Ref: 26/010

24 March 2026

Electricity Authority | Te Mana Hiko
Commerce Commission
EECA

By email to:
distribution.feedback@ea.govt.nz

Tēnā koutou,

RESPONSE TO JOINT LETTER TO DISTRIBUTORS ON NNS (NON-NETWORK SOLUTIONS)

Unison Networks Limited (Unison) and Centralines Limited (Centralines) are consumer-owned electricity distribution businesses serving communities in Hawke's Bay, Taupō, Rotorua, and Central Hawke's Bay. We welcome the joint letter of 24 February 2026 regarding the accelerated development and use of non-network solutions (NNS) and strongly support the shared objective of delivering reliable electricity services at least cost to consumers through a more flexible electricity system.

As consumer-owned entities, we operate in the best interests of the communities we serve. Guided by our vision, and values, we strive to deliver economic benefits to both our customers and community shareholders, while championing a sustainable energy future. We are committed to maintaining the right balance between keeping electricity affordable and making strategic investments that secure the long-term reliability and resilience of our network. In all aspects of our operations, we place strong emphasis on meeting industry compliance requirements, ensuring we uphold all relevant standards. This approach not only supports New Zealand's transition to new energy solutions but also enables our communities to access cleaner, smarter, and more flexible energy options, now and for generations to come.

We acknowledge the alignment signalled across the Commerce Commission, the Electricity Authority and the Energy Efficiency and Conservation Authority. The opportunity identified particularly the scale of forecast network investment and the flexibility potential within distributed energy resources confirms that flexibility represents a system-level opportunity rather than a marginal planning tool.

Executive Summary

The increased development of non-network solutions presents a timely opportunity to support the efficient evolution of New Zealand's electricity system as electrification, distributed energy resources, and demand growth place increasing pressure on network infrastructure.

Unison and Centralines support the shared objective of the Commerce Commission, the Electricity Authority, and EECA to ensure consumers benefit from least-cost investment decisions through greater use of flexibility. The scale of forecast system growth capex,

combined with the emerging potential of flexible demand and distributed technologies, confirms that flexibility should be treated as a system capability, not as a marginal or secondary planning option.

When enabled through appropriate regulatory, pricing, and market settings, flexibility can:

- defer or avoid network reinforcement where demand growth is uncertain or evolving.
- improve utilisation of existing distribution and transmission infrastructure.
- support electrification at a lower overall system cost; and
- deliver long-term affordability and reliability benefits for consumers.

Effective use of non-network solutions requires technology-neutral planning and evaluation, where flexibility and traditional reinforcement are assessed on an equal footing using transparent, comparable methodologies. Flexibility also delivers option value by allowing investment decisions to be deferred until demand, technology uptake, and system conditions are clearer, reducing the risk of premature or stranded assets.

Pricing reform will be a critical enabler of flexibility at scale. Over time, flexibility is expected to become increasingly price-responsive, automated, and mediated through retailers and market services, rather than delivered solely through distributor-controlled load. Well-designed, stable pricing signals aligned with long-run marginal cost principles will support efficient consumer participation while enabling distributors to incorporate price-responsive demand into planning and operational decision-making.

We are already progressing practical enables that align with this direction, including:

- local flexibility initiatives to assess and learn how targeted flexibility can help manage local constraints.
- a pricing discovery journey to explore how evolving price signals can support scalable, automated flexibility over time; and
- collaboration with Counties Energy on dynamic operating envelopes to better manage real-time network limits and safely unlock capacity for customer energy resources.

As flexibility markets mature, regulatory frameworks must continue to support investment neutrality, ensuring distributors can pursue least-cost solutions for consumers regardless of whether those solutions involve capital investment or procured services. Clear cost-causation and cost-allocation principles will also be important to maintain fairness across consumers as distributed energy participation increases.

This submission emphasises that flexibility should be enabled as a whole-of-system capability. Coordinated regulatory, market, and policy settings will be critical to unlocking its full potential while preserving efficient investment signals, supporting electrification, and delivering enduring consumer benefits.

Key takeaway:
Flexibility should be recognised and enabled as a system capability, through the non-network solutions framework, which supports least-cost investment, efficient electrification, and long-term affordability for consumers, rather than as a substitute for network assets.

Flexibility System Map

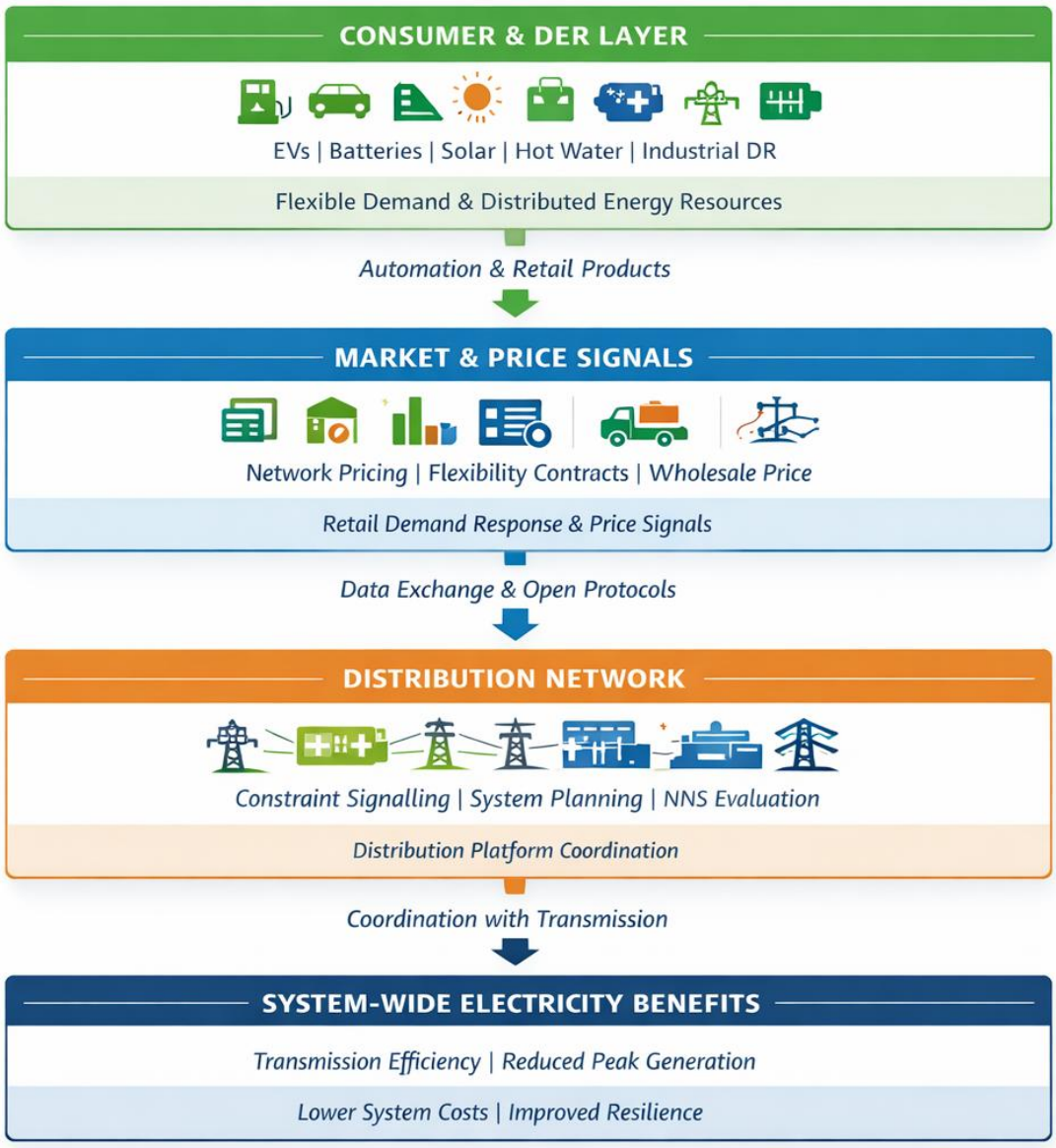


Figure: Flexibility System Map illustrating how distributed energy resources, price signals, distribution networks, and the wider electricity system interact to deliver efficient system outcomes.

Interpretation: Flexibility enables coordinated interaction between consumers, markets, and network infrastructure, allowing electricity demand growth and electrification to be accommodated at lower overall system cost.

1. Reframing the Role of Distributors from Asset Builder to System Enabler

We support the principle that distributors consider non-network solutions alongside traditional network reinforcement when planning investment decisions.

However, this should be understood in a broader context. Distributors are not simply choosing between "network" and "non-network" options; rather, they are enabling a system that can unlock flexibility across consumers, technologies, and markets.

Importantly, consumers do not typically invest in flexible resources with the primary objective of providing flexibility services to the system. Customers invest in consumer energy resources, such as appliances, rooftop PV, batteries, and electric vehicles, to achieve lifestyle outcomes, manage energy costs, and improve sustainability and resilience. These customer motivations reflect a personal energy trilemma rather than a system optimisation objective.

The role of electricity distribution businesses is therefore not to "buy flexibility" from customers, but to efficiently connect these resources, orchestrate their operation where appropriate, maximise utilisation of existing network capacity, and minimise unnecessary network investment. This includes enabling customer participation in emerging markets through standardised protocols, transparent terms, interoperable platforms, and pricing structures that support automated and scalable response.

From this perspective, flexibility functions as a capability layer, not a direct substitute for infrastructure. When effectively integrated, it can deliver a range of system services, including:

- energy shifting
- peak demand reduction
- voltage and power quality support
- congestion management
- transmission support
- system resilience.

Viewing flexibility as a system capability supports:

- efficient infrastructure investment
- competitive electricity markets
- efficient electrification.

Given the early stage of flexibility market development in New Zealand, collaborative experimentation, pilots, and proof-of-concept initiatives are likely to be more effective in the near term than prescriptive regulatory requirements. Such approaches allow learning, refinement, and confidence-building while market structures, technologies, and consumer participation continue to mature.

2. Planning and Evaluation Frameworks

We support the expectation that distributors evaluate traditional network reinforcement and non-network solutions using transparent, consistent, and comparable decision-making methodologies.

Robust evaluation frameworks should incorporate:

- net present value (NPV) assessment
- cost-benefit analysis (CBA)
- deliverability and reliability considerations
- transparent assumptions and disclosure.

International approaches, such as the UK Common Evaluation Methodology, provide useful examples of how flexibility solutions can be assessed on an equal footing with conventional network investment. These frameworks typically include:

- standardised cost-benefit inputs
- consistent treatment of uncertainty and risk
- valuation of deferral benefits
- transparent comparison of investment options.

Adapting similar methodologies for New Zealand should reflect local market characteristics, including retailer-mediated customer relationships and the scale and structure of the electricity system.

Importantly, flexibility also provides option value. By enabling investment deferral, flexibility allows additional information about demand growth, technology uptake, and system conditions to emerge, reducing the risk of premature or stranded infrastructure investment and supporting more efficient long-term outcomes for consumers.

These pricing and market design considerations are already being informed by distributor-led pilots, pricing discovery initiatives, and collaborative trials of enabling technologies such as dynamic operating envelopes.

3. Pricing as an Enabler of Flexibility

Pricing will play a significant role in enabling efficient flexibility outcomes and supporting the development of flexibility markets.

Over time, flexibility is expected to become increasingly price responsive, automated, retailer mediated and market enabled, with consumers and technologies responding to transparent price signals rather than direct operational control by distributors.

This evolution recognises that most customers engage with flexibility indirectly, through the technologies they adopt for personal benefit rather than through active participation in flexibility markets. Well-designed pricing and standardised market arrangements allow these technologies to respond automatically to system needs, enabling scalable participation without requiring customers to actively provide or manage flexibility services.

Historically, distributor-controlled load has provided valuable peak demand management capability. These arrangements will continue to play an important transitional role where automation penetration remains limited or where direct control is necessary to maintain system reliability.

However, emerging technologies such as smart EV chargers, batteries and building management systems increasingly enable automated response to price signals. This supports a shift toward market-based mechanisms, reducing reliance on direct control while allowing flexibility to be delivered at scale.
In this context, efficient network pricing will be critical to unlocking flexibility at scale. Price signals will need to:

- align with long-run marginal cost principles
- be supported by credible and stable price structures
- be monitored to manage emerging peak demand patterns
- enable innovation in retail products and services that facilitate automated response

Well-designed pricing frameworks can support the efficient delivery of flexibility, enable market development, and allow consumers to participate through automated technologies without requiring active or ongoing engagement.

4. Market Development and Interoperability

New Zealand's electricity system has several structural characteristics that should be recognised when designing flexibility frameworks, including the presence of multiple distribution businesses, retailer-mediated customer relationships, diverse network price structures, and differing levels of distributed energy resource (DER) penetration across regions.

Within this context, commercial and industrial customers represent a critical foundation for early flexibility market development. These customers typically have larger and more controllable loads, greater operational sophistication, and a higher capacity to respond to price or contractual signals. As a result, they are well suited to participate in early flexibility arrangements and to support learning, price discovery, and confidence-building as flexibility markets evolve.

Unlocking this potential will require flexibility frameworks that actively enable participation by larger customers, either directly or through intermediaries such as retailers, aggregators, or flexibility service providers. Continued reliance on price structures based primarily on volumetric energy charges risks muting price signals and limiting efficient demand response from customers capable of providing high-value flexibility.

In parallel with the development of national frameworks, electricity distribution businesses are already taking practical steps to build the foundations for scalable flexibility and customer participation. This includes:

- **Local flexibility initiatives**: where distributors are collaborating with customers, retailers, and service providers to test how flexible demand and DER can be coordinated to manage local network constraints and inform future market design.
- **Pricing discovery and learning journeys**: using pilots, analytics, and engagement to better understand customer responses to price signals, automation potential, and the interaction between pricing structures and flexible technologies.

- **Dynamic Operating Envelopes (DOE) initiatives**: including collaborative work with Counties and other partners, to explore how transparent and standardised operating limits can enable greater DER connection, improve network utilisation, and support safe and efficient customer participation over time.

These initiatives reflect an active and coordinated effort by distributors individually, collaboratively, and through industry forums to develop the operational capability, standards, and learnings required to support future flexibility markets in a manner that is efficient, interoperable, and scalable.

Consistent with this direction, we support further consideration of mechanisms that enable large customers to access, test, and participate in flexibility markets at an early stage, including:

- non-residential price structures that better reflect network constraints and capacity drivers.
- demand-based and time-differentiated price signals that support economically efficient demand response.
- trial arrangements and standardised participation pathways that allow market participation to be assessed and scaled over time.

Alongside pricing and market design, interoperable technology standards will be fundamental to supporting competitive and scalable flexibility markets. Effective market development depends on seamless integration across customer assets, networks, retailers, and service providers.

Without coordination, fragmented communication standards and proprietary integration approaches risk increasing transaction costs, limiting competition, and slowing market uptake. Coordinated national direction that promotes open communication standards, standardised data exchange protocols, robust cybersecurity frameworks, and the avoidance of proprietary technology lock-in will be important to enable flexibility markets to scale efficiently from early large-customer participation to broader system adoption.

5. Consumer Outcomes and Affordability

The development of flexibility solutions should be assessed against the objective of delivering efficient, dependable, and affordable electricity services for consumers. Flexibility has the potential to materially reduce the long-term cost of electricity infrastructure by enabling distributors to defer or avoid network reinforcement where demand growth is uncertain or evolving.

However, the consumer benefits of flexibility depend on several conditions being met. In particular:

- flexibility services must be dependable and available during network constraint periods.
- procurement costs must remain lower than the avoided network investment.
- evaluation frameworks must remain technology neutral, allowing flexibility and traditional reinforcement to compete on equal footing.

As flexibility markets mature, the benefits may extend beyond distribution networks to include:

- reduced peak generation requirements.
- improved wholesale market efficiency
- lower overall system costs.

Taken together, these outcomes reinforce that flexibility should not be viewed solely as a network planning tool, but as a mechanism that can improve the overall efficiency and affordability of the electricity system.

Flexibility can also support prudent investment decisions by allowing distributors to defer infrastructure investment until demand growth and technology adoption patterns become clearer. In doing so, it can help reduce the risk of premature investment and potential stranded network assets, supporting efficient long-term outcomes for consumers.

6. Cost Allocation and Distributed Energy Participation

As distributed energy resources continue to grow, it will be important that participation in flexibility markets occurs in a manner that maintains fair and efficient cost allocation across consumers. Distributed energy technologies can deliver valuable system services when they respond to efficient price signals or participate in well-designed flexibility mechanisms.

However, regulatory frameworks must also recognise the potential for cost-shifting where pricing structures do not adequately reflect the underlying drivers of network costs. This can occur, for example, where customers materially reduce their contribution to network cost recovery while continuing to rely on network capacity, or where exported generation creates incremental network costs that are not fully reflected in price signals.

If not carefully managed, these dynamics risk shifting network costs onto consumers who do not have access to distributed technologies, undermining perceptions of fairness and potentially eroding confidence in market and pricing reforms.

Maintaining pricing frameworks that remain aligned with cost-causation principles will therefore be critical to ensuring equitable outcomes across the consumer base while enabling efficient participation in flexibility markets. In this context, ongoing network pricing reform will play a significant role in allowing flexibility and distributed energy participation to develop without creating unintended cross-subsidies between diverse groups of consumers.

7. Whole-of-System Opportunity

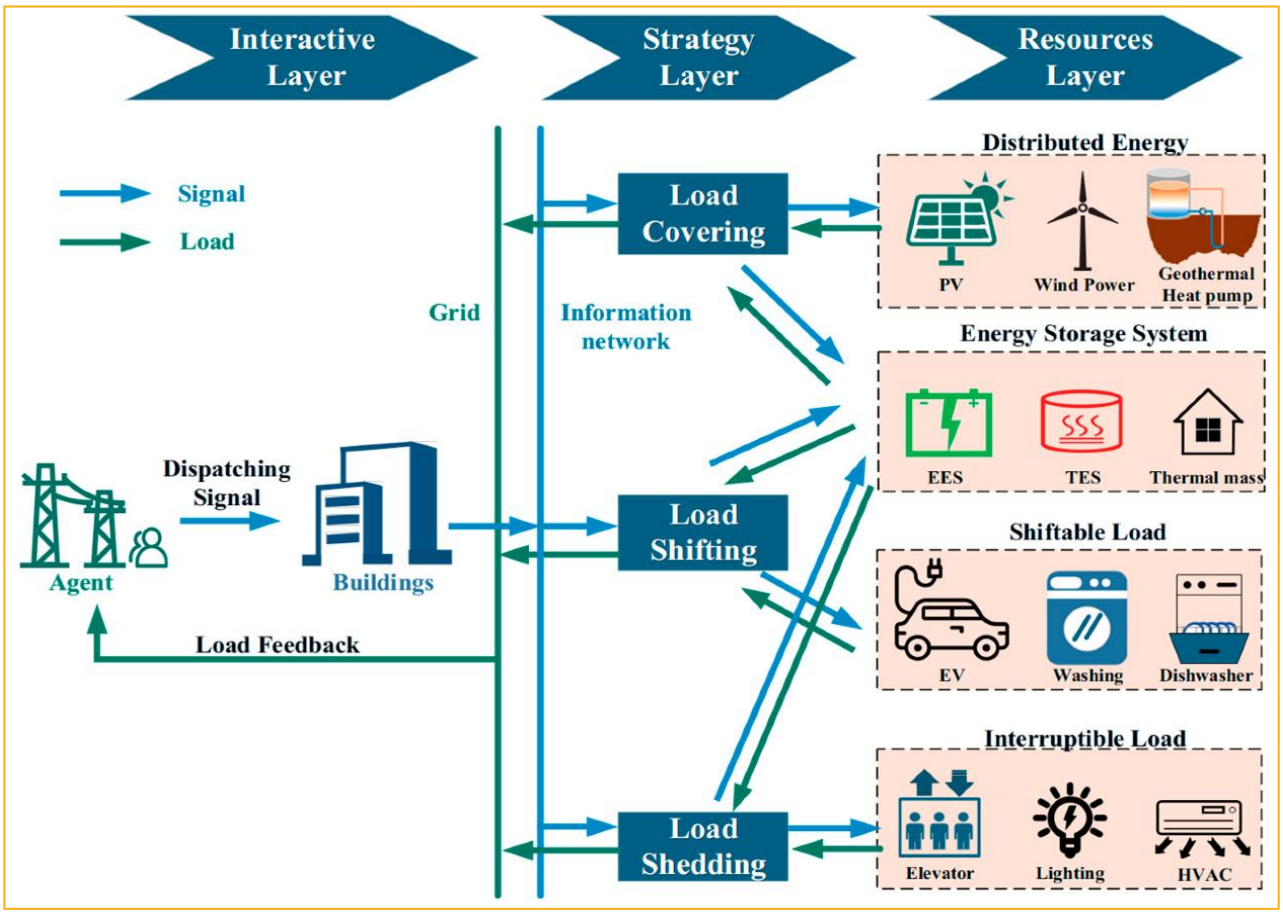
Flexibility should be viewed as a whole-of-system capability, rather than solely as a distribution planning tool. When effectively deployed, flexibility can support more efficient outcomes across multiple parts of the electricity system.

Beyond distribution networks, flexibility has the potential to deliver broader system benefits, including:

- reduced transmission congestion and improved utilisation of existing grid infrastructure
- lower peak generation requirements and reduced system capacity costs
- improved wholesale market efficiency through demand responsiveness
- enhanced system resilience and operational flexibility.

These benefits are particularly important in the context of New Zealand's transition toward greater electrification. As electricity demand grows through electrified transport, heating, and industrial processes, flexibility can play a critical role in enabling the electricity system to accommodate this growth in a more efficient and coordinated manner.

By shifting demand and making better use of existing infrastructure, flexibility can help manage peak demand growth, reduce the need for additional generation and network capacity, and lower the overall cost of electrification for consumers. Viewed in this way, flexibility is not simply a network planning tool, but a system capability that supports electrification, strengthens market efficiency, and helps manage long-term electricity costs across the wider economy.



8. Allocation of System Benefits

As flexibility markets develop, it is important to recognise that the benefits of flexibility often extend beyond the distribution network where constraints are identified.

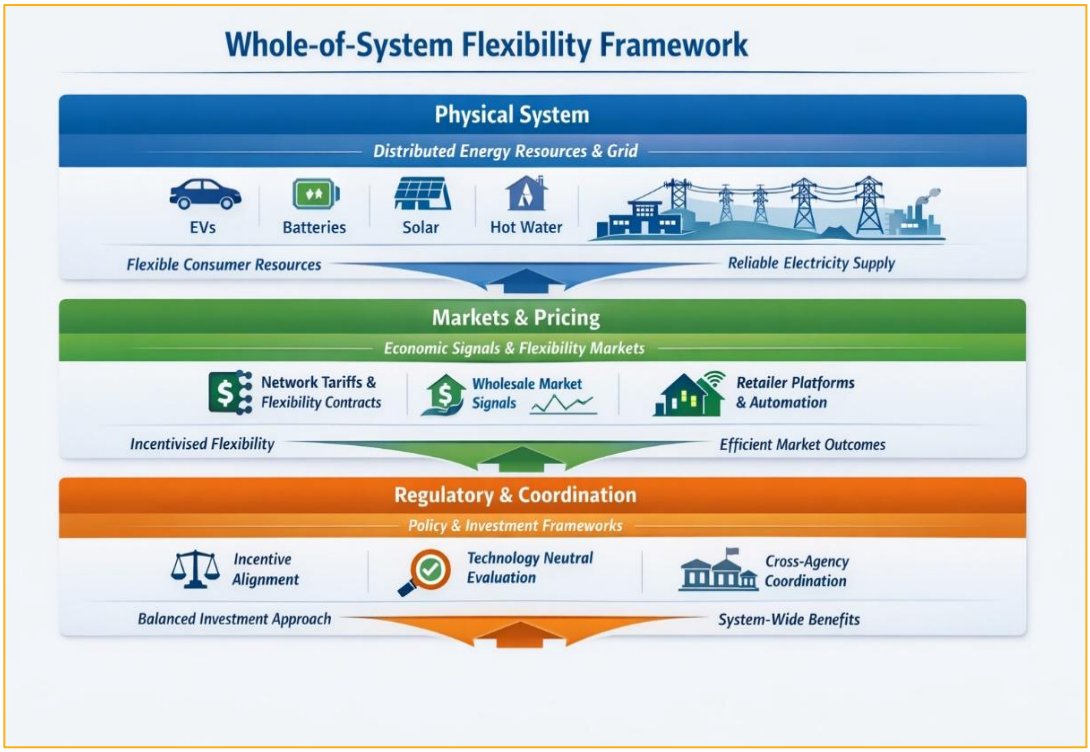
While distributors may signal network needs and procure flexibility services to address local constraints, the resulting benefits can accrue across the wider electricity system. These may

include reduced transmission congestion, lower peak generation and capacity requirements, improved wholesale market efficiency, and enhanced system resilience.

This highlights the system-wide value of flexibility, where actions taken to manage local network risks can deliver broader benefits beyond the regulated distribution investment boundary. As regulatory and market frameworks evolve, it is therefore important that these shared benefits are recognised in ways that support efficient participation and decision-making across the sector.

Ensuring that incentives remain aligned across distribution networks, transmission, retailers, and market participants will be critical to supporting least-cost investment outcomes for consumers. Regulatory settings should enable distributors to consider flexibility procurement as a legitimate and comparable alternative to traditional infrastructure investment, without creating distortions between operational and capital solutions.
Clear recognition of flexibility within investment assessment, incentive frameworks, and disclosure requirements will help ensure distributors can pursue the most efficient solutions for consumers while maintaining transparent and consistent regulatory signals.

The framework below illustrates how flexibility interacts across consumers, markets, networks, and the wider electricity system, emphasising the importance of coordinated regulatory and investment settings.



9. Regulatory Incentives and Investment Neutrality

As flexibility markets develop, it is important that the regulatory framework continues to support technology-neutral investment decisions. Non-network solutions often involve

operational expenditure or contracted services rather than traditional capital investment, and regulatory settings must allow these options to be assessed and selected on an equivalent basis to network reinforcement.

Maintaining neutrality between capital investment and non-network solutions is critical to supporting least-cost outcomes for consumers, particularly as distributors respond to growth uncertainty, evolving demand patterns, and electrification pressures.

For this approach to be effective, distributors require regulatory confidence that:

- flexibility procurement is recognised as a legitimate and comparable alternative to capital investment.
- incentive settings do not unintentionally bias decisions toward asset-based solutions; and
- evaluation frameworks appropriately recognise the option value created by deferring irreversible investment decisions in the face of demand and technology uncertainty.

Clear alignment between flexibility market development and the price-quality regulatory framework, including expenditure incentives, investment assessment, and information disclosure will support efficient decision-making and enable distributors to pursue the most cost-effective solutions for consumers, regardless of whether those solutions involve infrastructure investment or contracted flexibility.

In this context, distributors should be viewed not as controllers of flexible resources, but as system integrators that enable coordination across consumers, markets, and electricity infrastructure through transparent signalling, robust evaluation, and efficient procurement.

The framework below illustrates how flexibility operates across the electricity system, linking distributed energy resources, price signals, network operations, and system-wide outcomes, and highlighting the importance of aligned regulatory incentives in supporting efficient investment.

Conclusion

We support the overall direction outlined in the joint letter and welcome continued engagement between regulators and the sector as non-network solutions frameworks and flexibility markets evolve.

Flexibility should be understood as a system capability enabled through non-network solutions, rather than as a replacement for infrastructure investment. When effectively integrated, flexibility allows existing network assets to be utilised more efficiently and enables investment to be appropriately timed, informed by evolving system conditions and demand uncertainty.

Maintaining regulatory and market frameworks that support technology-neutral, least-cost investment decisions and equitable cost allocation will be essential as electrification and flexibility expand. Clear alignment across regulatory, market, and policy settings will help ensure flexibility delivers system-wide benefits while preserving efficient investment signals and long-term consumer affordability.

With coordinated settings, New Zealand is well positioned to leverage flexibility through the non-network solutions framework to support electrification, enable economic growth, and manage long-term electricity system costs. Continued focus on transparency, consistency, and consumer benefit will be central to maintaining confidence in the electricity system as it continues to evolve.

At scale, flexibility is most likely to be delivered by enabling customer energy technologies installed primarily to achieve everyday outcomes such as cost management, sustainability, and resilience to participate efficiently and automatically in system coordination, rather than through bespoke or manually procured flexibility services.

Key takeaway:

Non-network solutions provide the framework through which flexibility can be enabled as a system capability, allowing distributors to deliver efficient, least-cost investment outcomes for consumers while supporting electrification and improving overall system efficiency.

Ngā mihi nui,

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