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Electricity Authority  
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Submitted via email to [Distribution.Feedback@ea.govt.nz](mailto:Distribution.Feedback@ea.govt.nz)

## **Submission on ‘guidance on distributor involvement in the flexibility services market’**

### **Introduction**

1. Thank you for the opportunity to submit on the recently published ‘guidance on distributor involvement in the flexibility services market’. This submission is not confidential and can be publicly disclosed.
2. Orion owns and operates the electricity distribution infrastructure in Central Canterbury, including Ōtautahi Christchurch city and Selwyn District. Our network is both rural and urban and extends over 8,000 square kilometers from the Waimakariri River in the north to the Rakaia River in the south; from the Canterbury coast to Arthur’s Pass. We deliver electricity to more than 225,000 homes and businesses and are New Zealand’s third largest Electricity Distribution Business (EDB).
3. Orion, as an electricity distributor, plays a critical role in enabling and facilitating the growing flexibility services market. Orion has developed a Flexibility and Markets Development (FMD) Programme and roadmap that aims to maximise the scope for customer participation through flexibility and other market-based solutions. The FMD Programme and roadmap are aligned with Orion’s Group Strategy, and fits within the focus area on Facilitating Decarbonisation and Hosting Capacity at lowest cost<sup>1</sup>.
4. As part of the FMD Programme, Orion has developed a position statement on Hot Water Flexibility: *“Continue to maintain and leverage utility led hot water management for demand and emergency management, while exploring the feasibility and value of alternative solutions that maximise value to consumers.”* We request that the Authority consider whether these principles adequately allow us to implement this approach effectively. Specifically, we seek clarification on how the principles will accommodate the continued use of existing utility-led hot water management systems, that allow for a significant deferral of investment, while also encouraging innovation and exploration of new flexibility solutions.
5. With the increasing demand for flexibility to accommodate renewable energy integration and support the transition towards a net-zero economy, Orion’s seeks to leverage its electricity network as a platform that unlocks innovative solutions and cost-effective services which maximise customer (consumer, prosumer<sup>2</sup>, and community) participation and value throughout the transition.

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<sup>1</sup> <https://www.oriongroup.co.nz/assets/Your-energy-future/Orion-innovation-strategy-update-2024.pdf>

<sup>2</sup> Prosumers are consumers who both consume and produce energy.

## Orion summary points

6. Orion supports the Electricity Networks Aotearoa position, as expressed by the ENA representative in the Authority workshop on 25 June. We concur with ENA's view that a formal consultation process would be beneficial for all affected parties to fully understand the sector-wide current and future implications of this Guidance. This is considered best practice regulatory process.
7. We urge the Electricity Authority ("Authority") to address the critical challenge of managing parallel needs during the energy transition, as we foster the growth of flexibility to reflect and balance both national ('whole of system') and local system values (e.g., the transition away from existing ripple control systems for hot water management), as these evolve through the transition towards a distributed future system. We cannot, as a sector, lose sight of the significant deferral of investment we are privileged to have from existing ripple control of hot water. Orion's current ripple control system allows us to manage approximately 127MW of demand deferred from peak, highlighting the substantial impact and value of this existing technology in our network management strategy.
8. While the principles outlined by the Authority may reflect expectations for a maturing, or matured, flexibility services market, it is crucial to recognise that the flexibility market in New Zealand is still in its infancy. The Authority should be practical in how it assesses whether these principles are met by participants. Additionally, it is critical that the Authority recognise the significant change management that is required by sector participants to develop and mature this emerging market.
9. In acknowledgement of the market's infancy, to foster innovation and allow for the exploration of new approaches, the Authority should remain receptive in their assessments of EDB's application of these principles – particularly for innovative flexibility trials conducted either internally by EDBs, or in partnership with flexibility providers (e.g. retailers or aggregators).
10. The Authority should consider defining '*flexibility services*', and whether ripple control systems are considered a managed resource, or a controllable load under this Guidance. The Authority should consider what section of the Code it intends for flexibility to be included under; if it is within Part 8, does the definition for '*controllable load*' need to be better defined, and made clearer?
11. The term '*flexibility traders*' used in the principles is broad, and it would be beneficial for the Authority to provide a clear definition to ensure consistent understanding and application across the market.
12. Instead of requiring '*maximum value*' to be extracted from assets, principle 7 could be reframed to encourage '*optimised value*' extraction, which may better align with the overall objective of minimising costs for consumers.
13. Orion seeks clarification on whether mobile generators owned by EDBs for security of supply purposes (e.g. to provide power in the event of an outage) would be subject to these flexibility principles. Many of these generators within the industry are aged assets, and EDBs often choose not to use them for flexibility services. Guidance is needed on whether the Authority expects these assets to be utilised for flexibility, or whether the Authority expects EDBs to contract out these services via a competitive tender process.

14. The Authority's guidance on flexibility services should consider the unique position of locally owned EDBs in New Zealand's energy landscape. Research from overseas demonstrates significant social, technical, and economic benefits<sup>3</sup> to locally owned clean energy solutions, and locally optimised energy systems which reflect the context and values of local consumers and communities of place.<sup>4</sup> EDBs are well positioned to play a crucial role in partnering with their local stakeholders and communities in the planning, development and operation of the local energy system to realise this value and facilitate the transition to a decentralised grid.
15. The Authority should reevaluate its stance on EDB involvement in these areas, as the current guidance may inadvertently limit future opportunities for community-oriented energy solutions – including both DER and BESS. A more balanced approach is needed – one that enables EDBs to leverage their local presence and existing assets to facilitate greater community benefits, while still fostering fair competition and addressing potential conflicts of interest. There should be provisions within these principles that allow for EDB-owned community battery systems, or grid scale battery systems, where these are transparently owned and operated, to maximise (or optimise) the flexibility value stack for local consumers and community.
16. It is Orion's view that EDBs should be enabled to take a broader role in community distributed energy and flexibility solutions. This could result in more local jobs, customer savings, and local wealth creation while advancing decarbonisation, promoting equity (affordability and participation), and enhancing resilience (to address the energy trilemma). The Authority should provide guidance for EDBs on navigating the balance between fostering competition and efficient asset utilisation, ensuring that a balanced approach is taken that both addresses the Authority's concerns while enabling EDBs to effectively contribute to community-oriented energy solutions.
17. The Authority's current approach may overlook the potential for EDBs to facilitate greater local benefits through participation in the flexibility services market. Clearer guidance is needed to ensure EDBs can leverage their local presence and existing assets to benefit communities, while adhering to flexibility market principles and supporting the transition to net-zero.

#### **Principle one comments**

*Distributors should treat all suppliers even-handedly when procuring flexibility services as inputs to regulated electricity distribution services.*

18. Orion requests that the Authority provide clearer guidance on what constitutes a '*de minimis*' input, that would not require an open tender process for procuring flexibility services. Establishing specific thresholds or criteria would help ensure consistent interpretation and application across the market.

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<sup>3</sup> [Community Models for Deploying and Operating DER - Australian Renewable Energy Agency \(ARENA\)](#);

<sup>4</sup> [Advantage Local: Why Local Energy Ownership Matters, 2023 \(ilsr.org\)](#)

19. It is not clear how EDBs are expected to identify '*all flexibility traders*' operating in New Zealand to disclose flexibility services opportunities. The Authority should consider implementing a reporting mechanism to notify EDBs of new flexibility services providers. Alternatively, the language of the principle could be modified to '*...including the monetary value, via the Government Electronic Tender Service (GETS)*'.<sup>5</sup>
20. Regarding the requirement to disclose '*potential network flexibility need*', this appears to already be covered by the updated Information Disclosure (ID) requirements (D5.1 – Work and investment on flexibility resources (non-network solutions) – AMP requirements); the Authority should clarify if these requirements are aligned and if additional or duplicate disclosure is expected. Ensuring we minimise regulatory reporting burden and associated costs is important.
21. Orion has chosen to not include monetary value in flexibility services procurement processes, to avoid potentially incentivising providers to inflate their prices to just below the disclosed value, and potentially costing customers more than necessary. While it can facilitate market transparency and pricing discovery in the short term, excluding monetary value can enable more effective price discovery in the long-term and ensure that providers are competing to be the lowest cost option – rather than simply meeting a disclosed value threshold. The Authority should consider removing the requirement to disclose '*monetary value*'.
22. Orion's current approach with offering flexibility services is to wait for flexibility providers to approach us about conducting a flexibility trial, or a request for Orion to enable flexibility services. Clarity is needed on whether an open tender process, or Request for Proposal (RFP), is expected when an EDB is approached directly by a flexibility provider, or if this requirement only applies to EDB-initiated procurement of flexibility services. Alternatively, the Authority could simplify this principle to allow for more flexibility when EDBs are responding to provider-initiated or existing participant opportunities, as opposed to requiring an open tender process for all flexibility opportunities.
23. For the requirement '*disclosure of the distributor's rationale when procuring...*' the Authority should specify to whom this disclosure needs to be made, the required disclosure format, retention periods, and third-party access requirements.
24. For the requirement to '*record[ed] in writing...material terms of commercial arrangements*', the Authority should clarify whether these written records will be required to be disclosed, and if so, specify any retention periods and third-party access requirements.

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<sup>5</sup> Orion utilises the Government Electronic Tender Service (GETS) for procurement processes due to its standardised, user-friendly interface and wide accessibility for all market participants, ensuring that there is a level playing field for all participants. GETS facilitates efficient communication, allowing for centralised query management and document distribution. Moreover, GETS incorporates standard terms and conditions (e.g. MBIE's goods and services terms), streamlining the procurement process and promoting consistency across tenders.

25. This principle should address allowances for flexibility provider maturity and risk profiles in the procurement process, extending beyond the current consideration for '*procuring a flexibility service from a related party or through self-supply, including any higher reliability value*'. When procuring flexibility services, EDBs should have a reasonable basis to consider factors such as level of experience, financial stability and operational track record for all potential providers, not just related parties as is typical of good practice in procurement. The Authority should provide guidance on how EDBs can account for differences in contract risk profiles and credit/contract requirements while still adhering to the principle of being even-handed with all flexibility traders. This approach would help streamline the process and allow EDBs to make more informed decisions based on provider reliability and maturity – regardless of the provider's relationship with the EDB.
26. If EDBs are permitted to take on a broader role in facilitating community energy solutions, such as DER and BESS, the Authority should provide guidance on how the principle of even-handed procurement of flexibility services from third parties can still be upheld.

## **Principle two comments**

*Distributors should be even-handed with all flexibility traders connecting to their distribution network.*

27. The Authority should ensure that this principle is aligned with the new distribution pricing principles introduced as part of the distribution pricing reform.
28. The Authority should ensure that this principle is aligned with the outputs developed by the Network Connections Technical Group.
29. The Authority should provide guidance on how EDBs can balance the requirement to '*ensure the terms, processes, and timeframes for putting new or expanded network connections in place are consistent for all applicants*' with the need to ensure the reliability and security of electricity networks. There may be scenarios where certain flexibility services or providers pose different risk profiles, and the Authority should allow for informed judgement in this, depending on the technical requirements of the proposed flexibility service.
30. The principle states that an '*end customer should not get less preferable terms because they contract through a third party*.' However, it is unclear how an EDB would identify whether an end-customer receives less preferable terms when contracting through a third-party flexibility services provider. As an example, consider time-of-use pricing and ripple control systems for hot water cylinders. Orion has traditionally offered these incumbent services to customers. If an end-customer were to enter a contract with a third-party flexibility services provider for similar services, it is uncertain how the EDB would reasonably be expected to determine if the terms offered by the third party are less preferable than what the EDB can provide.

### Principle three comments

*Flexibility services and regulated electricity distribution services should not be jointly promoted, or bundled together in a way that advantages the distributor.*

31. The principle prohibits the joint promotion or bundling of flexibility services and regulated electricity distribution services in a way that advantages the distributor. However, clarification is needed on whether this extends to BESS, microgrids, and other resilience assets that are used for both regulated distribution services and flexibility services.
  - 28.1. The Authority should provide clear guidance on how EDBs can comply with both principle 3 and principle 7 simultaneously. The Authority should consider defining clear boundaries or criteria for when the joint promotion or bundling of services is considered advantageous to the distributor, versus when it is considered efficient maximum (or optimised) utilisation of assets to minimise costs for consumers.
32. The Authority should consider exceptions or specific scenarios where the joint promotion or bundling of services may be permitted if it can be demonstrated to provide clear benefits to consumers and the overall energy system. This could potentially align with the listed exceptions (charities, non-profits and for emergencies) found in principle 4.
33. Regarding the requirement for different branding of flexibility services, and as mentioned above in [point 10](#), the Authority should clearly define what constitutes a 'flexibility service.' This clarification is necessary to understand the impact on existing services offered by distributors, such as hot water control via ripple systems that are considered 'controllable load' as per Omnibus 2.
34. The Authority should provide guidance on how this principle extends to in-house flexibility trials or research initiatives conducted by distributors. If a distributor procures in-house flexibility services to understand and address constrained areas<sup>6</sup>, clarification is required on whether this would be subject to the obligation of involving a third-party flexibility service provider, or via conducting an open tender process.
35. The Authority should ensure that the implementation of this principle aligns with the overarching objectives of fostering a competitive and efficient flexibility services market. While preventing unfair advantages is important, the principle should not inadvertently hinder innovation, customer choice, or the development of beneficial solutions for the energy transition.

### Principle four comments

*Distributors should generally not provide non-commercial (below cost) flexibility services.*

36. The Authority should provide guidance on how existing ripple control systems operated by distributors will be treated under these principles. As noted in [point 10](#), are ripple control systems considered controllable load or manageable load? Orion notes that the Authority considers the Omnibus 2 Code Amendment to be an enabler for future market participation of controllable load.

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<sup>6</sup> Examples of in-house flexibility trials or research initiatives could include direct load control or battery storage systems installed by the EDB. While the Authority has indicated that tendering would be required for such initiatives, this raises concerns about the time and cost implications of RFPs and third-party integrations for trials. Ultimately, these additional processes may increase costs for consumers without necessarily providing commensurate benefits in the context of research and trial initiatives.

37. While ripple control could be perceived as undercutting flexibility markets, distributors need to maintain the safe and reliable operation of these systems for emergency response and load management. Third-party solutions have not, thus far, demonstrated the same degree of resiliency due to communication limitations. Does this clash with the requirement to not reduce potential revenue streams for third-party flexibility traders?
38. The Authority should clarify if there are any implications for what a distributor can do to support customers facing energy hardship under this principle.
39. If an EDB operates a community BESS, the Authority should provide clear criteria that the EDB can utilise to ensure that is not providing non-commercial, uneconomic services that undercut third-party flexibility and storage providers.
40. Clarification is needed on the timeframes around when and for how long the '*emergency*' exception is acceptable to be used, and what constitutes an '*emergency*' in these principles.

#### **Principle five comments**

*Distributors should protect confidential information supplied by third-party flexibility traders.*

41. The Authority should provide more clarity on the expected protocols for handling confidential information supplied by third-party flexibility traders to distributors. This includes specifying the requirements for handling and storage of both hard and soft copies of information, as well as any guidelines for discussions involving this information.

#### **Principle six comments**

*Distributors should share non-public network information even-handedly.*

42. The Authority should carefully consider the implications of mandating broad access to '*Network Information*' and provide a clear definition of what constitutes '*Network Information*' under this principle. This definition should clarify whether it includes both raw data and data resulting from detailed analytics, as well as information generated internally by the EDB or externally by third parties. While EDBs already provide Asset Management Plan (AMP) information, the Authority should clarify what additional Network Information is expected to be made accessible to flexibility service providers. The sector is still in the process of developing and sharing further information, such as network capacity maps. Extensive data sharing could require significant resource allocation and investment from sector participants, and the Authority should weigh the potential benefits of increased data accessibility for market development against resource requirements, implementation challenges, and potential risks.
43. The Authority should provide guidance on the acceptable methods for disclosing different types of Network Information to ensure compliance with the even-handed sharing requirement.
44. The Authority should provide guidance on data sharing requirements for EDBs addressing the use of raw data, third-party data that is the result of analytics (such as from inverters or behind-the-meter IoT devices) and the sharing of network data for community energy solutions. This guidance should clarify how EDBs can balance the principle of sharing non-public information with other flexibility traders, against the need to protect proprietary or commercially sensitive data, especially in scenarios where the EDB may be both a provider and competitor in flexibility/DER services.

45. The Authority should provide guidance on how to handle situations where there are concerns about the quality of raw data. Should potentially incorrect raw data still be provided to all flexibility traders in the interests of even-handed sharing, or are there exceptions for data quality issues?

#### **Principle seven comments**

*Distributors should ensure that the cost of regulated electricity distribution services is not inefficiently increased through self- or related-party supply of flexibility services.*

46. Clarification is needed on how this principle aligns with existing network management practices, such as Orion's use of the ripple control system. The principle requires extracting 'maximum value' from assets; however, if the ripple system is used primarily for network management rather than as a revenue generator, there may be a perceived clash that needs to be addressed.
47. Orion acknowledges the tension between optimising our regulated asset base to extract value, and promoting a competitive flexibility services market. While we understand the Authority's aim to maximise asset value, finding an appropriate balance may be challenging in the future, recognising the Authority may see a risk that extensive EDB participation could inadvertently suppress third-party providers or create market inequities. However, it is crucial to recognise the vital role EDBs play in enabling decarbonisation, reducing consumer inequities and supporting coordination. Our involvement is essential in facilitating the transition to cleaner energy sources and ensuring that all consumers have access to reliable and affordable electricity. The Authority should provide specific guidelines that outline how EDBs can demonstrate that their flexibility assets' primary function isn't to compete in the flexibility services market, while still enabling the transition to net-zero.
48. The Authority should work with the Commerce Commission to determine how revenue from flexibility services should be categorised. This categorisation should consider various flexibility scenarios, including participation in wholesale markets, network support, and maximisation of local self-consumption and community resilience. Specifically, the Authority and Commerce Commission should clarify if this income is considered regulated or unregulated income, and provide any cost allocation rules, if necessary.
49. The guidance should provide more detail on how EDBs can meet the objectives between balancing distributed generation at lowest cost, while still maximising scope for participation for customers and communities. The guidance, as written, appears to be solely focussed on developing a commercial and competitive market – rather than what may be best for communities such as ownership and operation of location resources for local system optimisation and consumer and community value.

50. Clarification is needed on whether the responsibility for optimising and monetising the full value stack from flexibility assets should lie with the EDB or third-party providers, keeping in mind that this value stack should not overlook the aspect of investment deferral for EDBs.<sup>7</sup> Overseas research<sup>8</sup> has found that in a local system with high levels of distributed generation at the grid edge, to achieve optimal utilisation of assets such as BESS, it relies on a combination of network and community use. This decision could significantly impact the overall efficiency, cost-effectiveness, and community benefit of asset utilisation.

#### **Concluding remarks**

51. Thank you for the opportunity to provide this submission.
52. If you have any questions or queries on aspects of this submission which you would like to discuss, please contact us.

Yours sincerely,



Connor Reich

**Regulatory Lead – Electricity Authority**

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<sup>7</sup> As outlined in [point 7](#), Orion's current ripple control system allows us to manage approximately 127MW of demand deferred from peak, highlighting the substantial impact and value of this existing technology in our network management strategy.

<sup>8</sup> <https://arena.gov.au/projects/community-models-for-deploying-and-operating-distributed-energy-resources/>