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Via email: [REDACTED]

Tēnā koe Ben,

INTSA application for Powerco as a DSO: response to follow-up questions

Thank you once again for taking the time to meet with us on Friday the 26th of June to discuss our Innovation and Non-traditional Solutions Allowance (INTSA) application for Powerco's development of the core capabilities required to transform into a distribution system operator (DSO). We received your letter requesting further information and have responded to your questions below.

Question 1: Some of the workstreams included in the application seem to relate to projects already funded via INTSA. To the degree that this is the case, please explain why the initial funding has not been sufficient?

While there are strategic linkages, the Powerco DSO INTSA application does not duplicate or seek additional funding for any Powerco projects or work that has already been requested via the INTSA application process. The work outlined in the *Powerco as a DSO* INTSA application is novel to Powerco and, to our understanding, the New Zealand context.

In the table below we highlight what earlier INTSA applications are relevant to the DSO, describing how they complement but do not overlap with that proposed in the *Powerco as a DSO* application.

Table 1: Comparison of some of Powerco's previous INTSA applications with the Powerco as a DSO application

INTSA Project	Scope of the application	How it is distinct from the work under the Powerco as a DSO application
Local flexibility market platform (Submitted on the 8th of April 2025)	Development of a targeted flexibility platform solution, to support the recruitment of flexibility service providers, the registration of flexible distributed energy resources and to facilitate an auction and contracting process for such services.	The activities raised in our DSO INTSA application involves separate but adjacent initiatives – focusing on developing a range of flexibility services. This includes bringing flexible services to market, making the value of flexibility services visible, reducing barriers for standardised flexibility product providers, opening up flexibility market participation and building experience and confidence in using flexibility services to reliably defer or avoid more traditional network solutions.
Demand Forecasting Artificial Intelligence – AI/ML (Submitted on the 17th of October 2025)	The first phase of a potential demand forecasting model leveraging artificial intelligence/machine learning (AI/ML) techniques. Its goal is to develop a partial prototype of a short-term demand forecasting model that utilises AI/ML to provide automated seasonal daily demand profiles at all network nodes.	Powerco recently signed a contract for an off-the-shelf demand forecasting product to provide an immediate, significant step-change in our demand forecasting capability (this was funded outside of INTSA). The 'leveraging our future demand forecasting platform' activity outlined in the Powerco as a DSO application will integrate this off the shelf tool and its outputs into the tools and systems intended to be developed for future DSO capabilities. The off-the-shelf product, and the integration into other tools outlined in the DSO INTSA application is distinct from the first-phase AI/ML prototype work.
Flexible Farm Energy (Submitted on the 2nd of April 2026)	Engaging with rural energy consumers and service providers to understand the impact of changes to energy consumption patterns, particularly on dairy farms. This sector is experiencing rapid growth in DG uptake. Early and meaningful engagement will create an opportunity to develop DSO solutions that maximise benefits to customers and the network from these new installations.	Customer engagement and intelligence is core to a DSO. The DSO INTSA application involves gaining insights about our broader customer base, as well as focusing on particular customer segments (excluding dairy farming). It is intended to engage with customers to understand how, why and when they may want to interact with a DSO, flexibility or other new forms of energy technology and what they see as the value from these. The insights gained will provide essential inputs for Powerco's DSO work, helping us ensure our services align with what customers need and value.

Question 2: Contractors represent approximately 40% of the forecast expenditure on the project. Could you please explain the factors driving the proposed level of contractor expenditure and the role contractors are expected to play in delivery?

The proposed contractor expenditure reflects the scale, complexity and novel nature of the DSO application. The capabilities being developed through this programme are new to Powerco and to the New Zealand energy sector. As a result, this requires access to specialist expertise and capability that is not currently available within Powerco's current workforce.

In addition, (as discussed in the response to the next question), Powerco has some internal capacity constraints as we deliver a number of strategic objectives in parallel. Where appropriate, external providers will be used to help alleviate these constraints. (Our DPP4 settings did not anticipate the DSO program and associated resource requirements.)

Contractors are not intended to replace Powerco ownership or deliverability of the programme. Powerco employees will provide the programme leadership, governance, strategic direction and subject matter expertise, while contractors will primarily provide specialist skills, delivery support in areas where capability is emerging or not currently available, and subject matter expertise if not available at Powerco. Given this, contractors are expected to play several roles within the delivery of this application, including:

- Supporting the design, development of new tools, systems and processes.
- Transferring knowledge and capability to Powerco employees as the programme progresses.
- Providing additional delivery capacity for periods of high programme activity, or where internal Powerco resources are not available.

The combination of these factors leads us to rely more heavily on external service providers than would typically be the case for a more conventional project or development programme. The use of external support will enable resourcing flexibility and security, meaning we can be confident that we can ensure delivery of the programme as required.

Question 3: Powerco is undertaking a number of strategic initiatives in parallel. Could you outline any risks this may present for delivery of the DSO project, and how those risks are being managed?

Powerco has a number of key strategic initiatives to deliver over the coming years. Alongside our DSO transformation, we are currently integrating the Firstlight network into the existing Powerco network (pending the completion of final contractual arrangements) and completing a substantive transformation of our customer service approach. These initiatives are complementary and intentionally designed to support a common strategic objective of being the most customer focused infrastructure provider. The primary risks associated with delivering multiple strategic initiatives concurrently include:

- Competition for internal specialist resources and subject matter expertise.
- Competing delivery priorities across programmes.
- Dependencies between programmes.
- Potential for emerging regulatory, market or technology developments that may alter programme priorities and focus.

Powerco is actively managing these risks, and several measures are being (or have been) implemented to do so:

- Increased use of consultants and external service providers, to help deliver initiatives and ensure we have adequate resources and expertise (as mentioned in the answer to the previous question).
- Ensuring work programmes are targeted to best utilise critical internal resources, such as for change management and IS integration.
- Centralised management of the DSO transformation, supported by a company-wide agreed roadmap, to avoid ad hoc or potentially conflicting priorities or capability development. This also helps ensure DSO capabilities can be more immediately integrated into BAU processes and deliver faster benefits.
- Careful scheduling of the delivery plan to reflect programme priorities and the capacity of internal teams to support delivery or integrate new business processes.
- Uplifting strategic planning and programme management capability across the organisation.
- Dedicated governance and oversight (see our response to question 6 for more information on this).

Together, these measures are anticipated to reduce delivery risk and help the effective and efficient delivery of the DSO programme within the desired timeframe. Resourcing risks will however remain an ongoing focus point for the DSO team and Powerco leadership.

Question 4: One of the stated objectives of the programme is to provide input to DPP5 decisions. Could you provide examples of the outputs or insights that you expect could be used to inform future regulatory settings?

DPP4 is all about testing DSO capability to build an evidence base that informs Powerco's DPP5 advocacy and positioning. We will utilise existing reporting obligations, such as AMPs and INTSA reporting, to highlight the impacts of operationalising DSO capabilities as well as input into the DPP5 consultation process. The intended DSO improvements and investments will be explicitly called out and also compared to the counterfactual (maintaining more traditional network solutions). An essential prerequisite for investing in the DSO and flexible solutions, is that it has to demonstrate net life-cycle benefits to customers, either from adopting lower cost solutions or providing service improvements (that provide value to customers above the cost to achieve these). In our 2026 AMP we have included assumptions of the DSO benefits of deferred capex investment. In future AMPs we will provide further detail, understanding and transparency of DSO benefits.

Delivering DSO benefits, will require significant internal changes to our business model, systems, capabilities and operations. As we progress with these changes we anticipate we will get a better understanding of any

regulatory mechanisms or barriers that might need to evolve with it. We are aiming to get a better understanding and provide the Commission with evidence on:

- The extent of the shift from capex to opex. While we know flexibility will cause such a shift, we don't yet understand how much, the timing impact or how this interacts with regulatory mechanisms such as IRIS. As there is currently no flexibility market in place in Aotearoa, our DSO INTSA work will accelerate the development of these markets and help develop an understanding of how flexibility providers will engage with the market, and how these impact our cost base.
- Understanding the service customers want and expect from a DSO. Given the way customers are using the network is changing and we are developing new service offerings, there is a step change in the need for customer engagement, to ensure we are meeting customer service and information expectations.
- Potential new metrics or ways of measuring network performance such as reliability, or utilisation of the network.
- New ways of understanding network investment and providing investment transparency, especially given the use of flexibility.
- New ways of understanding the trade-off between price and quality.
- Understanding of whether there are any barriers in the current regulatory framework which impede becoming a DSO or maximising the benefits of a DSO.

Our intent is to provide the Commerce Commission with evidence and to engage where appropriate on how the desired DSO benefits would be achieved and any impact on the regulatory framework, in order to ensure these benefits are realised. The scope and scale of our DSO INTSA application reflect regulatory timeframes and our desire to have the required settings in place by DPP5.

Question 5: Could you describe the metrics and outcomes that will be used to evaluate the success of the proposed changes?

Our response to this question reflects our interpretation of this question, which we have understood to be asking how we plan to measure success during the INTSA application period, and how do we plan to manage success after.

As our application is centred around the development of core DSO capabilities, the overall outcome we will use to measure our success is whether these capabilities have been developed or not. We plan to measure the success of the work outlined in the *Powerco as a DSO* application through our proposed capability readiness indicators (highlighted in section 4.2.1 of our application):

Table 2: The indicators used to measure success during the application period

Desired customer outcome	Capability readiness indicator	Capability being assessed
Developing a deeper network and customer understanding to enable optimal customer-focused decision-making	Customer	Quantifiable understanding of what customers value and how this is used to inform aspects of DSO capability prioritisation, development and delivery.
	Network	The development of a granular and probabilistic understanding of our network and the optimisation of the proposed programme of future works.
Enabling and supporting the development of products and markets that allow customers to define their energy relationships in new ways	Flexible connections	The ability to offer a range of cost and time effective connection options.
	Flexibility services	The ability to use flexibility as an alternative to standard network offerings and investment.
Achieving a dynamically operated, stable and reliable network	DER orchestration	The ability to optimally facilitate market orchestration of DER that ensures a reliable, efficient and stable network.
	Flexibility dispatch	The ability to send signals to customers or flexibility service providers to dispatch or signal need for flexibility.

We will base-line the above indicators, and then have them annually reviewed, using independent external experts, along with more regular internal progress reviews. The independent external experts will establish an assessment framework and will assess our progress against this framework through the INTSA funding period.

Following the completion of the work outlined in the INTSA application, we will shift from monitoring the development of our DSO capabilities, to measuring the performance of our DSO. We plan to develop performance benchmarks as we evolve and integrate our DSO capabilities – they will sit at both a programme level and a capability level and will likely be similar to those utilised by DSOs from Australia and the United Kingdom (noting that there is still much ongoing debate about suitable DSO performance measures). The table below provides an example of the types of measures we may look to use, and that are similar to international examples.

Table 3: Examples of the types of indicators that could be used to measure success after the application period

Desired customer outcome	Capability area	Key Performance Indicator
Developing a deeper network and customer understanding to enable optimal customer-focused decision-making	Customer	Mass Market Customer Expectations - Percentage of customers satisfied with the quality of supply provided at the cost it is provided Commercial Customers – Percentage of commercial customers who feel the network is aligned with, and does not act as a barrier to, their growth ambitions
	Network	Network Options Assessment - Percentage of network assessments that recommend use of flexibility Network Deferral – Value of deferred or avoided network reinforcement through the use of flexibility, flexible connections, or other DSO activities
Enabling and supporting the development of products and markets that allow customers to define their energy relationships in new ways	Flexible connections	Network Access - MW of flexible connections energised on the network Network Access - Speed of enabling access to the network through flexible connections
	Flexibility services	Flexibility Procurement - MW of flexibility requested Flexibility Procurement - MW of flexibility procured through flexibility contracts
Achieving a dynamically operated, stable and reliable network	DER orchestration	Network Utilisation - Increase in network utilisation achieved through DER orchestration
	Flexibility dispatch	Flexibility Dispatched - MWh of flexibility dispatched to manage network constraints

Although not DSO specific, Powerco will also be assessing itself as a business on metrics such as customer satisfaction, and our performance relative to other EDBs. Given our DSO transformation is an all of business one, these all of business metrics can also provide insights into whether we are succeeding as a DSO.

Question 6: The proposed DSO programme contains multiple workstreams, some of which are expected to evolve over time. Could you describe the governance arrangements for the programme, including stop/go decision points?

The goal of operating as a DSO by FY30 is clear and has been agreed with the Powerco board. While we have a well-researched view on what may be required to achieve this, the uncertain and innovative nature of a DSO transformation means that this understanding will evolve and that the targets for individual deliverables may be tweaked to account for this. Individual deliverables may also be adapted to account for outcomes from earlier initiatives.

To manage the uncertainty inherent with a new, evolving programme, our application outlined the overarching escalation and governance pathways in place to consider changes and make decisions based on this. This includes pathways from the DSO management team, through to the Asset Management Steering Committee, the executive team and/or the Powerco board.

We will follow normal internal programme progress reporting procedures for the initiatives making up the DSO programme. This includes regular (generally monthly) reviews of expenditure, progress, estimated future cost and scope changes and reporting on these to the executive and the board. In addition, we note that Powerco is in the process of uplifting its programme management capabilities for the whole of the business, and we have a newly established programme management office - its resources and expertise, will also be applied to the DSO programme.

More critical progress review points will be formalised under the guidance of our Asset Management Steering Committee. While individual decisions may be subject to different escalation paths, the programme will be reviewed in detail twice a year by this committee. These sessions will be key reflection and decision points on the progress of the programme and each initiative, also allowing for stop/go decisions. (These governance approaches and structures are not new to Powerco - we have arrangements in place to review, monitor and make stop/go decisions on over \$300 million dollars of investment projects each year). Furthermore, Powerco has an established risk management framework which is embedded within these governance structures and is used to identify risks, track issues, prompt rescoping discussions and provide checklists for when investment in an initiative may need to be scaled back or completely cease.

Stop/go decisions will typically follow a multi-step approach. These decision points will be formally documented:

- For all initiatives, there will always be pre-agreed milestone checkpoints against the proposed outcomes from it and the original (or amended) need it was meant to address.
- Reviews considering whether the original need still exists and whether the solution being worked on is still appropriate or the most effective solution. These reviews will occur as part of the periodic programme review sessions.

- Reviews considering the balance between progress on an initiative, the anticipated (customer) value from the initiative already realised or still to be realised, and the amount spent or still to be spent on it. Project governance will consider this question as part of its standard review actions.
- If an initiative fails against one or more of these checks, we will consider the consequences of scaling back or ceasing it. Such decisions will consider how stopping an initiative will impact the rest of the programme given the interdependencies across the programme. Where appropriate, a post-implementation review will be carried out to ensure that we learn from the reasons why an initiative had to be stopped.

Our DSO programme has also been reviewed and validated by an external expert and as such we are confident in the scope and trajectory we have outlined. At the same time, as noted in our answer to question 5, we plan to seek an independent view on how we are succeeding in developing our desired capabilities and whether our work continues to align with international best practices.

The above structures and resources, alongside diligent project management, provide an appropriate amount of scrutiny and checkpoints over the programme to ensure that investment in initiatives will be re-thought or stopped if substantive issues arise.

Question 7: Could you describe any developments regarding potential future phases of the programme that have occurred following submission of the application?

Since our submission of the INTSA application on the 28th of May, there have been a number of relevant developments that could influence (generally further support) our application.

Firstly, the stream of formal and anecdotal feedback on the negative impact of energy prices on households and businesses alike, continues to build. We see this from ongoing customer feedback, media articles¹, regulatory releases,² and the direction set by government³. We expect this pressure to continue to build, emphasising the importance of programmes like our DSO transformation project, the need for change to happen at pace, and to provide optimal customer outcomes at the lowest cost possible.

Both the National and Labour parties have recently announced their intent to support the uptake of household solar PV generation and battery storage⁴ with the intent of reducing barriers to the uptake of solar PV generation. We expect these policies to accelerate the uptake of solar PV and (ideally) battery storage.

¹ For example: A recent New Zealand Herald article from 08/07/2026:

<https://www.nzherald.co.nz/business/companies/energy/energy-minister-simeon-brown-calls-on-power-networks-to-tackle-scale-and-cost-pressures/premium/BHVM43Z755B73FWPNRD7BNSXQM/>

² For example, there was considerable discussion following the recent release by the Electricity Authority of movements in regional energy prices (<https://www.ea.govt.nz/data-and-insights/charts-and-dashboards/regional-power-prices/>)

³ For example, the letter from the Minister for Energy to EDB chief executives on the government's expectations.

⁴ The Labour party announced a "SolarSaver" policy and the National party announced a "Home Energy Fund" policy.

Accommodating distributed generation and providing customer opportunities to participate in the energy market are core functions of a DSO.

In his letter dated 07/07/26, the Minister for Energy recently wrote to the chief executives of all EDBs outlining his expectations that EDBs move to innovate, drive efficiencies, and keep electricity prices affordable. The Electricity Authority also released its "Roadmap for distribution system operation in New Zealand" published on 30/06/26, in which its expectations for EDBs (and industry) progress toward DSO functionality are set out. Both the letter and the roadmap strongly align with our DSO plans and goals. The initiatives included in our INTSA application will help us move quickly and at scale to develop a blueprint, navigate uncertainties and implement the transformation required. It will also provide practical insights into what works well in Aotearoa (and what does not) in meeting the government, customer and regulators' objectives.

The developments noted above reinforces the need and urgency of achieving our DSO objectives, rather than require us to materially adjust our currently proposed programme. There will of course be further development of the DSO post completion of the work covered under the current INTSA. We have already identified some areas that will need further focus⁵ and future work will also be influenced by the outcomes from the earlier stages and potential further regulatory, political or other external changes. However, none of the recent external developments would materially change our current DSO INTSA application.

In conclusion, despite some inevitable delivery uncertainties, we remain strongly of the view that our DSO objectives are an optimal way to support our customers and communities and ensure a resilient and affordable future electricity supply. We expect to learn a lot as we develop our core DSO capabilities and, while our ultimate goal remains clear, our current programme will be amended to best reflect future learnings, which we will continue to share with the rest of our industry. Accessing the requested INTSA amount will allow Powerco to work toward achieving a DSO transformation at scope and scale, also developing a strong blueprint other EDBs could follow.

If you wish to discuss the contents of this letter, or further discuss our application more generally, please do not hesitate to contact me.

Ngā manaakitanga,

Ryno Verster
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POWERCO

⁵ For example: expanding the use of dynamic operating envelopes; developing a market short-run marginal cost pricing engine; integrating true probabilistic planning into our demand forecasting and investment optimisation