

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Variation 3 to the Proposed Waikato
District Plan

STATEMENT OF EVIDENCE OF SARA BROWN FOR WEL NETWORKS LIMITED

04 July 2023

1. Introduction

- 1.1 My name is Sara Brown, and I am a Senior Planner employed by WEL Networks Limited (“WEL”). I hold a Bachelor of Science degree from the University of Waikato.
- 1.2 I have worked as a planner for 11 years in local authorities, the electricity distribution sector and as a consultant.
- 1.3 I have read the Section 42A Report prepared by the Council Planners.
- 1.4 I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note and I agree to comply with it. The evidence within this statement is within my area of expertise, except where I state that I am relying on information provided by another party. I have not knowingly omitted facts or information that might alter or detract from the opinions I express.

2. WEL Networks Limited

- 2.1 WEL is an electricity distributor operating under the Electricity Act 1992, who owns, operates and develops electricity distribution infrastructure in the Waikato Region to provide line function services to approximately 99,966 installation connection points. This includes the distribution of electricity to residences and businesses within Hamilton City and Waipa and Waikato Districts. WEL is also an approved requiring authority pursuant to Section 167 of the Resource Management Act 1991 (“RMA”) for its lines network functions.
- 2.2 WEL’s distribution network includes more than 7,000km of overhead electric lines, generally in rural and older urban suburbs. Newer urban suburbs are generally supplied by underground cables.
- 2.3 WEL, as a network utility operator under the Resource Management Act 1991 (“RMA”), has the responsibility of providing a secure and efficient supply of electricity to the community within WEL’s distribution network area. WEL’s network of cables and lines allows every household, business, school, medical facility and other types of consumers to have access to electricity. Other infrastructure such as substations, switching stations, ring main units, transformers, service pillars and pillar boxes allow WEL to convert electricity from a higher voltage (taken from the national grid) to a useable voltage for consumers to access, and to provide an enhanced level of security of supply through built-in redundancy in the network. WEL is classified as a lifeline utility under the Civil Defence Emergency Act 2002 and is also a requiring authority under the RMA.

3. Section 34 of the New Zealand Electrical Code of Practice for Electrical Safe Distances

- 3.1 Variation 3 to the Proposed Waikato District Plan (“Variation 3”) has been introduced in accordance with the government directive in the Resource Management (Enabling Housing Supply) Amendment Act 2021 (“Amendment Act”). Under Variation 3, the minimum building

setbacks from the road boundary are proposed to be reduced to 1.5m to align with the standards incorporated within the Amendment Act. Along with the more lenient building setbacks, building heights are also increasing to allow buildings up to 11 metres in height without resource consent.

- 3.2 The Amendment Act requires Council to incorporate the Medium Density Residential Standards (“MDRS”) and to give effect to policies 3 and 4 of the National Policy Statement on Urban Development (“NPS-UD”). Council may also amend or include related provisions including provisions that relate to ‘infrastructure’, and new and existing qualifying matters.
- 3.3 ‘Infrastructure’ as defined in the RMA includes the distribution of electricity (lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity as well as anything described as a network utility operation in regulations made for the purposes of the definition of network utility operator in Section 166). Accordingly, Variation 3 is able to include provisions related to infrastructure where these are consequential on the MDRS and to give effect to policies 3 and 4 of the NPS-UD.
- 3.4 Intensification enabled under the Amendment Act will increase the number of buildings, structures and people adjacent to electricity infrastructure. This increases the risk of unsafe environments, which needs to be adequately addressed in Variation 3.
- 3.5 Section 34 New Zealand Electrical Code of Practice for Electrical Safe Distances (“NZECP34”) sets the minimum safe distances between buildings (and other structures) and electricity infrastructure, and addresses matters such as excavation near overhead electric line supports (among other matters). Ensuring safety around electricity infrastructure is a paramount priority for WEL and we wish to avoid serious safety outcomes to the community which may result from development located too closely to existing infrastructure.
- 3.6 WEL’s submission sought to include rules to appropriately recognise NZECP34. The proposed rules are required because residential intensification permitted under Variation 3 fails to account for the mandatory minimum distances to overhead electricity lines prescribed by NZECP34. The more lenient setback and height standards will significantly increase the potential for development to be located in positions that breach NZECP34 without there being any resource consent, or consultation with WEL.
- 3.7 Prior to the introduction of Variation 3, the Waikato District Plan (“District Plan”) provided for minimum building setbacks of 3m in residential zones. These setback distances in most cases were generally sufficient to accommodate compliance with NZECP34.
- 3.8 Under Variation 3, development can obtain building consent and/or resource consent 1.5m from the road boundary, which will in many cases be impossible to complete lawfully with respect to NZECP34. WEL is generally unaware of encroachments until WEL staff notice an encroachment when passing the construction site. There have already been cases within Hamilton City where WEL has had to engage with developers and/or those working on construction sites due to concerns about non-compliance with NZECP34 and also of WEL

involving WorkSafe after becoming aware of a consented development that does not comply with NZECP34. At this stage, the risk to people is significant and unacceptable.

- 3.9 Workers (during construction) and occupants (after construction) are at risk of serious injury where NZECP34 has been breached. The critical need for safety around electricity lines was made abundantly clear in the recent tragic story where a scaffolder in Auckland had to have both of his arms amputated after suffering an electric shock where the scaffolding, he was holding onto made contact with overhead power lines at a development site.
- 3.10 Under the RMA, Councils control the permitted extent of new development, including in relation to the surrounding environment (such as infrastructure). When a resource consent is granted and/or building consent is issued, developers rely on that consent as confirmation that development standards have been met. Failure to confirm safe distances between development and existing overhead electric lines undermines Council's processes by allowing development that cannot be safely built and occupied. A planning regime that allows construction without consideration of NZECP34 will fail to give effect to Section 5 of the RMA, by failing to provide for the health and safety of people and communities and will also not adequately achieve the purpose of enabling people and communities to provide for their social, economic, and cultural well-being because such buildings cannot be safely built, maintained or occupied.
- 3.11 WEL's experience is that developers are generally not aware of the mandatory minimum setback requirements prescribed under NZECP34. WEL has found that developers have been increasingly frustrated as their expectation is that if Council approves a development, then it is able to be constructed. In other cases, developers will realise late in the piece that they require specific engineering advice and written authorisation for the proposal from WEL, at a point when mitigation is costly or impracticable. There is already significant public material available, but relevant parties remain unaware of NZECP34. Those thinking of subdividing or building will naturally look to the Council for information.
- 3.12 For information purposes, generally to comply with NZECP34 in the absence of specific engineering advice, a setback of 8.5m from 33kV lines (upper lines) and 5.5m from 11kV and 400V (lower lines) from the edge of the conductor/line would be required.

4. WEL's overall position on Variation 3 to the Waikato District Plan

- 4.1 WEL's submission sought amendments to Variation 3 to ensure that the subdivision and setback provisions to comply with NZECP34. In our view, those amendments are required to address very clear potential effects on the health and safety of people, as required by Section 5 of the RMA. Specific relief sought is addressed in the following points.

Part 2 – District-wide matters / Subdivision / SUB – Subdivision – IPI

- 4.2 WEL requested Council include a new rule (Rule SUB – R163), as follows:

Subdivision Activities adjacent to Electricity Distribution Infrastructure

Any subdivision in the vicinity of electricity infrastructure must demonstrate that building platforms can be located in positions where a subsequent building can comply with the NZ Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

Vegetation to be planted in the vicinity of electricity infrastructure should be selected and/or managed so that it does not breach the Electricity (Hazards from Trees) Regulations 2003.

Part 3: Area-specific matters / Zones / Residential zones / MRZ2 – Medium density residential zone 2

- 4.3 WEL requested Council amend Rule 4.2.5.6a to ensure buildings and development are located in positions that comply with NZCP34, as follows:

Front – 1.5m, provided the building or structure can achieve compliance with the NZ Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

5. WEL's Response to the Section 42A Report

- 5.1 As stated in paragraph 340 of the Section 42A report, Council accepted that Variation 3 has the potential to increase breaches of NZECP34. Council has therefore recommended that advice notes be included to raise awareness of NZECP34.

- 5.2 WEL **does not support** this recommendation, for the following reasons:

- An advice note does not have the same recognition or visibility as a rule and will often get missed, particularly in instances where resource consent is not required.
- A building consent and/or resource consent can still be issued if compliance with NZECP34 is not achieved and does not prevent development from proceeding. Issuing a building consent and/or resource consent for a structure that fails to comply with NZECP34 fails to give effect to Section 5 of the RMA, by failing to provide for the health and safety of people and communities and will also not adequately achieve the purpose of enabling people and communities to provide for their social, economic, and cultural well-being. It therefore fails to meet Council's obligations under s 74(1)(b) of the RMA.
- Referring to a Code of Practice in an advice note adds to the complexity and reluctance to identify the rules the code enforces.

- 5.3 During the preliminary discussions with Council, it was identified that a spatial solution in addition to the proposed rule framework included in WEL's submission would greatly assist developers, planners and building consent processing staff to determine if compliance is achieved. The spatial solution would include adding an overlay to Council's GIS to illustrate the overhead electricity network locations, which is identical to the national grid corridor overlay. WEL have an inhouse GIS team that can work with Council to provide this overlay information so that it can be uploaded to Council's GIS and made available to the public. The rule framework provided for in WEL's submission (or words to that effect) can then be applied and easily understood visually. Implementation of these preventative measures will ensure that serious outcomes from a potential breach of NZECP34 is avoided.

- 5.4 Paragraph 339 of the Section 42A report states that *“I acknowledge the concerns raised by WEL Networks however do not consider it appropriate for a District Plan to mandate compliance with other legislation. In my view, the requirement for Council to assess compliance with the other legislation is unreasonable, particularly in relation to technical matters such as setbacks from electrical infrastructure”*. WEL considers this reasoning to be flawed as WEL’s submission requests the application of identical rules to the National Grid Corridor Overlay which provides a clear precedent for this approach. The District Plan already requires development in proximity to national grid transmission lines to comply with NZCP34 through a rule framework. However, the District Plan does not contain any equivalent provision for electricity distribution infrastructure. This is despite the fact that, from a safety perspective, there is no difference between the consequences of non-compliance with NZCP34 in relation to the national grid transmission lines and electricity distribution lines. An unsafe distance from any electricity line can result in death or serious injury.
- 5.5 WEL does not consider our submission to be unreasonable. WEL's submission seeks a simple amendment to the District Plan to require compliance with NZECP34 through a rule framework to better inform relevant parties of the need for compliance. Rules to implement NZCP34 will ensure that the construction and occupation of development too close to overhead electricity lines is avoided which subsequently will avoid the risk of death or serious injury to people. Rejection of WEL's submission will mean the risks outlined in this evidence remain.

6 Conclusion

- 6.1 WEL **does not support** the recommendations made in Council’s Section 42A Report as outlined in Section 5 of my evidence.
- 6.2 Under the Amendment Act, Council is able to include provisions that relate to ‘infrastructure’, and new and existing qualifying matters. The rules contained in WEL submission are required because residential intensification permitted under Variation 3 fails to account for the mandatory minimum distances to overhead electricity lines prescribed by NZECP34. Rules to implement NZCP34 will ensure that the construction and occupation of development too close to overhead electricity lines is avoided which subsequently will avoid the risk of death or serious injury to people.
- 6.3 A District Plan framework that enables developments as permitted activities that cannot be built or maintained safely and lawfully is not in accordance with the purpose of the RMA to enable people and communities to provide for their social, economic, and cultural well-being and their health and safety. As such, it does not comply with Council's obligations under Section 74(1)(b) of the RMA.

Dated 04 July 2023



Sara Brown
WEL Networks Limited