Innovation and Non-Traditional Solutions Allowance Application: Local flexibility market platform

Commerce Commission

April 2025

POWERCO

INTSA application
Local flexibility market platform

Contents

1. Summary of Powerco allowance and INTSA applications

A summary of the proposed recovery in this application is provided in Table 1, along with a cumulative allowance recovery through the DPP4 period. Powerco's Innovation and Non-Traditional Solutions Allowance (INTSA) allowance limit is $20.1 million with 25% of that for collaborative projects only.

Table 1 Recovery proposal capex and opex

	Description	Purpose	FY26 recovery proposal		FY27 recovery proposal	
			Capex	Opex	Capex	Opex
Local flexibility market (this application)	Develop a platform that engages with and recruits flexibility service providers to register their flexible distributed energy resources	The platform will enable EDBs to broadcast requirements and procure local flexibility.	$0	$195,200	$0	$84,800
Recovery in this application						$280,000
Allowance recovery approved in previous applications – Powerco						$0
Allowance recovery approved in previous applications – collaborative						$0
Remaining allowance – Powerco						$15,075,000
Remaining allowance – collaborative						$4,745,000
Total allowance						**$20,100,000**

2. Introduction

2.1 Purpose of this report

This is Powerco Limited's ("Powerco", "we") application for the innovation and non-traditional solutions allowance (INTSA), for one project planned across FY26 and FY27. This report collates the information required for the Commerce Commission (the Commission) to be satisfied that the project meets the requirements for recovery of the nominated allowance for FY26 and FY27.

This application covers the following projects/programmes:

- **Development and rollout of a local flexibility market**.

The project spans two financial years in the set up and rollout of the project. This application seeks approval for the costs forecast in FY26 and FY27. The project is a collaborative project with Vector, Alpine Energy and Our Energy. Vector and Alpine Energy will lodge separate applications at the same time or shortly after this application is lodged.

We are happy to discuss any aspects of this application with the Commission. The first point of contact for this application is Irene Clarke Policy Manager, Irene.Clarke@powerco.co.nz. No parts of this application are confidential, and we will publish this report in full.

2.2 INTSA requirements

Under the Default Price-Quality Path Determination, Electricity Distribution Businesses (EDBs) may make an application to the Commission for approval of recovery of the allowance under Schedule 5.3 of the Determination[1]. This report is guided by the requirements in Schedule 5.3. We have provided check list against Schedule 5.3 in Appendix 1.

A local flexibility market is a non-traditional approach of reducing or shifting peak demand to meet network capacity needs, compared to conventional network reinforcement. This project will be an early trial of a local flexibility market, and the first one that Powerco is testing.

The full Powerco allowance available under Schedule 5.3 is $20.1 million (with 25% for collaborative projects only). This application is for drawdown of $280,000. A breakdown of our allowance is provided in section 1.

2.3 Powerco's commitment to innovation and customer outcomes in our vision to Grow to zero

Where and when energy is consumed is changing. As sectors decarbonise, we anticipate increasing peaks in demand driven by the uptake of electric vehicles (EVs), industrial electrification, and distributed energy resources. These shifts will require a more flexible and resilient network, capable of accommodating new demand profiles and bidirectional energy flows.

To support this transition, we are investing in:

- Modernised network architecture to integrate and optimise new energy technologies.
- Smart grid solutions that enhance visibility, forecasting, and real-time network management.

[1] Determination: 5BFINAL5D-Electricity-Distribution-Services-Default-Price-Quality-Path-Determination-2025-5B20245D-20-November-2024.pdf

- Targeted capacity upgrades to support increasing electrification where needed.
- Enabling flexible energy use, including demand response and local energy trading.

To adapt to the evolving role of electricity distribution, Powerco is transitioning towards becoming a data-driven distribution system operator (DSO), where real-time intelligence, automation, and digital innovation will underpin how we operate and manage the network. Our data, digital, and innovation strategy is central to this transformation and includes four elements:

- Digital grid modernisation
- Data-driven decision making
- Customer and market integration
- Automation and flexibility.

This transformation is essential to supporting New Zealand's energy transition and economic growth, ensuring our infrastructure can meet the demands of a low-emissions future while delivering greater efficiency, reliability, and customer value.

During 2024 Powerco adopted a strategic goal to be a fully operational DSO by 2030 with anticipated benefits:

- Reducing the medium to longer term need for network investment, thereby helping to reduce energy cost to customers (in comparison with the counterfactual of conventional investment) without compromising service levels
- Supporting New Zealand's decarbonisation through electrification, by offering customers financial incentives and removing barriers to connecting distributed energy resources, particularly renewable generation, to the network
- Improving energy security, through accelerating network modernisation and cost-effectively improving supply resilience.

Engaging flexibility services is a core function of a successful DSO. The development of a flexibility market (this application project), with the platform on which it will be operated, is therefore an important enabling step towards achieving our DSO goal.

Chapter 7 of our Asset Management Plan 2023 outlines our evolving asset management strategies[2]. In our 2025 Asset Management Plan update[3] we have further outlined our DSO strategy (section 2.3), data and digital strategy (section 2.4), and DSO initiatives planned for the current year (section 3.2).

By embracing decarbonisation, digitalisation, and customer-centricity, Powerco is dedicated to not only meeting today's energy needs but also laying the foundations for a more sustainable, resilient, and innovative electricity future.

[2] 2023-electricity-asset-management-plan.pdf (powerco.co.nz)

[3] 2025 Asset management plan update available from 1 April 2025 here: Electricity disclosures

3. Project information: Local flexibility market platform

3.1 Project purpose and steps to achieve the purpose

The purpose of the project is to test a local flexibility market solution. This is a response to the way households, businesses and communities are changing their use of electricity. Uptake of technologies like solar PV, batteries and electric vehicles (EVs), plus the push for greater electrification and decarbonisation generally, changes when and how local networks are used. To keep the lights on, power bills affordable and support decarbonisation, EDBs like Powerco have a clear imperative to respond to these changes. Continuing to invest in network infrastructure remains necessary, but the use of new tools and solutions such as a local flexibility market is needed too.

The partners in this project will set up a local flexibility market platform which enables EDBs to broadcast requirements and procure local flexibility, and engages with flexibility service providers (FSPs) to register their flexible distributed energy resources (DER).

Our Energy is an energy technology company providing the platform and will collaborate with the EDBs in this project to set up and test the local flexibility market solution, with the intention that this demonstrates the ongoing value proposition and practical application of the solution for both EDBs and FSPs.

The key steps in order to achieve the project purpose are:

1. Develop and initial rollout of platform: prepare use cases relevant across EDBs; agree flex requests; confirm participants (EDBs and FSPs); MVP refinement. The platform will be supported by an international provider of similar services in more developed flexibility markets (Our Energy has a relationship with a UK platform provider).
2. Testing platform in NZ context; on-platform loading, editing, accepting, declining, responding and reporting of flexibility requests; tracking activities
3. User group engagement (parallel with steps 1 and 2)
4. Governance group oversight (parallel with steps 1 and 2)
5. Report on findings
6. Refine and launch a local flexibility market based on the trading platform established.

3.2 The outputs and consumer benefits

3.2.1 Outputs and timing

Initial planning and scoping of this project has been undertaken during FY25 with Alpine Energy, Vector, Our Energy and Powerco. We anticipate commencing the implementation phase of the project as soon as possible from April 2025. The project will have a 20-month programme. All outputs for the project are planned to be completed by November 2026, assuming commencement in April 2025.

Should the project commence in April 2025, the timing and delivery of key outputs will be as follows:

- Through 2025: Platform establishment and testing. Ideally early flexibility service transactions would already take place through the platform.
- December 2025: Issue an interim report on the progress to date and early findings with the flexibility trading platform. This will be for widespread industry use. Output: interim project report.
- January - November 2026: Further testing, fine-tuning and expansion of the platform, while expanding its application

- November 2026: A local flexibility market with clear commercial offerings is in place. Potential for an expanded user base of EDBs and FSPs and growing volume of transactions. Output: local flexibility market in place.
- November 2026: Issue final project report, for wide industry dissemination. Output: final project report.

3.2.2 Consumer benefits

Flexibility services are focused on achieving consumer benefits. This occurs through four benefit categories:

- Reducing electricity line charges (relative to the normal investment counterfactual and over time potentially in real terms, as asset utilisation increases and with increasing electricity volumes)
- Providing consumers the ability to monetise their flexibility services
- Enhancing network resilience where flex services can be applied for this
- Encouraging uptake of low carbon distributed generation and energy storage, by providing additional sources of financing for this.

3.2.3 Anticipated learnings

The project is aimed at development of a flexibility market – bringing EDBs who need flexibility in touch with providers who have such services to sell. International experience shows that a local platform(s) are necessary, and will be need to be developed to suit the local market. The project will bring learnings in platform design from international experience to local context, operation in the New Zealand context and maximising benefit.

The learnings will have application for future local flexibility markets in any New Zealand EDB location. We will share the learnings across EDBs, and FSPs, through the Future Network Forum (ENA) and the FlexForum.

3.3 Eligibility criteria

3.3.1 Relates to the supply of electricity distribution services

The project will provide a platform to coordinate the procurement of flexible distributed energy resources with the EDB's network demand requirements. It is a tool for managing network capacity needs for the EDB's lines services, with flexibility services offering a potential direct substitution or deferral of network investments otherwise required.

3.3.2 Promotes the Part 4 Purpose of the Act

Through providing alternative means of reducing or shifting peak demand, suitable flexibility services could allow network augmentation projects to be deferred or avoided. Provided that these services can be procured at a lower life-cycle cost to conventional network reinforcement, customers will benefit from lower distribution prices.

In addition, flexibility services provide an opportunity for customers to monetise their flexible resources. This includes selling excess generation or storage capacity when needed for network purposes.

Lastly, the ability to procure flexibility services could assist EDBs to maintain general supply during emergency conditions, by reducing non-essential electricity demand or procuring additional capacity.

The project is squarely aimed at promoting the development of a flexibility market – bringing EDBs who need flexibility in touch with providers who have such services to sell. International experience shows that a flexibility trading platform is required for operation of a local flexibility market.

3.3.3 Unlikely financial benefit / sufficiently uncertain benefits

Both criteria are relevant for this project.

The main output from this project will be the establishment of a flexibility trading platform, over which EDBs can communicate their flexibility requirements, flexibility providers can provider their offers and appropriate matching and transactions can occur. The platform will not be owned by Powerco and while our operations will be improved through access to the platform, there is no financial gain in this (it represents an ongoing cost).

Effective application of flexibility services will result in reduced capital investments and ultimately in a lower regulated asset base value (compared with the normal investment counterfactual). That will result in a lower future revenue setting for Powerco. Flexibility broadly represents a shift in value from shareholders to customers, especially under current regulatory settings.

The setting up of a flexibility market is new to New Zealand and its success is still to be proven. Given this uncertainty and also reflecting that the market and benefits will cross between EDBs and other industry participants, it falls outside the normal risk range of lines business investments. Absent INTSA funding this investment, while seen as necessary for effective DSO operations, the project would not be able to stand up against day-to-day operational requirements and would accordingly be highly unlikely to be funded from Powerco's operational expenditure allowance.

3.4 Project phases and forecast costs

The forecast costs of the project for each disclosure year are outlined in Table 2. All costs are GST exclusive.

The costs of the platform development, testing and reporting are based on draft agreement and forecast provided to Powerco by Our Energy. This cost is established based on their knowledge of international experience in platform development, sources of funding contributing to this project, and the parties engaged in this project (see section 3.6). All EDBs involved in the project will contribute the same cost to Our Energy. Powerco is satisfied that this cost is appropriate for the project.

The development costs are primarily a lump sum cost for set up of the project and the platform, while the testing and roll out cost are based on a monthly forecast during the rollout phase.

The internal project management and integration cost is forecast based on the length of the project, monthly staff time commitment to work on the project, and project time-cost for that staff member. The internal work will involve both coordination/input/management with Our Energy and other project parties, as well as working internally within Powerco on integration with our systems and processes, and learnings capture.

The proportion of the forecast project costs proposed to be recovered is 100%. As outlined in section 3.3.3, this project, while potentially significantly beneficial to our customers, will represent an ongoing cost to Powerco, with no direct financial benefits. Therefore, the full risk of the project is sought to be recovered from the INTSA.

Table 2 Forecast costs

	Cost for output year 1 (FY26)	Cost for output year 2 (FY27)
Output – develop platform and interim report (Our Energy)	$68,000	$0
Output – test platform through to rollout and final report (Our Energy)	$84,000	$56,000
Internal project management and integration	$43,200	$28,800
Total per financial year	$195,200	$84,800
Total cost of project		$280,000

3.5 SAIDI and SAIFI

In delivering this project, we do not anticipate any SAIDI and SAIFI impact. We are not seeking any SAIDI and SAIFI values to be excluded under Schedule 3.1 or 3.2.

We do note however, that the actual future application of flexibility solutions, which could be supported through this platform, could present a changing SAIDI and SAIFI exposure.

3.6 Parties to this project and collaboration

This project is a collaborative project. Initial planning and scoping of this project has been undertaken with the following partners:

- Alpine Energy
- Vector
- Our Energy

We are now ready to enter into the development and testing of the platform. Powerco will enter an agreement with Our Energy. The same agreement will be entered separately by Vector, Alpine Energy and/or potentially other EDBs. Each EDB engaged in the project will contribute the same funding to Our Energy. Separate applications to the Commission for INTSA should be expected from other EDBs involved in the project. These are anticipated to be lodged with the Commission concurrently, or shortly after this Powerco application.

Our Energy will project manage the project with the EDBs including establishing appropriate governance structures. The project scope, process and funding is established by Our Energy to enable additional EDBs, or other parties with an interest in the pilot, to join the project during the development phase.

A flexibility platform pilot by Our Energy is one of six initiatives selected by the Electricity Authority for regulatory support through its Power Innovation Pathway[4], recognising its value in unlocking innovation in New Zealand's electricity sector to improved long-term outcomes for consumers.

[4] Electricity Authority's Power Innovation Pathway fast-tracks energy innovation through six high-value initiatives | Electricity Authority

4. Preparing this application and meeting schedule 5.3 requirements

4.1 Addressing the Schedule 5.3 criteria

In Appendix 1, we have outlined the criteria for the innovation allowance in Schedule 5.3. Table 3 confirms each criterion has been addressed and identifies where in this application the relevant information can be found. We are satisfied that all the criteria have been addressed.

4.2 Liaison with the Commission

We understand that Our Energy have been in discussions with the Commission about this project, explaining its intent and scope. If the Commission requires further information for its evaluation of the project, we'd happily provide more details or arrange further meetings with the project partners, including Our Energy.

4.3 Reporting on completed projects and sharing learnings

The Commission has emphasised the focus of the INTSA to encourage projects with learnings that will benefit NZ Inc. We acknowledge that reporting on the projects and sharing learnings with other EDBs is critical. Should this application be successful, Powerco anticipates the following activities to share learnings:

- Prepare report as required by Schedule 5.3 (14). The report will be made available on our website and also to Our Energy for further dissemination.
- Share updates on our application, key findings and related reports on our website and social media channels
- Present an overview of the project and key learnings to a suitable ENA or EEA or other industry forum to raise awareness amongst all EDBs. For example, an ENA Future Networks Forum Innovation meeting would be an ideal venue.
- On the successful implementation of the platform, we will inform our wider customer base of this. This is to encourage flexibility offers and help develop an active market for flexibility services.

5. Conclusion

Powerco has an active strategy to ready ourselves for the changes in the energy sector ahead. An underlying direction for our Strategy is to drive innovation, with Powerco taking an active role in identifying and testing non-traditional solutions and new technology. This will not only be an integral part of operating our future network, but it will also provide longer-term outcomes for our customers. In our focus on connecting communities and best outcomes for customers, the non-traditional solution being tested through this application, demonstrates our Customer Commitments (refer Appendix 2)[5].

[5] Information on Powerco's Customer Commitments: Customer Commitments

Appendix 1 – Check of application against Schedule 5.3 requirements

Table 3 Innovation project allowance criteria and how the requirement is met

Schedule 5.3 requirement	How the requirement is met
(2) A non-exempt EDB may at any point prior to six months before the end of the DPP regulatory period submit an INTSA proposal to the Commission.	This application is made before the stated deadline
(3) If a non-exempt EDB proposes to work together with 1 or more other EDBs to carry out the project or programme in an INTSA proposal, each non-exempt EDB carrying out the project or programme that proposes to recover any of the forecast costs from the non-exempt EDB's innovation and non-traditional solutions allowance must submit an INTSA proposal.	Refer section 3.6. This project is a collaborative project and each EDB will submit separately.
(4) An INTSA proposal must set out the following:	
(a) the purpose of the project or programme in the INTSA proposal, and the steps that the non-exempt EDB intends to take to achieve that purpose if the Commission approves the INTSA proposal	Refer section 3.1
(b) the INTSA outputs and expected benefits of the project or programme for consumers	Refer section 3.2
(c) the date by which the non-exempt EDB expects all of the INTSA outputs for the project or programme to have been delivered	Refer section 3.2
(d) the forecast costs of the project or programme for each disclosure year up to the date by which the non-exempt EDB expects all of the INTSA outputs to have been delivered	Refer section 3.4
(e) the proportion of the forecast costs of the project or programme that the non-exempt EDB seeks to recover from the non-exempt EDB's innovation and non-traditional solutions allowance (e.g., 75% of the forecast costs of the project or programme)	Refer section 3.4
(f) an estimate of any anticipated SAIDI INTSA values or SAIFI INTSA values that the non-exempt EDB expects to exclude under Schedule 3.1 or 3.2	Refer section 0
(g) the cause or causes of the interruptions for the SAIDI INTSA values and SAIFI INTSA values referred to in subparagraph (f)	Refer section 0
(h) any steps that the non-exempt EDB has taken, or proposes to take, to reduce the likelihood or impact on consumers of any interruptions referred to in subparagraph (f)	Refer section 0
(i) whether the non-exempt EDB intends to work together with 1 or more other EDBs to carry out the project or programme in the INTSA proposal and, if so, how it intends to work together with the other EDBs	Refer section 3.6
(j) sufficient information to enable the Commission to decide under paragraph (7) whether the project or programme meets the eligibility criteria under paragraph (6)	Refer section 3.3

Schedule 5.3 requirement	How the requirement is met
(14) Within 50 working days of the delivery of all of the INTSA outputs for the project or programme in a non-exempt EDB's INTSA proposal that the Commission has approved under paragraph (7), the non-exempt EDB must submit a closeout report to the Commission	We will deliver a report within 50 days of completion of outputs. We do / do not request an extension to the time for submitting a close-out report, but reserve the option of making this request at a later time. Refer section 4.3.
(19) Subject to paragraph (20), the limit on the innovation and non-traditional solutions allowance for each non-exempt EDB for the DPP regulatory period is specified in Table 5.1	Refer section 1
(21) Where a non-exempt EDB considers that it has a right to confidentiality in any information that it provides to the Commission under this Schedule and the non-exempt EDB does not waive the right, the non-exempt EDB must— (a) include that information in an appendix; and (b) clearly mark the information as confidential.	This application does not contain any confidential information

Appendix 2 – Powerco Customer Commitments summary

Customer Commitments, our promise to you

With customers at the centre of everything we do, our customer commitments show the standards we hold ourselves to and how we ensure, and measure, your satisfaction with the mahi we do.

Our customer commitments represent the standards we set for ourselves in terms of engagement, service, quality, impact and sustainability. These commitments are actionable benchmarks that guide our daily operations.

Showing our accountability reinforces our commitment to continuous improvement, ensuring that we are always striving to meet and exceed your expectations.

Find out more

For further information regarding our Customer Commitments visit our website at powerco.co.nz/commitments or scan the QR code below.

We engage with customers and communities to understand their needs

Customers are our priority, and we're committed to understanding their needs and expectations.

We build strong relationships with our customers through consistent, transparent, and two-way communication. This includes collaborating with communities, businesses and stakeholders to engage them in our planning process and clearly communicating decisions and projects that impact them.

By prioritising customer needs, managing expectations transparently, and continuously improving our ways of working, we are designing a network that meets our customer's needs and expectations in both the short and long term.

We are easy to deal with and quick to respond

We are committed to provide timely and effective support. By investing in our people and technology, we aim to deliver a seamless, transparent, and responsive customer service experience.

We achieve this by using multiple communication channels, enhancing digital tools, fostering organisational efficiency, and maintaining a strong focus on customer feedback and satisfaction.

Our customer service aims to make our customers feel supported and valued.

Our network services and solutions provide value to customers

Providing value to our customers is important to us. We do this by ensuring our network services are reliable and tailored to meet their needs. By focusing on smart design and operational excellence, we minimise outages and maintain a steady supply of energy.

Through efficient and transparent investment decisions, we offer better value for money in our network solutions and services. Clear connection charges, distribution prices, and optional pricing flexibility empower customers to make informed decisions.

We minimise the impact of our assets and works on customers and communities

We will minimise the impact of our network and operations on customers and communities by designing and maintaining a reliable energy supply.

In the case of unplanned outages or planned maintenance, we aim to minimise the disruption by prioritising clear and timely communication. We will keep the loss of power to a minimum through effective outage planning, utilising innovative monitoring technology and, where essential, we can offer support such as generation.

On the ground, we aim to minimise any visual, noise, and environmental impacts on our communities.

Our network is future ready and sustainably operated

We're committed to New Zealand's transition to net zero emissions by 2050. We're reducing our emissions by improving our ways of working and using energy efficient and sustainable practices.

Through new technologies, we're preparing our network to meet future energy demands and support our customers' decarbonisation needs.

Our network will enable a sustainable and resilient energy future with tailored services, empowering customers to actively participate in the low-carbon transition through personalised energy choices.


POWERCO