

19 August 2025

Submissions  
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## **UNISON SUBMISSION ON CONSULTATION PAPER - THE FUTURE OPERATION OF NEW ZEALAND'S POWER SYSTEM – ISSUES AND HIGH-LEVEL OPTIONS**

Unison welcomes the opportunity to submit on the Electricity Authority's consultation paper, The future operation of New Zealand's power system – Issues and high-level options. Unison has also contributed to the ENA's submission. We support the ENA analysis and recommendations.

Future system operation is a critical area of innovation and development for New Zealand's electricity system. Progress in this area will facilitate better management of security and resilience and allow distributed energy resources (DER) opportunities to be realised. Unison supports the Authority's focus in this key area of development.

Unison is innovating and investing in future system operator services, including through:

- Development and rollout of a local flexibility market operator. This investment by Unison, alongside partners Powerco, Vector and Our Energy, has received approval for funding under the Commerce Commission administered INTSA program.<sup>1</sup>
- Support of the ENA Future network forum and the initiatives they have taken, including commissioning of the Baringa report, Distribution System Operation (DSO) models - An exploration of potential DSO models for New Zealand (Baringa report).<sup>2</sup>

This submission outlines the significance of the future system operator and examines the necessity for a regulatory environment that facilitates, rather than impedes, the innovation and investment essential for progress. Appendix A presents specific responses to the submission questions.

### **Investments in DER by customers present security and resilience challenges.**

Consumers are investing in DER to meet their energy needs and manage energy costs. Unison supports energy consumers to improve their wellbeing and lifestyles through realisation of this opportunity. Our role, as network operator, is to facilitate consumers energy chooses.

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<sup>1</sup> Commerce Commission, [Unison Local Flexibility Market Platform Application approval letter](#), 10 July 2025.

<sup>2</sup> Bringa, [Distribution System Operation \(DSO\) models - An exploration of potential DSO models for New Zealand](#), April 2025.

The realisation of these opportunities will however create challenges for our network. Increasing demand from EVs, plus new generation and battery storage, is making the energy network more complex—a trend that will intensify as the energy transition progresses.

**Investment in Distribution System Operator (DSO) activities is needed to address network challenges and realise opportunities**

DSO will serve as a critical component within a network owner's toolkit, enabling effective management of the increased demands and complexities related to network security and resilience as customers capitalise on the opportunities presented by DER.

Until the necessary innovation and investment is undertaken, distributors run the risk that security and resilience challenges will become unmanageable which could lead to over investment in traditional network solutions.

As identified by the Authority in its consultation paper, investment in DSO activities will also enable the realization of network benefits associated with DER. Contributing to the overall advancement of the energy system.

**Regulatory response needs to support rather than inhibit innovation and investment**

The consultation paper notes the Authorities consideration of an independent DSO (iDSO) but they also exclude it from the three models being considered.

*The Authority acknowledges an iDSO might be required to facilitate a subset of DSO functions related to distribution market mechanisms and ensure neutrality if there are misaligned interests for distributors performing distribution system operation services*

Unison does not at this stage of the development support a regulatory response that has the effect of mandating an outcome or restricts innovation and investment in this area. Unison supports the Authority only considering mandated iDSOs when it is clear and proven that there is an issue and the benefits clearly outweigh negative impacts such as the restriction of investment and innovation. Any regulatory response will need to consider all options and demonstrate a clear understanding of unintended consequences. Given the implications, structural separation should be the last resort.

Distribution network operators are currently best placed to deliver the innovation and investment required. Any impediment to that will be counterproductive to the advancement of New Zealand's electricity system and ultimately cost energy consumers.

Yours sincerely

Jason Larkin  
**GM Commercial and Regulatory**

## Appendix A Unison response to submission questions

<b>Submitter</b>	Unison Group (Unison)
<b>Questions</b>	<b>Comments</b>
Q1. Do you agree with the explanation of the distribution system operator (DSO) role/ entity, and the explanation of the distribution system operation (DSO) functions that one or more DSO entities would be required to perform?	Unison supports the EA's explanation of the distribution system operator (DSO) role/ entity and the explanation of the distribution system operation (DSO) functions.
Q2. Do you think we are correct that the themes we identified in submissions to the initial consultation paper mean we should focus mostly on system operation at the distribution level, and on the new functions required for effective distribution system operation?	Unison agrees the EA should focus mostly on system operation at the distribution level, and on the new functions required for effective distribution system operation
Q3. Do you think we have accurately covered the main changes to the distribution system in this section? If not, what have we missed or where have we gone wrong?	The EA has accurately covered the main changes to the distribution system.
Q4. Do you agree with how we have defined the problem, as the need for a more coordinated framework of integrated system operation?	Unison agrees that the problem is best defined as the need for a more coordinated framework of integrated system operation
Q5. In your view, what aspects of the Australian and British deliberations around DSO models are relevant to New Zealand?	Both the Australian and British deliberations have features that are relevant when considering DSO's in NZ. We must not however follow the same path blindly. The ENA commissioned the Baringa report to consider this issue. Unison supports this analysis. Key aspects of both the Australian and British deliberations that relevant to NZ include: <ul style="list-style-type: none"> <li>- progressive, proportionate, less regrets approaches</li> <li>- acknowledgement of unknowns and complexities that widespread DER brings</li> <li>- learning by doing rather than premature heavy handed regulatory responses</li> </ul>
Q6. What do you think about the direction of research conducted in New Zealand by bodies such as the ENA, NEG and SIDG on the challenges of preparing to perform DSO functions?	Unison supports the research conducted by ENA, NEG and SIDG.

Questions	Comments
Q7. What is your view about the need for an independent DSO (iDSO)? Should we consider an iDSO now as an option to perform all DSO functions, or a subset of functions related to market facilitation? Or can that decision wait until the market for flexibility services is more developed?	<p>Unison recommends the decision on whether an iDSO is needed should be deferred until</p> <ul style="list-style-type: none"> <li>a) the problem it is looking to solve is well defined;</li> <li>b) all possible solutions have been considered; and</li> <li>c) a whole system cost benefit analysis is performed.</li> </ul>
Q8. What do you think about the three DSO models proposed by the Authority?	The three models are consistent with the Baringa report, and Unison endorses that work and it's framing of system operation models.
Q9. Do you prefer one model over the others?	Unison supports the Hybrid DSO model, especially during the development phase due to the natural incentives and it having the greatest chance of realisation during this time critical phase. We do not oppose any of the models and would be concerned if there were any limitation of options at this early stage of development.
Q10. Given the hybrid model can take several forms, what do you think would be the best allocation of DSO functions between the TSO and one or more distributors as DSOs?	Unison supports the ENA's proposed allocation of functions between TSO and EDB(s). Refer ENA submission.
Q11. How would you rank the DSO models in terms of enabling the process of price discovery in the market for flexibility services to approach the wholesale market ideal of security-constrained economic dispatch?	Unison prefers the Hybrid and then total DSO as preferred models for enabling price discovery in the market. EDBs have access and insights to local network conditions about distribution network capacity and constraints, where significant latent value can be unlocked. The Hybrid and total DSO models will provide for efficient price discovery.