

**Before the Independent Hearings Panel
At Wellington City Council**

Under Schedule 1 of the Resource Management Act 1991

In the matter of Hearing submissions and further submissions on the
Proposed Wellington City District Plan

**Right of reply of Joe Jeffries on the Renewable Electricity Generation Chapter
on behalf of Wellington City Council**

Date: 19 July 2024

INTRODUCTION

1 My name is Joe Jeffries. I am employed as a Principal Planning Advisor in the District Plan Team at Wellington City Council.

2 I have prepared this Reply in respect of the matters raised in Hearing Stream 9 on the Renewable Electricity Generation (REG) Chapter.

3 The REG section 42A report sets out my qualifications and experience as an expert in planning.

4 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

SCOPE OF REPLY

5 This reply follows Hearing Stream 9 held between 10 and 14 June 2024. It responds to the request for comment/information from the reporting officer on several issues related to the REG Chapter raised by the Hearings Panel in Minute 51: Stream 9 hearing Follow Up.

6 This reply also addresses other matters raised in the hearings by submitters and picked up in a post hearing review of the REG Chapter.

RESPONSE TO MINUTE 51

REG Chapter

Query whether there is merit in adding reference to upgrading in the headings to REG-P9 and PX.

7 I agree that there is merit in making additional amendments to REG-P9 and REG-PX to clarify that these policies apply to *upgrading of existing* REG activities as well as new large scale REG activities. However, I prefer to achieve this by inserting “including the upgrading of existing

activities” into the chapeau of policies REG-P9 and REG-PX rather than the policy heading, as set out in Appendix A. In my view this amendment adds clarity to the policy without making the headings overly long.

Can Mr Jeffries please advise as to the extent of duplication between NZS6808 on the one hand, and REG-S9 and S10 on the other. In particular, are there any substantive requirements in the New Zealand Standard not captured in the latter standards?- and if not whether there is nevertheless value in retaining reference to the New Zealand Standard, e.g. because it provides the methodology for assessing potential compliance with S9 and S10?

8 Most of the text of REG-S9 and REG-S10 is contained within NZS6808. The table below shows REG-S9 and REG-S10 of the PDP in the left column alongside the relevant sections of NZS6808, where this text originates from, on the right. I have added yellow highlight to point out the common wording between the two sets of standards.

PDP REG Chapter	NZS6808
<p>REG-S9.1</p> <p>At any wind speed, the LA90 (10min) sound pressure level from a wind turbine or wind farm must not exceed the background sound level by more than 5 dB, or a level of 40 dB LA90 (10min), whichever is the greater, when measured at the notational boundary of any dwelling or sensitive activity which is a noise sensitive location as defined in New Zealand Standard on Acoustics Wind Farm Noise “NZS 6808: 2010 Acoustics - Wind farm noise”, except where a location is identified by Council as a high amenity area a noise limit of 35 dB LA90(10 min) will apply; and</p>	<p>5.2 Noise Limit</p> <p>As a guide to the limits of acceptability at a noise sensitive location, at any wind speed wind farm sound levels (LA90(10 min)) should not exceed the background sound level by more than 5 dB, or a level of 40 dB LA90(10 min), whichever is the greater.</p>

<p>REG-S9.2</p> <p>The sound level of a wind turbine or wind farm must be measured and assessed to the requirements of New Zealand Standard on Acoustics – Wind Farm Noise “NZS 6808: 2010 Acoustics - Wind farm noise”.</p>	
<p>REG-S10.1</p> <p>Wind turbine sound pressure levels with special audible characteristics, such as tonality, impulsiveness or amplitude modulation, must be adjusted by arithmetically adding up to +6 dB to the measured level at the notional boundary; and</p> <p>REG-S10.2</p> <p>The assessment of special audible characteristics must be conducted in accordance with Appendix B of New Zealand Standard on Acoustics – Wind Farm Noise “NZS 6808: 2010 Acoustics - Wind farm noise”.</p>	<p>5.4.2 Special Audible Characteristics</p> <p>Wind turbine sound levels with special audible characteristics (such as, tonality, impulsiveness, and amplitude modulation) shall be adjusted by arithmetically adding up to +6 dB to the measured level at a noise sensitive location (see 5.4.3). This adjustment is a penalty to account for the adverse subjective response likely to be aroused by sounds containing such characteristics.</p>

9 NZS6808 also contains a large amount of additional information that is not included within REG-S9 and REG-S10 including methodology for assessing and measuring wind turbine sound effects. According to NZS6808 its purpose is:

to provide suitable methods for the prediction, measurement, and assessment of sound from wind turbines. These methods may be applied during the processes of planning and

developing a wind farm, then for confirming compliance with resource consent conditions covering sound levels, and also for the investigation and assessment of noise complaints about operating wind farms.

- 10 In my view there is value in retaining both the REG chapter standards, REG-S9 and REG-S10, and the references to NZS6808 within the REG chapter rules and standards (REG-R3, REG-R4, REG-R5, REG-R6, REG-S9, and REG-S10).
- 11 The PDP standards, REG-S9 and REG-S10, specify wind turbine noise limits and special audible characteristics for compliance, make this information available within the plan for those without access to NZS6808, and provide assessment criteria for non-compliance with the noise standards. NZS6808 sets out methodology for measurement and assessment and recommends acceptable noise levels. The references to NZS6808 within the REG chapter provisions provide a link to this additional information that would be impractical to include within the REG chapters standards themselves.
- 12 As stated in my statement of supplementary evidence, while there is some duplication between REG-S9/REG-S10 and NZS6808 I do not consider this duplication imposes any notable cost, and it adds value in clarification and in ensuring a comprehensive approach to managing noise effects.

Does Mr Jeffries have any comments in relation to Ms Foster's supplementary statement, and in particular to the concern she expressed about the breadth of the definition of renewable electricity generation activity, when used in the context of the REG provisions governing upgrades?

13 The supplementary statement of Christine Foster raises a concern around REG-PX and REG-P9 and the way land is captured by the definition of *large scale REG activities*¹. According to Ms Foster:

3.2 Policy REG-P9 is indeed a 'provide for' policy, and it requires consideration of operational need or functional need to locate where the REG resources are available. However, Policy REG-P9 is only theoretically available for upgrading Meridian's existing wind farms. That is because the policies do not address the buildings, structures and other physical changes within a wind farm that could affect the overlays. The policies capture the whole entity of the wind farm, including all land that is not occupied by any REG structures or activities.

3.2 The definition of 'large scale REG activities' means 'the land, buildings, substations, wind turbines, structures, underground cabling earthworks, access tracks, roads, paved areas, transmission networks'. The combination of the definition and the policies does not distinguish the unoccupied land from the REG buildings, structures and activities located within the landholding.

3.3 This means that Policy REG-PX is potentially problematic as currently worded, because the definition and therefore the policy applies even to land that is not actively used for REG structures or activities. This is problematic also in the suggested alternative wording I had proposed for a re-worded Policy REG-P8 (in referring to Policy REG-PX).

14 Ms Foster recommends amending REG-PX as set out in paragraph 3.8 of her supplementary statement to address this issue.

¹ [Submitter speaking notes - Meridian Energy Ltd \(228 & FS101\) \(wellington.govt.nz\)](#)

- 15 I do not agree with Ms Foster’s claims (my paraphrasing) that:
- 15.1 the “provide for” policy REG-P9 is only *theoretically available* for upgrading Meridian’s existing wind farms, and
- 15.2 in practice all large scale REG upgrades will therefore be captured by REG-PX as if they are inside an overlay area.
- 16 I also do not agree that Ms Foster’s proposed amendments to the wording of REG-PX solve the issue she has raised, even if I were to accept her definition of the problem as correct.
- 17 Policy REG-P9, as worded in my s42A report, clearly states that new large scale REG activities (including upgrading) are “provided for” outside of overlays. I do not consider that this is ambiguous, or that the inclusion of “land” within the definition of *large scale renewable electricity generation activities* means that all upgrading activities will be captured by the less enabling policy REG-PX.
- 18 However, I have reviewed the REG chapter provisions in light of Ms Foster’s supplementary statement and agree there is an issue with the way some of the overlays are referred to in REG-PX. For example, REG-PX.3 states (emphasis added) “If located on a *site* identified in SCHED8 - Significant Natural Areas”. By contrast REG-PX.5 states “If located within an *area* identified in SCHED10 - Outstanding Natural Features and Landscapes”. In my view the reference to “area” rather than “site” in REG-PX.5 is preferable and removes the potential for the policy to be interpreted in a way that brings an entire *site* including areas unaffected by the overlay into its ambit. To address this issue, I recommend amending clauses 1, 2, 3, and 6 of REG-PX to refer to “an area identified” within the specified overlays rather than “on a site identified”. This amended wording is set out in Appendix A.
- 19 I note that this issue with REG-PX referring to *sites* within overlays equally applies to the wording of REG-P7. I recommend amending REG-P7 in a similar manner to refer to “an area identified” within the specified overlays rather than “on a site identified”. This would make REG-P7

consistent with the wording of REG-P5 and the updated wording of REG-PX. In my view this change is minor and supports the drafting intent of the notified version of the policy.

- 20 Finally, setting aside the issue outlined above, Ms Foster accepts that “Policy REG-P8 as publicly notified does not incorporate the effects management approach of the NZCPS in relation to ONFLs, SNAs and areas of high natural character in the coastal environment”, she “supports inclusion of those more stringent requirements” and agrees “that the way Mr Jeffries has expressed the various effects management directions in his proposed Policy REG-PX reflects the direction of the NZCPS in relation to the coastal environment.” However, differences remain between us on how this should be achieved.

Query both the scope and merits of clarifying the reference in REG-P3 to effects being ‘minimised’.

- 21 I have reconsidered the wording of REG-P3 following the hearing and, setting aside the issue of scope, I support amending the policy to qualify the meaning of “minimised” with “as far as practicable”. I understand that without qualification “minimised” in REG-P3 could be interpreted to mean that adverse effects must be minimised regardless of cost or other practical limitations. In my view this is an overly onerous standard to apply given the direction of the NPS-REG and considering that the policy only applies outside of identified overlay areas. The addition of the words “as far as practicable” to the policy is more consistent with the direction of the NPS-REG and allows the requirement for adverse effects to be minimised to be tempered by practical considerations including the costs of minimising effects.
- 22 Regarding scope I note that Forest and Bird sought the deletion of “minimised” from REG-P3 and for this to be replaced with “avoided, remedied, or mitigated”.

Does Mr Jeffries have any further comments on the reasoning set out in paragraph 282 of his Section 42A Report?

23 Fire and Emergency New Zealand (FENZ) (273.45 and 273.46) seek that REG-S1 is amended to insert an assessment criterion to enable fire risk mitigation to be taken into account when assessing applications for non-compliance with the standard.

24 In paragraph 282 of my s42A report I rejected this submission point:

I do not support the relief sought by FENZ to introduce a new matter of assessment on management of fire risk. In my view this issue is better addressed through the provisions of the Ecosystems and Biodiversity chapter, when in relation to indigenous biodiversity. Trimming indigenous vegetation for the purposes of managing fire risk is not strictly a Renewable Electricity Generation activity. The normal provisions of the Ecosystems and Biodiversity chapter would therefore apply without the need to reference this matter in the Renewable Electricity Generation chapter.

25 Having reconsidered this issue I stand by the statement that trimming indigenous vegetation for the purposes of managing fire risk is not strictly a Renewable Electricity Generation activity, and is therefore an activity that is able to be addressed through the provisions of the Ecosystems and Biodiversity chapter. However, I acknowledge that there is an overlap with vegetation trimming undertaken for the purposes of managing fire risk created by REG activities, and this could also be considered a REG activity.

26 In the interests of clarity and certainty I now support introducing this assessment criteria as requested by FENZ. I note that this standard would only be engaged for maintenance and repair of existing renewable electricity generation activities under REG-R1 so there is no issue with duplicating provisions of the Ecosystems and Biodiversity chapter. The amended wording of REG-S1 is set out in Appendix A.

In relation to REG-S1, should the second assessment criterion reference identified cultural values (where there are some)? 6

27 In my s42a report I rejected the submission of WCC ERG seeking to add cultural values to the assessment criteria for infringement of REG-S1:

I also do not support the relief sought by WCC ERG to add cultural values to the assessment criteria list. "The effects on the identified ecological and biodiversity values of the significant natural area" is included in the notified version of the assessment criteria. Cultural values are a component of the identification of significant natural areas as set out in Policy 23 of the Wellington Regional Policy Statement and the NPS-IB.

Therefore, the above-mentioned assessment criteria already provides for the ability to take effects on cultural values into account where those are relevant to the significant natural area, without the need to explicitly reference cultural values.

28 I have reconsidered this position and while I stand by the assertion that cultural values are able to be taken into account with the notified wording where relevant, I agree that inserting "including cultural values" would add additional clarity and there is no downside to doing so. The amended wording of REG-S1 is set out in Appendix A.

Does Mr Jeffries have any response to Mr Hodge's presentation, and in particular to his suggestion that the policy Wellington Proposed District Plan enabling small scale renewable electricity generation activities in the form of on-roof wind turbines is effectively rendered nugatory by the 60 metre separation standard?

29 I have considered the information presented by Mr Hodge and generally agree that the 60-metre setback requirement in REG-S6 is overly constraining, and is inconsistent with the requirement in the NPS-REG to

provide for small and community-scale distributed renewable electricity generation.

30 According to Mr Hodge there are only 12 sites in Wellington City that would be able to comply with the 60-metre setback standard under REG-S6. While I have not independently verified the specifics of this claim, I agree generally that there would be few sites in Wellington City able to comply with the standard. I also agree that it is unclear that the effects of a small-scale wind turbine would be so severe as to justify such a large setback, particularly as noise effects for small scale REG activities are managed independently of setback requirements through REG-R3.

31 Additionally, I note that the wording within “60m of a habitable building on an adjacent site” is problematic in that the placement of buildings on adjacent sites may change within the site which could alter whether a wind turbine on a neighbouring site complies with the standard or not.

32 I therefore support Mr Hodge’s submission seeking deletion of the 60m setback requirement from REG-S6, and agree that a 15m setback is more appropriate for small scale freestanding wind turbines. However, as I have noted issues with reference to *buildings on an adjacent site* above, I recommend replacing the 60m setback requirement with a 15m setback from *site boundaries* as set out in Appendix A.

Mr Jeffries please provide a wiring diagram showing the links between REG policies and rules?

33 I have provided a table showing the relationship between the policies, rules, and standards of the REG chapter. This is included as Appendix B.

Other Issues

Notification clause in REG-R4

34 The notified version of REG-R4.1 includes the following clause in relation to notification (underline added for emphasis):

Notification status: An application for resource consent made in respect of rule REG-R4.1 is not precluded from being publicly notified.

35 This notification clause was discussed during the hearing.

36 This clause is redundant as *not precluding* notification is the same as having no notification clause at all. By contrast other rules of the chapter including REG-R5, REG-R6, and REG-R7 do not have notification clauses. I recommend deleting this clause as it is redundant and because its inclusion may misleadingly imply that there is a distinction in relation to notification between REG-R4 and the other rules that are silent on notification. In my view this amendment, set out in Appendix A, is of no practical effect and is therefore consistent with Schedule 1, clause 16 (2) of the RMA.

Clarifying references to overlays in REG-P9

37 In the s42A report I recommended amending policies REG-P3, REG-P4, REG-P5, REG-P6, and REG-P7 to clarify the references to overlays in response to the WIAL submission. I now recommend making a similar amendment to REG-P9 to refer to “the overlays specified in REG-PX” to remove any potential ambiguity around which policy applies. This amendment to REG-P9, set out in Appendix A, is consequential to the insertion of a new policy REG-PX as recommended through the s42A report.

Minor amendment to REG-R3.3

38 As set out in Appendix A, I have amended a typo in the notification clause in REG-R3.3 which incorrectly referred to REG-R3.2.

Section 32AA evaluation

39 I have recommended amendments to the following provisions through this right of reply: REG-P3, REG-P7, REG-P9, REG-PX, REG-R3, REG-R4, REG-S1, and REG-S6.

40 In my opinion, based on the analysis in this report, the amendments outlined above are more appropriate, and more efficient and effective, in achieving the objectives of the PDP than the notified version of the REG chapter. In particular, I consider that the amendments:

40.1 Better give effect to the requirements of the NPS-REG to provide for the development, operation, maintenance, and upgrading of new and existing renewable electricity generation activities.

40.2 Provide greater clarity and certainty.

41 I consider that the cost of these amendments are limited, and are outweighed by the benefits.

42 The amendment to REG-S6 may have moderate increased visual or dominance effects on neighbouring sites. These effects are outweighed by the need to give effect to the requirement to provide for the development, operation, maintenance and upgrading of small and community-scale distributed renewable electricity generation under Policy F of the NPS-REG.

43 There are unlikely to be any additional environmental, economic, social, or cultural effects as a result of the changes to REG-P3, REG-P7, REG-P9, REG-PX, REG-R3, REG-R4, and REG-S1.

Joe Jeffries

Principal Planning Advisor

Wellington City Council

19 July 2024

Appendix A - Recommended Amendments - Renewable Electricity Generation

Appendix B - Wiring diagram of REG chapter policies and rules

Theme	Maintenance and repair of REG	REG Investigation	Small scale REG	Community scale REG	Large scale REG (including upgrading)	Other REG	Reverse sensitivity	Energy efficient subdivision and development
High level policies	P1 Recognising the significance and benefits of the use and development of renewable energy. P2 Providing for renewable electricity generation activities							
Specific Policies	n/a	REG-P3	REG-P4 (outside overlays) REG-P5 (within overlays)	REG-P6 (in General Rural Zone and outside overlays) REG-P7 (within overlays or other zones)	REG-P8 (upgrading) REG-P9 (in General Rural Zone and outside overlays) REG-PX (in General Rural Zone and within overlays) REG-P10 (in other zones) REG-P11 (upgrading)	n/a	REG-P12	REG-P13
Rules	REG-R1	REG-R2	REG-R3	REG-R4	REG-R5 (upgrading existing REG) REG-R6 (new REG)	REG-R7	Rule in General Rural Zone chapter.	n/a
Standards	REG-S1 REG-S2	REG-S3	REG-S4 REG-S5 REG-S6 REG-S9 REG-S10	REG-S7 REG-S8 REG-S9 REG-S10	REG-S9 REG-S10 REG-S11	n/a	n/a	n/a