

IN THE MATTER The Resource Management Act (RMA)

AND

IN THE MATTER OF Part 8, RMA

AND Requirement for designation by Space Operations New Zealand Limited
(Requestor) made to Invercargill City Council ref: MI_2025_20

Defendant

COMMISSIONER'S MINUTE # 4

Dated 23 September 2026

1. Having read the evidence once, I have identified significant conflicts between the technical witnesses on engineering questions that go to the effect, need and consequences of the proposed designation, including:
 - (a) the derivation and justification of the 5° / 2 m / 3 km horizon mask parameters (McNeill; Hulston; cf. Morley at [43], [57], [64]; Peer Review at [86]–[93]);
 - (b) the magnitude and character of obstruction caused by the SFAL wind turbines (McNeill at [70]–[72], Figures 19–21; cf. Morley at [49]–[54] and Appendix 1);
 - (c) the derivation, measurability and enforceability of the -154 dBW/MHz EMI limit (Morley at [33]–[35]; Peer Review at [40]–[54]; SpaceOps response to peer review); and
 - (d) the workability of the proposed approval-pathway conditions (Hulston at [28]; Morley at [13], [78]; Jones at [8], [23]).
2. I expect technical witnesses (witnesses making statements relevant to the radio communication aspects of the requirement) to provide, at the hearing, an oral summary of their evidence to enable me to understand it and to respond to the evidence presented by other experts after their statements or reports. On that topic, it would be helpful to understand, from each witness, the areas of difference and the reasons for those differences on the relevant issues, including those above, in a systematic way, as my task is to identify the matters in contention and assess them, and the role of experts is to help me in that endeavour.
3. I am unsure whether the last sentence of paragraph 2 of Mr Morley's statement indicates he completed those degrees or merely attempted them. Either way, it does not suggest he is not an expert given his qualifications and experience. It simply struck me as odd phrasing.
4. On the topic of expertise, I query the extent to which the effect, necessity, and consequences of the designation are, in part, influenced by technical detail relating to radio communication physics (and variables affecting that) and, in part, by an appreciation of the nature and extent of the customer's/users' (actual and potential) requirements of the requiring authority. I expect legal submissions to frame this adequately. It may also be the case that the Requiring Authority does not intend to limit the material effect on operability (cited in the offered/Augier conditions) by reference to the existing monitored spacecraft portfolio, but to a broader concept of a reasonable operational capability envelope. This may need to be teased out. I may be assisted by a practical example of how the Requiring Authority envisages

its assessment pathway would be followed for a conceptual development in the Awarua Industrial Zone. How that is framed may also impact the cost-benefit and risk assessment.

5. All other experts, including those in planning, should also provide an oral summary of their evidence and any rebuttal. Otherwise, the hearing becomes too focused on the commissioner's questioning, which is unduly burdensome given the dense material, and it deprives the hearing of a natural rhythm as witnesses shift from one topic to another.
6. I remind all experts of the expert code requirements to explicitly acknowledge assumptions and uncertainties.
7. I prefer all legal submissions and authorities to be submitted electronically via email to gillian.cavanagh@icc.govt.nz, with a copy also provided to me on a clean flash drive at the hearing. This includes any additional materials introduced during the hearing, which should also be sent to gillian.cavanagh@icc.govt.nz to ensure the Council website maintains a comprehensive record of the proceedings.
8. Regarding planning, I would appreciate it if the flash drive containing the legal submissions also included copies of the relevant parts of the Invercargill District Plan, together with an oral walk-through by planners of the relevant policies and rule cascade for the Awarua Industrial Zone that reflect the enabling framework described in the evidence. I would expect the planners to confer on what to include on the flash drive.
9. Visual material can often be helpful, and there will be facilities available for that purpose.
10. I have no views on the strength or otherwise of the requirement, and nothing in this Minute suggests otherwise. Instead, I am seeking to understand, with limited technical background, the issues that bear on my assessment. The parties have important interests at stake.
11. I apologise in advance if any of this technical framing is clumsy or inaccurate.



John Maassen (Commissioner)