.

Table 3: Revised Innovation Fund Cost Summary

Project	Opex \$m (FY26)	Capex \$m (FY26)	Totex \$m (FY26)
Bidirectional EV Charging Pilot (V2X)	0.60	0.84	1.44
Grid Edge Managed EV Charging	0.36	0.59	0.95
Customer Interface with Flexible Markets	0.35	1.01	1.36
EV Grid 2.0	0.60	1.01	1.61
Total	1.91	3.44	5.41

Portfolio estimated expenditure proposal by regulatory year over the next regulatory period:

Table 4: Revised Innovation Fund Expenditure by Year across the regulatory control period (\$FY26)

Project	FY27 \$m		FY28 \$m		FY29 \$m		FY30 \$m		FY31 \$m	
expenditure	opex	capex	opex	capex	opex	capex	opex	capex	opex	capex
Bidirectional EV Charging Pilot (V2X)	0.06	0.09	0.30	0.42	0.18	0.25	0.06	0.09	-	-
Grid Edge Managed EV Charging	-	-	0.04	0.06	0.28	0.46	0.04	0.06	-	-
Customer Interface with Flexible Markets	-	-	-	-	-	0.10	0.21	0.51	0.14	0.40
EV Grid 2.0	0.24	0.40	0.18	0.30	0.12	0.20	0.06	0.1	-	-
Total	0.30	0.49	0.51	0.77	0.58	1.01	0.37	0.75	0.14	0.40

2.4 Schedule

The estimated schedule has been revised to account for deliverability over the next regulatory period.

Table 5: Revised Estimated Portfolio Delivery Schedule

	FY27				FY28				FY29				FY30				FY31			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Bidirectional EV Charging Pilot																				
EV Managed Charging																				
Customer Interface with Flexible Markets																				
EV Grid 2.0																				

2.5 Benefits

Quantifying the benefits of innovation projects and trials is inherently challenging in contrast to other network-led projects. There remains an expectation that the scope of the projects in this portfolio may evolve, particularly towards the end of the next regulatory period.

The Innovation Fund delivers near-term, customer-focused outcomes—such as affordability, experience, and energy equity—while improving reliability and enabling solar exports. These initiatives act as catalysts, piloting solutions that can scale to unlock system efficiencies, resilience, and long-term value. Over time, this translates into measurable financial, safety, and environmental gains through risk reduction, compliance, and operational savings. The table below illustrates how project outcomes evolve into broader benefit areas and potential network impacts.

Table 6: Alignment of Portfolio Outcomes to Benefits

Key Outcome	Innovation Benefit	Potential Network Benefit at Scale
Increased overall energy storage across JEN's network	Supply Reliability	Reliability (avoided unserved energy), Safety (reduced injury/fatality risk)
Increase the possibility of renewable energy powering the grid during peak demand times	Solar (export) reliability	Rooftop solar exports (avoided CER curtailment), Lost embedded generation
Reduce the need for network augmentation in future regulatory periods	Cost Efficiency	Cost efficiency (avoided/deferred capex, improved capex efficiency)
Increased utilisation of JEN's network	Network Load Factor	Reliability (avoided unserved energy), improved capex efficiency
Accelerated uptake of EVs within JEN's network (avg net saving of \$2,500 per customer/year)	Affordability / Customer Experience	Customer service benefits (affordability, time saved), Energy conservation (bill savings)
Reduced carbon emissions	Energy Equity	Emissions reduction, Environmental harm (avoided spill costs/penalties)

All proposed projects are expected to deliver or unlock both network and customer benefits. The following sections outline the benefits of each project which have been revised along with the project scope and costs.

2.5.1 Bidirectional EV Charging Demonstration Project (V2X)

Benefit description: Bidirectional charging will enable benefits to end customers and JEN. Predominantly, there are expected benefits in load shifting capabilities similar to small-scale batteries, and there may also be benefits in resilience through vehicle-to-load capabilities

With increased participation in future flexible markets it is expected that these benefits may increase and/or become more accessible

Table 7: Benefits - Bidirectional EV Charging Demonstration Project

Innovation Portfolio Benefit	Benefit	Estimated Quantification	Possible Benefits at Scale
Network Load Factor	Peak demand reduction	~0.5 MWh avoided unserved energy per EV/year	Improves hosting capacity for renewables
Affordability	Customer bill savings	Up to \$1,600/year per EV (V2G export revenue)	Incentivises EV uptake and reduces household energy costs
Energy Equity	Carbon offset	0.0175 tCO ₂ per EV/year based on line loss reduction	Emissions reduction and resilience benefits

What is the risk of not doing this project?

Without rapid enablement of bidirectional charging capabilities, the latent storage in battery electric vehicles remains locked from providing network support, resulting in ongoing investment in network assets, including BESS.

2.5.2 Grid Edge Managed EV Charging Project

Benefit description: Expected benefits include load shifting capabilities which may introduce an upfront benefit of lower connection costs and ongoing benefits from load optimisation in network and retail tariffs.

With participation in future flexible markets, predominantly flexible imports, it is expected that these benefits may increase or become more accessible.

Table 8: Benefits - Grid Edge Managed EV Charging Project

Innovation Portfolio Benefit	Benefit	Estimated Quantification	Possible Benefits at Scale
Network Load Factor	Peak demand reduction	5–10% load shift per feeder (could equate to ~\$150k–\$250k deferred capex)	Defers augmentation across multiple feeders
Affordability	Customer bill savings	\$300–\$500/year per EV (TOU optimisation)	Broad affordability improvement for EV owners
Solar Export Reliability	Minimum demand increase	Aligns charging with solar generation	Reduces CER curtailment risk

What is the risk of not doing this project?

If this project does not proceed, an opportunity is missed to orchestrate somewhat discretionary loads as EV uptake continues to accelerate. This may result in higher network stress, costly upgrades, and missed opportunities to deliver customer savings and value.

2.5.3 Customer Interface with Flexible Markets

Benefit description: The benefits of this initiative are predominantly customer benefits. Long term once flexible markets are established, network benefits may be achieved.

Table 9: Benefits - Customer Interface with Flexible Markets

Innovation Portfolio Benefit	Benefit	Estimated Quantification	Possible Benefits at Scale
Affordability / Customer Experience	Time and cost savings	10 hours/year saved; up to \$200/year bill savings	Improves customer engagement and market participation
Energy Equity	Carbon offset through demand flexibility	0.0128 tCO ₂ /year per customer based on line loss reduction	Enables equitable access to flexibility markets
Network Load Factor	Peak demand reduction via demand response	Small per-customer impact, scalable	Improves reliability during peak events

What is the risk of not doing this project?

Without this project we risk entering flexible markets ill-equipped. Without customer insights, future programs risk low participation, higher implementation costs, and inefficient network outcomes. Similarly, the knowledge supports trials in other jurisdictions looking at different elements of flexible markets.

2.5.4 EV Grid 2.0

Benefit description: This initiative aims to deliver tangible benefits for customers and charge point operators. It seeks to improve network efficiency, with long-term benefits at scale from peak demand reduction and minimum demand increases.

Table 10: Benefits - EV Grid 2.0

Innovation Portfolio Benefit	Benefit	Estimated Quantification	Possible Benefits at Scale
Network Load factor	Peak demand reduction	58,400 kWh per year across 10 chargers	Reduction in unserved energy
Solar (export) Reliability	Minimum demand increase	160,600 kWh per year across 10 chargers	Reduces CER curtailment.
Affordability	charge point operator estimated savings	up to \$1460 annually per charger	Savings may be passed on to customers by CPO

Innovation Portfolio Benefit	Benefit	Estimated Quantification	Possible Benefits at Scale
Energy Equity	carbon offset	Approximately 175 tonnes of CO ₂ emissions avoided p.a.	Emissions reduction (risk reduction)

What is the risk of not doing this project?

Public EV charging demand is set to surge. Without this project, infrastructure will be deployed without grid awareness, leaving operators with no flexibility to optimise charging in line with network needs. This will drive up operating and charging costs, potentially discouraging transport electrification.

3. Framework

JEN largely accepts the AER's draft decision around the Innovation Fund's governance structure and framework.

3.1 Stakeholder & collaborator engagement since lodging our initial submission

In addition to conversations with both our Customer Council and Energy Reference Group JEN has developed a short animated video to explain the purpose of the proposed Innovation Fund to key stakeholders and likely collaborators.⁸

3.2 Handback mechanism

JEN acknowledges AER's draft decision that a use-it-or-lose-it handback mechanism does not align with the National Electricity Rules as they currently stand. JEN is committed to working with AER on an alternative solution to reduce customer risk whilst still enabling the necessary flexibility to deliver innovation.

In order to reduce the risk of underspend without a handback mechanism, JEN has critically revised the proposed Innovation Fund portfolio from 15 projects to 4 which improves deliverability.

⁸ This video can be views here: <https://youtu.be/zWOs9wpovAs>

Appendix A

Supporting Materials

A1. Stakeholder Explanatory Video

JEN has developed a short, animated video to provide stakeholders with a brief understanding of the design of the fund and how it is intended to be delivered.:

<https://youtu.be/zWOs9wpoyAs>



Figure 1: Stakeholder Explanation Video

A2. Letters of Support

JEN - RP – Att 03-03 Innovation Fund – Letters of Support – 20251201 includes letters of support, received in August 2025 in support of our EV Grid 2.0 grant proposal. JEN is aware that stakeholders are planning to submit similar letters to the AER directly.