

Meeting Date: 27 February 2025

POWER INNOVATION PATHWAY

SECURITY AND RELIABILITY COUNCIL

This paper introduces a presentation from the Authority's Corporate and Market Services team on the Authority's Power Innovation Pathway, supporting security and reliability through enabling innovators' access to regulatory information and support to bring fresh ideas to market faster.

Note: This paper has been prepared for the purpose of the Security and Reliability Council (SRC). Content should not be interpreted as representing the views or policy of the Electricity Authority except where specifically noted.

Power Innovation Pathway

1. Introduction

- 1.1. The SRC has asked the secretariat to arrange an update from the Authority on the Power Innovation Pathway, launched by the Authority in September 2024.
- 1.2. Personnel leading this work at the Authority will present an update on the pathway, its aim and focus and how it supports security and reliability.
- 1.3. The presentation will include lessons from round 1 of applications. SRC members are encouraged to consider what feedback they have for the Authority that may be incorporated into future application rounds to address any issues and maximise the opportunity this work presents.
- 1.4. Further information about the Power Innovation Pathway is available [here](#)
- 1.5. The presentation is included as **Appendix A** to this paper.

2. Questions for the SRC to consider

The SRC is asked to consider the following general questions.

- Q1.** What further information, if any, does the SRC wish to have provided to it about the Power Innovation Pathway?

Q2. What, if any, barriers can members identify to sector engagement with the pathway?

Q3. What advice, if any, does the SRC wish to provide to the Authority?

3. Appendix A: Power Innovation Pathway presentation

Power Innovation Pathway

February 2025 Security and Reliability Council quarterly meeting

Overview

The SRC has indicated interest in:

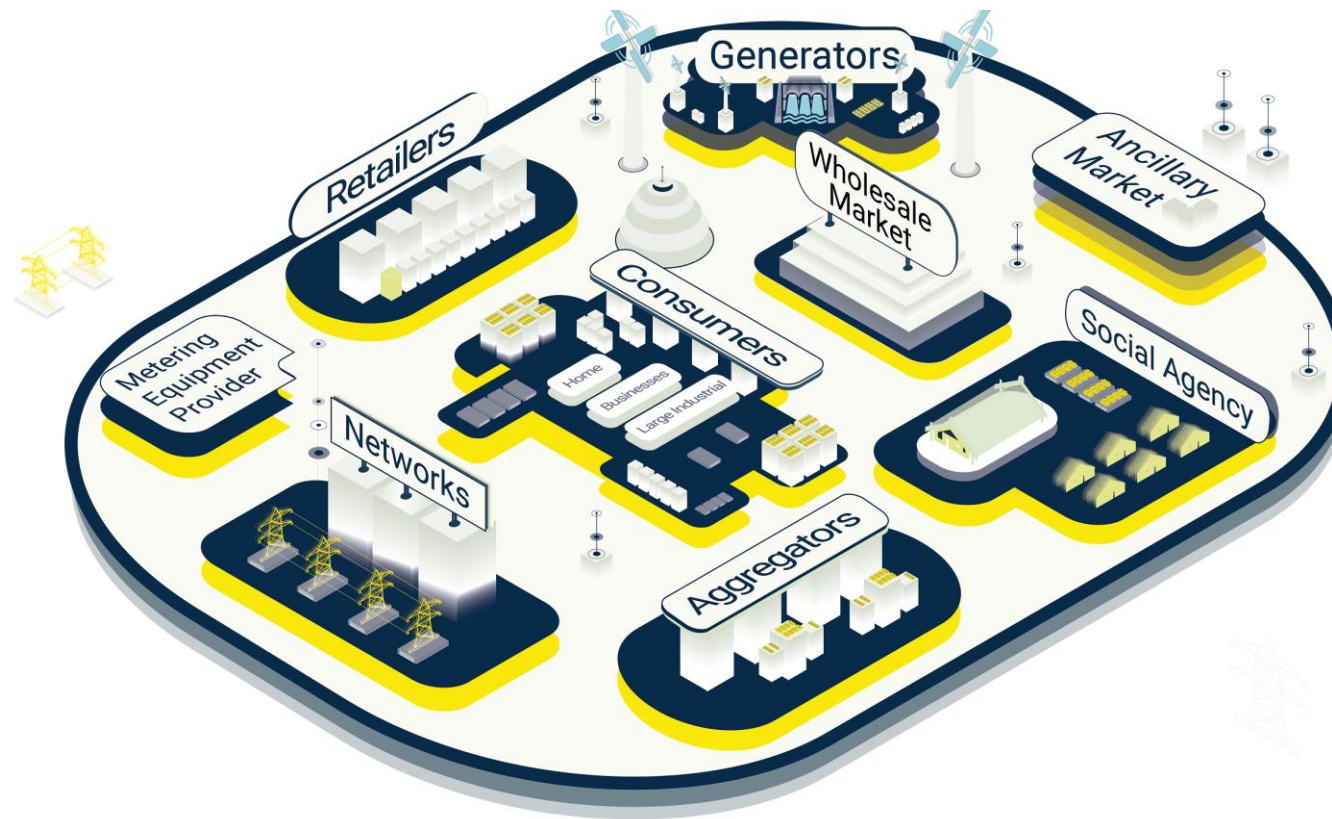
- The scope of the Pathway
- How the Pathway can help support a secure and stable electricity supply
- Learnings from the initiative so far
- Lessons from similar initiatives overseas
- The future of the Pathway
- Any messages for the sector to maximise the opportunities it presents

Our challenge

- How can regulation keep up with the pace of change in the sector – change in technology, business models, and consumer preferences?
- How can we understand and meet the needs of new and/or smaller players looking to innovate?
- How can we support participants who are facing real or perceived regulatory barriers?

The Power Innovation Pathway

An **open door** to regulatory advice and support to **accelerate the delivery of significant consumer benefits** through supporting and enabling innovation.



The Pathway aims to deliver enhanced market outcomes

The purpose of the Pathway is to provide the Authority **an additional mechanism to achieve its vision and strategic outcomes.**



Open access for innovators

An accessible, structured process for innovators to engage with us and receive the regulatory guidance you need.



Regulatory clarity

Addressing real or perceived regulatory barriers to help innovators progress their ideas more efficiently.



Accelerating high-value ideas

Supporting innovative ideas with potential to deliver significant benefit to electricity consumers.



Deepening market understanding

Builds the Authority's understanding of emerging opportunities and barriers, to enable more effective and adaptive regulation.

The scope of the Pathway is broad as anyone can apply, with applications to date ranging from individuals with innovative ideas to international businesses looking to pilot their technology in New Zealand.

The Authority will provide bespoke enhanced support to initiatives where **the focus is on enabling flexibility, increasing security of supply and regional resilience, and utilising data for better system performance.**

Enhanced support via the Pathway

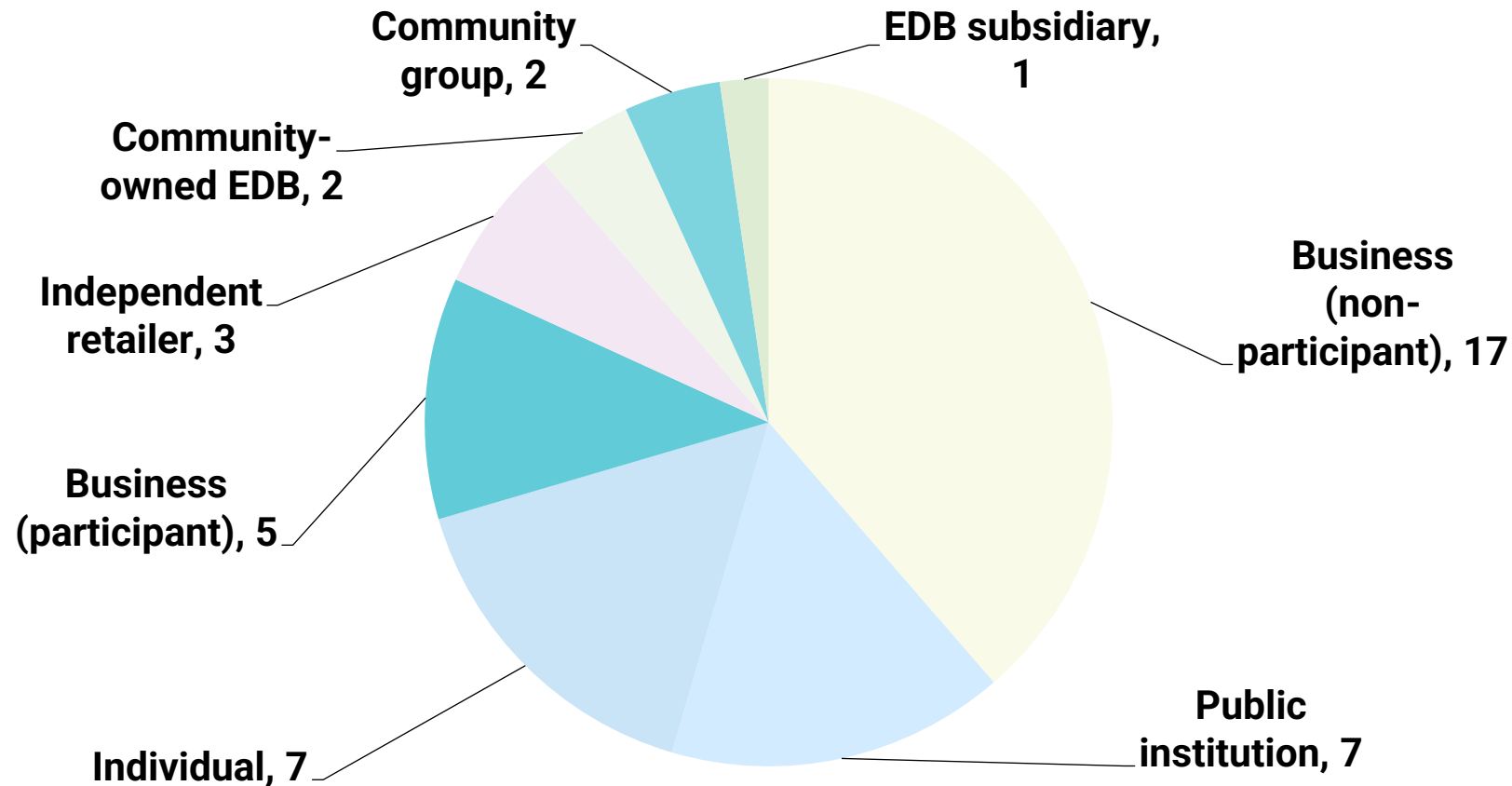
Providing specific Code support to innovators

Supporting trial scoping to inform regulatory activities

Pilot observer to connect findings to Authority workstreams

Accelerating high-value ideas through regulatory exemptions.

Learnings: Diverse applicants



Learnings: Diverse applications

Application themes

Round 1 Power Innovation Pathway

11

Learn-by-doing trials

Demonstrating novel ways to deliver consumer benefits.

15

Innovator cohort

To provide perspectives that could inform the Authority's workplan.

2

Code specific support

Helping innovators interpret the Electricity Industry Participation Code.

21

Innovative ideas, no support required

Where applicants are providing visibility to the Authority.

Learnings: How the Pathway supports Security of Supply?

Initiative	Applicant	How it's supporting SoS
Prompt Electricity Market	Aotearoa Energy	A trading platform offering access to CfDs and electronic derivatives to incentivise the build/dispatch of generation which would not occur under current market conditions.
Smart panel demand flexibility trial	Basis	A trial to demonstrate Basis' Smart Panel with a focus to implement flexibility protocols in coordination with gain access to other value-stack opportunities (such as VPPs).
End-to-end flexibility platform pilot	Our Energy/Cortexo	The integration a local market flexibility platform and the FlexViz dispatch platform to provide an end-to-end offering for flexibility service providers and buyers (EDBs/system operator).
Dispatchable Demand pilot	Simply Energy	A Dispatchable Demand pilot for a load customer (distinct from a BESS) to assist in the development of their systems and experience iteratively while enabling challenges with DD participation to be identified, quantified and analysed.
Winter peak innovation pilot 2	Ara Ake	A trial using Dispatch Notification where flexibility providers can be dispatched by the system operator in advance of a low residual event and be compensated for the service.

Learnings: Similar overseas programmes

ofgem Innovation Hub

Fast Frank Feedback: Support for innovators looking for feedback on the regulatory implications of their propositions or help navigating the sector.

Energy Regulation Sandbox: To help innovators trial or bring to market new propositions without some of the usual rules applying. Open to innovators who want to offer something different but are facing a 'rule-based' barrier.

Over five years, Ofgem's Innovation Hub has provided bespoke support to 470+ innovators.



Innovation Enquiry Service: Informal guidance to innovators on energy regulations that might apply to their business idea and their options to launch under current energy frameworks.

Regulatory sandboxing trials: Enabling trial waivers or rules for innovators to test business models that would be blocked under current regulatory frameworks.

In year 1 (2023), the Toolbox had 40 IES inquiries and 6 trial submissions (one trial waiver granted).



The future of the Pathway: Enhanced Support

The *Statement of performance expectations 2024/25* notes:

- A small number of initiatives will receive full support to accelerate progress, with the aim of getting these to market faster to benefit consumers
- Applications will be triaged, with the first tranche of supported projects selected by February 2025.

Projects being supported as part of the first tranche include:

- ***Dispatchable Demand pilot (Simply Energy)***
- ***DSO/TSO in-field pilot (Counties Energy)***
- ***End-to-end flexibility platform pilot (Our Energy/Cortexo)***
- ***Franklin energy sharing pilot (Ara Ake/Counties/Climate Connect)***
- ***Prompt electricity market (Aotearoa Energy)***
- ***Smart panel demand flexibility trial (Basis)***
- ***Voluntary tariff for community donations (The Lines Company)***

The future of the Pathway: Linking to EA workstreams

Two key insights gleaned from early conversations with innovators is that:

- **the way the Authority engages with the sector does not work for them, and**
- **their perspectives have the potential to inform the Authority's work programme and strategy going forward to create a more efficient, affordable and secure electricity system.**

Power Innovation Pathway Day

- An event is being planned **to present the learnings from the Pathway to date and capture innovator perspectives** - in a way which works for them - with potential to inform the Authority's work programme.
- **Key workstreams which the Pathway will inform are Decentralisation and Digitalisation.**
- This event will be attended by innovators, Authority leadership and subject matter experts, as well as externals including the Commerce Commission, MBIE, EECA, Ara Ake and others **to allow innovators easy access to engage with usually 'hard-to-reach' people.**

The future of the Pathway: What success looks like...

v0.1

Success in 2024-25:

1. Industry innovators are supported (*1 trial, many innovators receive advice*)
2. Proof of concept delivered in a way that engages the wider sector (*an end-to-end service is tested*)
3. New ways of working for the Authority to deliver its role explored (*processes to enhance productivity*)

On track to
deliver all three

v1.0

Success in 2025-26 means:

1. Industry innovators are supported (*2+ trials, proactive innovator outreach*)
2. Service iterated and internationally recognised
3. New ways of working for the Authority to deliver its role explored (*technology to enhance productivity - process automation and use of generative AI*)

v2.0

Success in 2030 means:

1. Accessible and proactive innovation support and advice is part of BAU across industry
2. Authority has a track record of enabling innovation to measurably enhance consumer value
3. Service continues to iterate, with some elements being self-service or largely automated (*e.g. digitalised Code advice*)

Message to the sector.....Put in an application to the Pathway

- **If you want to do something different** which you think will benefit electricity consumers, **but you aren't sure about the regulatory rules** and need some guidance, or
- **If you want to do something different and you're aware of the regulatory rules, but there is a clear barrier** limiting the potential of your innovation, or
- **If you are coming across regulator barriers in your business-as-usual** which is making your operations less efficient.

The purpose of the Pathway is to enable innovation and to accelerate bringing new products, services or business models to market with the potential to benefit electricity consumers **by lowering real or perceived regulatory barriers:**

- **This can only be done if the Authority is brought along for the journey.**

The Pathway shows a clear intention and interest from the Authority in doing things differently to make a more efficient, affordable and secure electricity system - **The Pathway is here to help and we look forward to hearing from you.**