BEFORE THE COMMISSIONERS APPOINTED BY THE QUEENSTOWN LAKES DISTRICT COUNCIL

IN THE MATTER	Of clause 6 of the First Schedule of the Resource Management Act 1991 (the Act)
AND IN THE MATTER	Of the Queenstown Lakes District Council Proposed District Plan (Stage 3) (PDP Stage 3)
SUBMITTER	AURORA ENERGY LIMITED
	Original Submission 3153

SYNOPSIS OF SUBMISSIONS OF COUNSEL ON BEHALF OF AURORA ENERGY LIMITED ON STREAMS 17 AND 18

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SYNOPSIS OF SUBMISSIONS OF COUNSEL ON BEHALF OF AURORA ENERGY LIMITED ON STREAMS 17 AND 18

May it please the Commissioners:

Introduction

- 1. Counsel appears for Aurora Energy Limited (**Aurora**). Aurora owns and operates electricity distribution infrastructure that supplies electricity to more than 90,000 homes in the Queenstown Lakes, Dunedin and Central Otago Districts.
- Aurora is the primary electricity sub-transmission provider with an extensive network of underground cables, lines and supporting structures, transformers, zone substations and other infrastructure which connects Transpower's Transmission Network and provides individual connections to customers.
- 3. This document records the oral submissions presented to the hearing panel and provides a more detailed response on issues raised at the hearing.

Submission

- 4. Aurora's submission on PDP Stage 3 relevant to Streams 17 and 18 can be summarised as: seeking to ensure safe distances from Electricity Distribution Infrastructure. There are two reasons for why this is important to Aurora.
 - (a) Firstly, ensuring that the risk to the health and safety of the public in proximity to Aurora's infrastructure is avoided or minimised.
 - (b) Secondly, the operation of Aurora's network is provided for by minimising the effects from reverse sensitivity.
- 5. That is generally Aurora's focus when participating in District Plan review processes and is what guided its submission on PDP Stage 1. The results of Aurora's efforts in PDP Stage 1 are attached to the evidence of Ms Dowd. Aurora's submission on PDP Stage 3 provides scope for the Council to carry those provisions though to the following zone chapters: Rural Visitor Zone; General Industrial Zone; Three Parks Commercial Zone and Settlement Zone. That relief is supported by the section 42A Report Authors. The drafting of New Zealand Code of Practice for Electricity Safe Distances (NZECP34) advice notes is inconsistent between the Zone Chapters and changes have been sought as outlined in the evidence of Ms Dowd. I wil not go through those changes unless the Panel has specific questions about is sought to be changed.

Wanaka Substation

- 6. The remainder of Aurora's relief is to ensure minimum setback distances for buildings are maintained from the Wanaka Zone Substation located at 39 Ballantyne Road. A Zone Substation is a key part of Aurora's electricity distribution network that typically comprises one or more transformers that converts high voltage electricity to lower voltages for distribution throughout the local community. The Wanaka Substation is the last of Aurora's 12 Zone Substations in the District to been rezoned under the District Plan review and PDP Stage 3 proposes to zone it Low Density Residential Zone.
- 7. The staging of the District Plan has somewhat disadvantaged the management of the Wanaka Substation. Had Aurora known that the land would be notified as LDRZ then it would have sought greater protections in that zone chapter for the management of land uses in proximity to it. Aurora did not have scope, when drafting its submission on PDP Stage 3, to seek the changes that it might have otherwise sought.
- 8. The provisions arising out of mediations on PDP Stage 1 assist with consideration of the high voltage sub-transmission lines located within Ballantyne Road but do not assist in the management of activities on private land adjoining the Wanaka Substation.
- Aurora's relief seeks a building restriction area in the area immediately surrounding the Wanaka Substation. Following consultation with Aurora engineers a smaller setback of 10 metres is now supported. All buildings are sought to be restricted from this area but the area may be used for parking cars, greenfield area, walking tracks or roading.
- 10. A new zone standard to be included into Chapter 7 so that applicants may obtain Aurora's consent to establish a building or structure within the building restriction area. That would require an assessment from an Aurora engineer as to determine whether it can safely be located in closer proximity to the substation. That has allowed Aurora to reduce the size of the building restriction area sought. But it is a double-edged sword the lesser the area the greater the protections that are required. If the area would be reduced further, then Aurora would need to introduce additional mitigation measures.
- 11. Counsel submits that this relief is supported by the Proposed Regional Policy Statement and the Strategic Directions in the Proposed District Plan such as Policy 4.3.1 of the PRPS that requires that regionally significant infrastructure (including lifeline utilities) are not compromised. The evidence of Ms Dowd is that buildings and structures in close proximity to the Wanaka Substation are likely to compromise its

functional needs (including operation and upgrades). The District Plan is required to address that.

Questions from the Hearing Panel

- 12. At the hearing, Commissioner Robinson questioned the lawfulness of the zone standard and whether there are other examples in the PDP where a third parties' approval is required for a resource consent application. The example that Counsel referred to was in relation to Rule 27.2.5.16 where the adequate provision of electricity supply is to be ensured which requires Applicants for resource consent to seek confirmation from Aurora that a connection to its network can be provided. That is not the same veto power as the Commissioners considered that proposed zone standard imposed but that was not the objective of including that zone standard.
- 13. The objective of Zone Standard 7.4.X was to provide an opportunity for some buildings or structure to be located within the Building Restriction Area and encourage applicant's to engage with Aurora to identify any concerns of that proposed building or structure being located in proximity to the Wanaka Substation. That would then enable Aurora to assess what is being proposed and offer any mitigation measures. That can be achieved through an amended zone standard that focuses on the reverse sensitivity and health and safety concerns being addressed might be through amended drafting to the zone standard that does not require Aurora's consent but provides an opportunity for applicants to ensure that reverse sensitivity and health and safety concerns are managed. Suggested drafting is shown below:

	Standards for activities in the Low Density Residential Zone	Non-compliance status
7.4.X	Setback of buildings and structures from Wanaka Substation.	NC
	The minimum setback of buildings or structures from the Wanaka Substation is 10 metres.	
	Exceptions to setback from Wanaka Substation:	
	 a. Where the building or structure has been designed and constructed to avoid any adverse effect on the functional needs (including reverse 	

sensitivity effects) on the Wanaka Substation provided that no buildings or structures are located within 5 metres of the Wanaka Substation. Note: An Applicant can seek advice on steps to be taken to avoid adverse effects on the Wanaka Substation from Aurora Energy.

- 14. The amendments to Standard 7.4.X provide an opportunity for an Applicant to seek advice from Aurora to ensure effects on the functional needs of the Wanaka Substation (including reverse sensitivity effects) are considered and avoided. While there is a possibility for effects on the functional needs of the Wanaka Substation to be avoided within 5 to 10 metres that same opportunity is not afforded within 5 metres given the risk that this poses to the health and safety of the public. Given that risk, it is appropriate for the activity status to change to non-complying so that the application goes through the s 104D gateway test of requiring effects that are no more than minor or not contrary to the objectives and policies of the District Plan. That will enable the full scope of provisions of the plan regarding reverse sensitivity to be considered.
- 15. A similar approach to the management of activities is in the Whangarei District Plan at CEL.1.2.1-1.2.2 where activities are permitted subject to standards. Where those standards are not met then alternatives are offered at CEL1.2.3 to maintain the permitted activity status provided that the works being consistent with NZECP34, the Electricity (Hazards from Trees) Regulations 2003, and the Electricity (Safety) Regulations 2010 or the works are carried out by the Network Utility Operator. A copy of CEL1.2 is attached as **Appendix 1**.

Dated 13 August 2020

S R Peirce Counsel for Aurora Energy Limited

Appendix 1



CEL.1 Critical Electricity Lines (CELs) and Substations

Index

- CEL.1.1 Description & Expectations
- CEL.1.2 Permitted Activity Land Use
- CEL.1.3 Restricted Discretionary Activities Land Use
- CEL.1.4 Restricted Discretionary Activities Subdivision
- CEL.1.5 Assessment Criteria
- CEL.1.6 Notification

CEL.1.1 Descriptions and Expectations

NOTE: The following provisions apply district wide in addition to any other provisions in this Plan applicable to the same areas or site.

Critical Electricity Lines (CEL's) and substations are the key components of the electricity network in the Whangarei District. To provide a resilient electricity network the use and development of CEL's and substations must be sustainable, secure and efficient. CEL's and substations can be vulnerable to inappropriate subdivision or building location to the extent that they can restrict access and affect the ability to maintain the CEL's (lines, cables and support structures). Trees planted too close to lines or cables can disrupt supply.

CEL's are, or have the potential to be, critical to the quality, reliability and security of electricity supply throughout the district or region. These lines contribute to the social and economic wellbeing and health and safety of the district or region and are lines that:

- Supply essential public services such as the hospital, civil defence facilities or Lifeline sites; or
- Supply large (1MW or more) industrial or commercial electricity consumers; or
- Supply 1000 or more consumers; or
- Are difficult to replace with an alternative electricity supply if they are compromised.

The locations of CEL's and designated substations are identified in the planning maps of the District Plan.

CEL.1.2 Permitted Activity Land Use

The following activities are permitted activities:

- 1. Within 10m of a CEL or the designation boundary of a substation:
 - i. Any building or structure that does not require building consent; or
 - ii. Alteration of any building that does not exceed outside the envelope or footprint of the existing building; or
 - iii. Earthworks that:
 - a. Are not directly above an underground cable(s); and
 - Do not result in a reduction of existing ground clearance distances from overhead lines below the minimums prescribed in the New Zealand Code of Practice 34:2001 (NZECP 34:2001); and



CEL.1 Critical Electricity Lines (CELs) and Substations

- c. Are in accordance with NZECP 34:2001.
- 2. Within 20m of a CEL or the designated boundary of a substation:
 - i. Planting of trees other than shelterbelts, plantation forestry or commercial horticultural operations.
- 3. Activities described in CEL.1.2.1 and CEL.1.2.2 that do not meet the requirements for permitted activities under CEL.1.2.1 and CEL.1.2.2 provided that:

EITHER

- 3.1 Prior to the commencement of any works:
 - i. Written notification has been provided to the Council; and
 - The proposed activity is being carried out in accordance with the Electricity Act 1992 and associated regulations (NZECP 34:2001, the Electricity (Hazards from Trees) Regulations 2003 (SR 2003/375), and the Electricity (Safety) Regulations 2010);

OR

3.2 The proposed activity is being carried out by a network utility operator or territorial authority in accordance with NZECP 34:2001.

Note:

1. Specified distances from CEL's are to be measured from a point directly below the centreline of the line or cluster of lines, as shown in Fig 1.

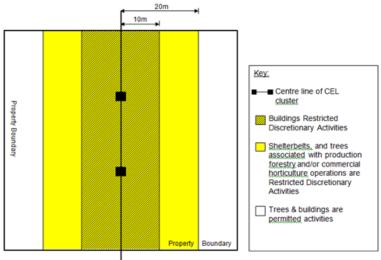


Figure 1: Classification of Activities in vicinity of CEL's

2. While only critical electricity lines are identified on the planning maps, works in close proximity to all electric lines can be dangerous. Compliance with NZECP 34:2001 as amended from time to time is mandatory for buildings, earthworks, and when using machinery or equipment within close proximity to any electric lines.



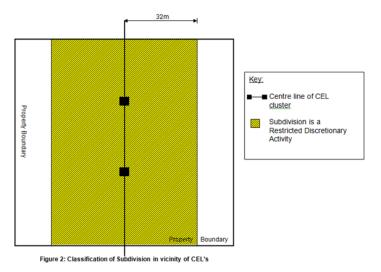
CEL.1 Critical Electricity Lines (CELs) and Substations

CEL.1.3 Restricted Discretionary Activities – Land Use

1. Activities described in CEL.1.2 that do not meet the requirements for permitted activities are restricted discretionary activities.

CEL.1.4 Restricted Discretionary Activities - Subdivision

1. Subdivision within 32m of the centre line of a CEL, or within 32m from the designation boundary of a substation shall be a restricted discretionary activity.



CEL.1.5 Assessment Criteria

- 1. When considering any restricted discretionary activity under CEL.1.3 and CEL.1.4, discretion will be restricted to:
 - i. the safe and efficient operation and maintenance of the electricity supply network, including:
 - a. The use, design and location of buildings; and
 - b. The mature size, growth rate, location, and fall zone of any associated tree planting, including landscape planting and shelterbelts; and
 - c. Compliance with NZECP 34:2001; and
 - d. Effects on public health and safety; and
 - e. Effects on access to CEL's, designated substations and associated infrastructure for maintenance purposes.

CEL.1.6 Notification

For restricted discretionary activities under CEL.1.3 and CEL.1.4 the relevant network utility operator will be considered an affected party under s 95E of the Resource Management Act, 1991.



CEL.1 Critical Electricity Lines (CELs) and Substations

Revision and Sign-off Sheet

Date Approved	Editor	Paragraph	Change Reference	Decision Date	Approved By
12 June 2013	MD	New Chapter	Plan Change 117 – addition of new chapter to the District Plan.	Operative Date 25 June 2013 TRIM 13/44408	MM
10 May 2016	ТВ	Whole Chapter	Re-formatting of Chapter to ensure consistency.	Clause 20A Memo TRIM 16/55469	MM
6 March 2019	AM	Amendments throughout	Plan Changes 85 A-D, 86A, &102	Operative Date 6 March 2019	

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