



18 June 2026

Electricity Authority
PO Box 10041
Wellington 6143

Via email: fsr@ea.govt.nz

Consultation Paper – Options to address a harmonics issue

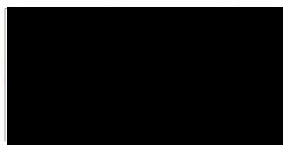
WEL Networks appreciates the opportunity to provide feedback on the above consultation.

WEL Networks (WEL) is New Zealand's sixth largest electricity distribution company and is 100% owned by our community through our sole shareholder WEL Energy Trust. Our guiding statement of strategic intent is to be leading Waikato's energy future, and we work to ensure that our customers have access to reliable, affordable, and environmentally sustainable energy.

WEL supports the preference for Option 1, and the use of the Electricity (Safety) Regulations to contain the installation standards for harmonics.

Our responses to the specific questions sought by the Authority are attached and should you require clarification on any part of this submission, please do not hesitate to contact me.

Yours sincerely



Andrew Maseyk
Regulatory Specialist

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Submitter	WEL Networks
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Questions	Comments
Q1. Do you agree the Authority should be short listing Option 1 for further consideration? If you disagree, please explain why.	Yes.
Q2. Do you agree the Code should not mandate harmonics management requirements, other than harmonics planning levels? If you disagree, please explain why.	Yes.
Q3. What regulatory instrument (i.e. the Code or the Electricity (Safety) Regulations) do you consider should be used to regulate installation standards for harmonics?	The Electricity (Safety) Regulations.
Q4. Which, if any, aspects of AS/NZS 61000 do you consider need substituting or adapting in order to accommodate New Zealand conditions?	
Q5. Do you consider the establishment, monitoring and enforcement of harmonics requirements should be a contractual matter between electricity network owners and their customers, or a Code-enforceable matter? Please give reasons with your answer.	We believe there could be separate approaches here for transmission and distribution. Given the existing responsibilities of the system operator for transmission power quality affecting multiple connected parties, and the lower number of connection points a regulatory model could suit. Distributors could manage harmonic requirements through a contractual approach with customers.
Q6. Do you consider distributors should have a mandated responsibility to investigate and resolve security of supply or reliability issues caused by non-compliance with the harmonic levels specified for distribution networks?	Distributors will have contractual arrangements placing obligations on consumers. A mandated obligation may create conflict between these contracts and the mandated distributor obligations.
Q7. What guidance for industry participants do you consider would be necessary under Option 1?	We would like to see a set of guidelines explaining how AS/NZS 61000 standards series and the EEA's Power Quality are applied in typical situations.
Q8. What do you consider to be the main benefits and costs associated with Option 1?	The update to modern standards.



Q9. Do you agree the Authority should be short listing Option 2 for further consideration? If you disagree, please explain why.	Yes.
Q10. What do you consider to be the main benefits and costs associated with Option 2?	Option 2 offers flexibility, but this comes at the risk of inconsistent outcomes.
Q11. Do you agree the Authority should be short listing Option 3 for further consideration? If you disagree, please explain why.	Yes.
Q12. What do you consider to be the main benefits and costs associated with Option 3?	It seems the main cost would be the required effort to fully revise and make the updates.
Q13. What do you consider to be the benefits and costs of the current arrangements for obtaining harmonics data from distributors and from Transpower, as a transmission network owner?	While WEL is not a transmission network owner, it should be noted that there are always costs associated with managing requests for data, and risks with data integrity where the data is relied on for contractual or regulatory purposes. A framework whereby developers can do their own measurements of harmonics (pre and post connection) to demonstrate compliance and for purposes of harmonic mitigation would be useful.
Q14. What do you consider to be the benefits and costs of a database of harmonics measurements?	A potential benefit could be the identification of emerging harmonic trends. Any benefits derived from a database of measurements would need to offset the ongoing costs of data collection and IT system maintenance.
Q15. Would access to raw harmonics measurement data be useful for your organisation? If so, why?	No.
Q16. Who do you consider should host a database of harmonics measurement data? Please give reasons	By those who will make most of use of the data, though this could be a third party similar to the Australian Power Quality & Reliability Centre.

