BEFORE THE TARARUA DISTRICT COUNCIL'S HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the applications by Energy Bay Limited to the

Tararua District Council (202.2022.136.1) for resource consents to establish and operate a solar

farm at 410 Managamaire Road, Pahiatua

LEGAL SUBMISSIONS FOR ENERGY BAY LIMITED

DATED 28 AUGUST 2023

Planz Consultants Ltd

PO Box 1845

Christchurch 8140

www.planzconsultants.co.nz

Catherine Boulton

DDI: 03 281 8924

E: catherine@planzconsultants.co.nz

Counsel acting:



☑ john@johnmaassen.com

johnmaassen.com

**** 04 914 1050

04 473 3179

TABLE OF CONTENTS

Housekeeping	3
Evidence for EBL	4
Overview of Submissions	5
Interpretation of the Tararua District Plan	5
The NPSREG	9
The NPSHPL	12
Acoustic effects	14
Landscape and visual effects	14
Glint and glare effects	16
Conclusion	21
Attachment 1 Analysis of the implications of the CCRA as amended in 2019 fo Policy B of NPS-REG	
Attachment 2 An interpretation of the NPSHPL with an eye to its potential implications for solar farm applications on HPL	26
Attachment 3 Additional Approval Forms	33
Attachment 4 General Conditions	34

MAY IT PLEASE THE COMMISSIONER:

Housekeeping

- [1] Energy Bay Limited (the Applicant) (*EBL*) provides with these submissions an electronic casebook (*ECB*) of its evidence statements and attachments. That includes a corrected version of Mr Langbridge's evidence with changes highlighted in yellow where Mr Langbridge has corrected misreported glint and glare results although the changes do not alter his conclusions.
- [2] The ECB provides quick referencing for witnesses to answer questions. Also filed with these submissions is an electronic authorities bundle (ABOA). All bundles are within a parent folder sent electronically. Underlining in these submissions indicates a hyperlink that only operates if the folder structure is preserved.
- [3] Three EBL witnesses will attend by AVL; Andrew Archibald, Peter Hayman and Mary Hamilton.
- [4] Witnesses have supplied their hearing notes. These are short because EBL recognises the Commissioner has read the exchanged material, and the important part of the hearing is to address the Commissioner's questions. Similarly, these submissions, being pre-circulated, will not be read at the hearing. Instead, counsel will highlight key points. Mr Visser provides speaking notes for EBL essentially in substitution for Mr Archibald's evidence on operational and technical issues because Mr Visser has the relevant technical knowledge and will be present in person at the hearing.
- [5] In addition to the approval forms supplied in the Application¹ and EBL's further information response,² EBL includes a recently obtained approval in **Attachment 3** to these submissions.

¹ AEE dated 23 September 2022, Appendix 5.

² Planz Consultants Ltd's memorandum dated 20 February 2023 clarifying approvals.

[6] Attachment 4 contains EBL's offered conditions with changes from Mr Bashford's version underlined. A Word version will be emailed to the Committee Administrator.

Evidence for EBL

- [7] EBL relies on the content of its Application and further information supplied as further modified by witness statements. The Council regards most of the information provided with the Application as sufficient. Therefore, EBL's oral presentation focuses on the key remaining topics of interest to the submitters and reporting officers.
- [8] The proposed solar farm will generate approximately 72.69 GWh in its first year, which, based on an average annual household usage of 7,000kwh/NZ home, equates to supply sufficient for 10,384 homes.³ The electricity will be fed into an existing substation at Mangamaire to meet market demand as described in evidence from Mr Archibald.
- [9] The witnesses and sequence of evidence for EBL are as follows:
 - (a) Mr Archibald Mr Archibald provides company evidence, including EBL's role in the electricity generation market, its development sites in New Zealand, and why EBL selected the Site for a solar farm.
 - (b) Mr Langbridge Mr Langbridge provides evidence on landscape and visual impacts.
 - (c) Ms Hamilton Ms Hamilton provides acoustic evidence.
 - (d) Mr Hayman Mr Hayman provides evidence on glint and glare using the modelling by Vector Powersmart.
 - (e) Ms Boulton Ms Boulton provides planning evidence.

³ See AEE at page 10.

Overview of Submissions

- [10] The Commissioner has comprehensive planning evidence from two senior planners who evaluate the technical evidence and planning instruments. It is neither necessary nor appropriate in these submissions to repeat that analysis. It is sufficient to observe the alignment between the planners on the main conclusions of the technical evidence and the proper weighting of these assessments under relevant instruments as part of the overarching evaluative exercise. Consequently, both planners consider that the RMA's purpose is best served by granting consent.
- [11] These submissions highlight key matters where legal submissions may assist the Commissioner.

Interpretation of the Tararua District Plan

- [12] This section analyses the structure and content of the Tararua District Plan (TDP) to illuminate its overall approach to renewable electricity generation (REG), recognising that the TDP is the most relevant planning instrument alongside the NPS-REG under RMA, s 104.⁴
- [13] The TDP is a second-generation RMA plan that (like the Rangitikei District Plan, also applying to a mostly rural district in the region) is a relatively straightforward planning instrument that attempts to accommodate market forces governing the demand for the use of natural and physical resources except where activities generate effects that are incompatible with the outcomes of management areas within the Plan or where resources warrant protection.⁵ Consistent with that approach, there is limited use of the noncomplying activity category and hence few resources where a protection ethic prevails.
- [14] The Tararua district has (alongside Palmerston North City) seen significant wind energy development on the Tararua and Ruahine Ranges. These wind farms generated substantial and sometimes contentious, planning processes.

⁴ For discussion on role of NPSREG see following section.

⁵ See <u>TDP section 1.1.5</u>. ABOA Item 7 page 272.

Important issues include the impact on the landscape and visual values and the effects of noise, including special audible characteristics from turbines. That historical observation is made for the following reasons:

- (a) It explains the significant references to REG in the TDP with a particular eye to wind farming.
- (b) It explains the consent of the TDP that says that REG is an important contributor to the economy and that communities, over time, often accept dramatic amenity changes associated with REG.
- (c) Generally, tangata whenua in the region supports REG development, notably because of REG's contribution to mitigating the impacts of GHGs.
- [15] Consistent with those themes, the Plan recognises the Rural Management Area as a place where demand for REG activities will emerge in response to regional and national trends. That is explicitly addressed in section 2.3.1.2 of the District Plan:

"2.3.1.2 Nature of activities in rural areas

A significant issue is how to achieve the appropriate balance between rural and non-rural activities in the Rural Management Area and in different parts of the Rural Management Area. It is recognised that the vitality of the District's rural area depends on the ability to maintain and enhance its population base, and to establish and retain essential services and facilities which serve the rural community. Furthermore, market forces play a critical role in the economy of the rural sector, and therefore of the District. The Council considers it is important that the District Plan does not inhibit the ability of people to adjust to changing land use practices and emerging economic trends any more than is necessary to achieve the sustainable management of our natural and physical resources.

In this regard, a good example is the emergence of wind farms as a viable and legitimate land use of national significance and benefit. The District includes a number of large-scale wind farms. The Council acknowledges the benefits of the generation of electricity from renewable sources and also acknowledges that wind farms have particular characteristics in terms of their potential adverse effects on the environment (e.g. potential noise and visual effects) and amenity values. It also recognises that the benefits of wind farms accrue nationally whilst adverse effects manifest themselves locally. For this reason, it is considered appropriate to consider wind farms as a discretionary activity so that their benefits, both in terms of the

national interest and in terms of renewable electricity generation can be considered with regard to local adverse effects and amenity values."

- [16] Following the approach above and to meet anticipated demand for REG resource use, section 2.8.4 of the District Plan (ABOA Item 7 pg 366) has a policy 'container' of well-ordered provisions governing REG operating alongside section 5.3.7's standards.⁶ The District Plan says that it gives effect to NPSFM by this bespoke treatment of REG.⁷ This policy cascade provides decision-makers with clear direction for evaluating REG proposals.⁸
- [17] The following are important textual indications in the policy 'container' in section 2.8.4:
 - (a) Objective <u>2.8.4.1</u> is to *acknowledge*⁹ the potential for REG activities in the Rural Management Area. Thus, the goal is to identify specific opportunities for the operation and development of REG in the Rural Management Area.
 - (b) Policy <u>2.8.4.2(a)</u> recognises the *benefits* from the *development* of those REG resources recognised under 2.8.4.1 at a local, regional and national scale. Hence benefits of all forms explicitly require attention in an RMA, s 104 analysis as part of the goal of acknowledging the opportunities.
 - (c) Policy <u>2.8.4.2(b)</u> has a deliberate reordering of the effects response from that in RMA, s 5(2)(c) so that the TDP prefers management of amenity effects for REG rather than avoidance. Hence, the management response is only required to the extent where *possible*. Further, inappropriate REG only arises where the effects are so significant that they make the activity *inappropriate*.¹⁰

⁶ "Well ordered" recognises that it implements Part 2 following R J Davidson Family Trust v. Marlborough District Council [2017] NZCA 194.

⁷ TDP pages 1-5.

⁸ See *Davidson* above.

⁹ This is a synonym for 'recognising'. See OED 5th ed.

¹⁰ This is contentious. See Environmental Defence Society Incorporated v. The New Zealand King Salmon Co Limited [2014] NZLR [59].

- [18] The benefits that are referred to in Policy 2.8.4.2(a) can be broken down into two classes (Classes A and B) as follows:
 - (a) Class A benefits, comprising REG benefits of the type in Policy A of NPSREG identifies as follows:

"POLICY A

Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities. These benefits include, but are not limited to:

- (a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
- (b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;
- (c) using renewable natural resources rather than finite resources;
- (d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
- (e) avoiding reliance on imported fuels for the purposes of generating electricity".
- [19] Class B benefits are economic benefits for the local and regional economy and the benefits of achieving the national REG target. In that class, are the types of benefits referred to by Mr Archibald including:
 - (a) Construction benefits.
 - (b) Locally sourced supporting activities.
 - (c) Market-led efficient resource use by an agrivoltaic enterprise.
 - (d) The contribution to achieving the national <u>target</u> for REG in light of the Climate Change Response Act following NSE-REG (Policy B).
- [20] The standards in TDP, section 5.3.7, make new REG a discretionary activity (5.3.7.2) with nine assessment criteria (ABOA Item 7 pp 497 499).

The NPSREG

- [21] The NPS-REG is a distinctive national direction in that its directions are to *Decision-makers*, defined in the interpretation section as <u>all persons exercising</u> functions and powers under the Act. Therefore, unlike some other national policies focused on directions for policy and planning instruments, the NPS-REG operates across all RMA functions, including RMA, s 104.
- [22] The NPS-REG is a living or ambulatory instrument requiring decision-makers at decision-making time to consider the contribution of the proposal to achieving national targets, which, in turn, is functionally related to New Zealand's energy market dynamics.
- [23] For example, Objective B and Policy B state as follows:
 - 'B. Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources

POLICY B

Decision-makers shall have particular regard to the following matters

- a) maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource; and
- b) even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output; and
- c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities."
- [24] When considering Policy B(c), one must consider the 2019 amendments to the Climate Change Response Act (*CCRA*) with the aim of zero carbon emissions in the long term because they alter New Zealand's energy demand context and hence the scope of the national task of achieving the target.

- [25] EBL's key propositions on the NPSREG Objective B and Policy B are the following:
 - (a) The NPSREG target is clear and is the renewable energy production capacity (90%) required to meet present and projected future electricity demand. The target referred to in NPSREG is to achieve at least the level of 90% renewable electricity production as recorded in the Statement's Preamble¹¹ and affirmed close to the Statement's Gazettal (as the Preamble notes) in the New Zealand Energy Strategy 2011–2021 (*The NP-REG target*).¹² That percentage level of production is only timebound by a specific date in that it is to be achieved by 2025¹³ from a starting level of 74% in 2011. Local authorities must aim to sustain that target level while the NPSREG is in force by implementing NPSREG in planning instruments using a reasonable planning horizon to assess renewable energy capacity requirements.
 - (b) In assessing the national renewable energy infrastructure needed to sustain the NPSREG target over a reasonable planning horizon, one must:
 - (i) Assume electricity generation will meet demand if economically viable.
 - (ii) Demand is a function of existing demand and growth in demand.

The factors influencing demand make up the energy demand context.

(c) The CCRA has transformed the energy demand context because it seeks net zero GHG emissions as the *2050 target* replacing the aim referenced in the New Zealand Energy Strategy 2011–2021 of a 50% reduction of GHG emissions below 1990 levels. Increased electricity demand will now be from the growth of usual sources of electricity

¹¹ R J Davidson Family Trust v. Marlborough District Council CA97/2017; [2018] NZCA 316.

¹² <u>Developing our energy potential</u> and the New Zealand Energy Efficiency and Conservation Strategy 2011–2016, NZ Government MBIE.

¹³ NPS-REG, Preamble.

- demand and significant substitutionary demand¹⁴ minus efficiencies and mitigation.¹⁵
- (d) A recent report from Transpower, Whakamana i te Mauri Hiko' illustrates the reality of the new energy demand context. 16 Transpower has now been commissioned under New Zealand's first Emissions Reduction Plan 17 under CCRA to model energy scenarios. That is Action 11.2.2: Ensure the electricity system and market can support high levels of renewables in the Emissions Reduction Plan. Whakamana i te Mauri Hiko was made before this action point.
- (e) Transpower, in *Whakamana i te Mauri Hik*' at p 33, states New Zealand needs to build 6 GW of wind generation and 6 GW of solar capacity in the next 30 years to keep up with demand from electrification. That is equivalent to 92 wind or solar farms (the same size as New Zealand's newest wind farm, the Waipipi wind farm) in 30 years. That is a magnitude and speed of infrastructure building that New Zealand has never seen before.
- (f) Parliament has set the 2050 GHG target in CCRA's 5Q. Therefore, New Zealand's energy demand context must now be assessed, recognising that New Zealand is on a trajectory to net zero GHG emissions. The national enterprise of meeting the NPS-REG target in that energy demand context is enormous irrespective of whether one uses:
 - (i) A 90% target or a 100% target;
 - (ii) A horizon of 20 years or 30 years.

It is even a large enterprise ignoring substitutionary demand.

[26] Detailed reasoning for the propositions above is contained in **Attachment 1**.

¹⁴ That is demand previously met by fossil fuels.

¹⁵ Mitigation includes tree planting and sequestration technologies.

¹⁶ Transpower, Whakamana i te Mauri Hiko, Empowering our Energy Future March 2020.

¹⁷ <u>First Emissions Reduction Plan.</u> Action 11.2.2: "Ensure the electricity system and market can support high levels of renewables".

The NPSHPL

- [27] Mr Bashford's assessment of the Application against NPSHPL is at [106]-[109] of his s 42A report. He concludes that the Application *meets the requirements* under clause 9.3 of the NPSHPL, and the NPSHPL does not prevent granting the Application. In reaching that conclusion, Mr Bashford identifies the functional benefits of locating the solar farm next to the Powerco substation at the Mangamaire intersection. He also notes a distinction between capacity and availability of HPL. Mr Bashford concludes that the land's capability is not affected by the Application, and the production availability is partly sustained by continuing use of the land for rural production.
- [28] Mr Bashford's conclusions align with Ms Boulton's. However, Ms Boulton also points out that NPSHPL is principally developed to be implemented through changes to the District Plan, and the planning provisions will need to assess the *measures* under clause 3.9(3) that are appropriate to mitigate or minimise effects on soil capacity and availability for a range of specified infrastructure under clause 3.9(10(j) including REG.
- [29] The NPSHPL will engender future strategic planning processes with the following requirements:
 - (a) Reconciliation of the directive requirements of NPSREG and NPSHPL following the recent *Port Otago* decision of the Supreme Court.¹⁸
 - (b) Consideration of the relative costs and benefits of various *measures*, also recognising the developing science of agrivoltaics demonstrating economic efficiencies obtained from combining solar production and primary production activities on rural land.¹⁹ This is an area of research in which New Zealand agricultural expertise is evident.²⁰

¹⁸ Port Otago Limited v. Environmental Defence Society Incorporated [2023] NZSC 112.

¹⁹ RMA, s 32.

²⁰ Ms Boulton refers to Massey University research. Also see Oregon University results peer reviewed by New Zealanders in <u>ABOA Item 9</u>, <u>Pasture production and land growth in agrivoltaic systems – Frontiers in Sustainable Food Systems April 2021 Volume 5 Article 659175.</u>

- [30] Attachment 2 has a more detailed consideration of the issues relating to the interpretation of NPSHPL, the reconciliation of NPSHPL with NPSREG and an analysis of how to *have regard to* NPSHPL under RMA, s 104 in circumstances where its principal function is to provide direction on the formation of policy to address HPL.
- [31] EBL's main propositions on the NPSHPL are the following:
 - (a) NPSHPL clause 3.9 (like other clauses) directs local authorities concerning plan-making and is not a standard (in planning terms) to be met. NPSHPL is not a NES.
 - (b) 'Specified infrastructure' is appropriately located on HPL under clause 3.9(2)(j), where operational or functional requirements apply. The *or* in clause 3.9(2)(j) can and does operate as an *and*. EBL says operational and functional requirements have dictated the sites' selection as addressed in Mr Archibald's evidence, Ms Boulton's evidence and in the AEE.
 - (c) Territorial authorities must in plans implement *measures* (i.e. planning responses) to ensure any use of development of land minimises or mitigates actual loss or potential cumulative loss. That will require a consideration of the impact on the availability and capability of HPL from REG, recognising the developing science in agrivoltaics. TDC may also set total cumulative limits on soils used for REG.
- [32] I agree with both planners that the NPSHPL does not have provisions that militate against grant of consent for the following reasons:
 - (a) Solar development's operational and functional requirements in this part of the District have dictated site selection.
 - (b) HPL capacity is unaffected, and the Site will remain in production in a configuration with REG that optimises efficient use of the natural resources.

- (c) It would be inappropriate to apply clause 3.9 rigidly before thorough implementation under RMA, Part 5.
- (d) There are no cumulative effects of solar farming on HPL availability in the Tararua District now and no evidence that it will be widespread in the future.

Acoustic effects

- [33] The TDP sets specific noise standards in section 5.4 (ABOA Item 7 p 500) for the Rural Management Area governing aural amenity at Rule 5.4.1.2(b) (ABOA Item 7 pg 501) and a requirement for construction noise to be measured in accordance with and to meet the limits in NZS 6803:1999. Mr Bashford correctly records in section E of his report that the Applicant does not seek consent to deviate from those standards. The Applicant expects to meet those standards and is yet to develop a complete methodology appropriate to achieving those standards. Ms Hamilton confirms that based on her current risk assessment, all operational and construction acoustic standards can be met.²¹
- [34] Following the decision of the High Court in <u>88 The Strand Limited v. Auckland City Council²²</u>, (ABOA Item 1) the proposal, therefore, fits within the Plan standard. Accordingly, there is nil noise effect and no noise-breaching activity requiring consent before the Commissioner.

Landscape and visual effects

[35] The Applicant proposes either Cyprus or Totara shelterbelts along the outside of a security fence (deer fence) shown in GA sheet 5 of Mr Langbridge's evidence. A clipped Cyprus hedge will achieve a screen within two to three years of planting, and a Totara hedge within five years. Clipped hedges are, according to Mr Langbridge, well-established within the locality.²³

²¹ Section 4.8 of Ms Hamilton's evidence, notes as a worst case, this could mean that works cannot take place within setback distances of dwellings -- i.e. potentially up to 160 metres for pile driving. ²² 88 The Strand Limited v. Auckland City Council [2002] NZRMA 475.

²³ Langbridge SOE at [16].

[36] Mr Langbridge described the landscape as having rural character values and notes at [53]:

"This working landscape is not unique in this area. It is a relatively generic rural landscape commonly experienced in this part of the Wairarapa bush locality. Nevertheless, the expansive views across the flat pastures to the surrounding hills is a visually coherent outlook that while typical has a high amenity and aesthetic value."

[37] Mr Langbridge notes about 15 dwellings and 23 other farm buildings within 500 metres of the boundary. Of these, nine dwellings are considered to 'overlook the site'. For the long-standing houses, Mr Langbridge notes at [44] that are identifiable by the protective measures that will be undertaken using planting and shelterbelts to address the wind in this area. In an overall conclusion, Mr Langbridge states:

"Given the anticipated time lag of the various shelterbelts, the screening effect of the shelterbelts will be gradual over a relatively short period of time possibly as short as two years, to achieve a height at which it becomes effective. Boundary fencing and planting can be undertaken as part of the initial stage in development which means that as the farm is installed the shelterbelts are establishing themselves and the visual effects are increasingly mitigated. I do not consider it is critical they are established in advance."

- [38] Mr Langbridge considers that following shelter planting the effect will be low within 2-3 years of planting.
- [39] Mr Bray for the Council, mostly agrees with Mr Langbridge's assessment of the degree of effect after screen planting is established but identifies the effect is moderate until that occurs. At [29] of his report, Mr Bray makes further suggestions, some of which have been adopted in the draft conditions promoted by Ms Boulton.
- [40] The TDP prefers mitigation for REG proposals, and both planners apply that approach.

²⁴ Langbridge SOE at [43].

Glint and glare effects

- [41] EBL's witness on glint and glare is Peter Hayman, a consultant at SLR based in Melbourne. Mr Hayman performs an interpretative assessment of the raw modelling by Vector Powersmart at Mt Maunganui, which was undertaken using the Solar Glare Hazard Analysis Tool (SGHAT) developed by Sandia Labs.²⁵ That classifies glare according to a traffic light taxonomy, as explained in Hayman at SOE at [14].
- [42] Before addressing the assessment and relevant evaluation of glint and glare, a short summary of the assessments performed as part of EBL's Application is appropriate.
- [43] Vector Powersmart's initial assessment in the AEE is dated 9 May 2022 and is attached as Appendix 2 to the Application. That analysis was modelling screening afforded by existing and to be retained on-site and off-site shelterbelts. That report identified glint and glare at OP1, OP2 and some parts of Mangamaire Road and Tutaekara Road.
- [44] Following TDC's undated section 91 request for further information, a further assessment was performed by Vector Powersmart (report reference: V20230811) that, in section 4 of its conclusion, stated:

"To conclude, both east and west arrays are predicted to produce glare for several of the existing and potential receptors. Glare is not predicted to effect either Mangamaire Road or Tutaekara Road. These results are based on analysis with the inclusion of existing and produced shelterbelts."

[45] Based on that existing and belt environment, Mr Hayman notes that:

"The maximum amount of glare at any one location is 398 minutes annually that could leave an after image for an observer."

- [46] Vector Powersmart also performed further modelling for locations where dwellings did not exist, but there was potential for dwellings.
- [47] Mr Hayman records that the following that modelling predicts in potential dwelling locations more significant glare with one potential receiver location

.

²⁵ Hayman SOE at [14].

- receiving 3,660 minutes and at least some minutes for 12 of the 26 potential dwelling locations chosen.²⁶
- [48] Following the revised V20230811 assessment, Vector Powersmart also performed further modelling (called the second and third round modelling). This included revised array and road user heights, the railway line to the west and revised shelterbelt heights
- [49] Mr Hayman then applied the New South Wales Guideline called the 'Large Scale Solar Energy Guideline' (LSSEG) 2022 as an assessment tool.
- [50] For existing receivers, Mr Hayman opines that the results *show maximums between* 10 and 30 minutes per day which falls into the moderate impact category and requires consideration of mitigation.²⁷
- [51] For potential locations, glint and glare greater than 30 hours per year was modelled for one property. Following NSW LSSEG, mitigation or avoidance is recommended for that level of exposure. It is noted that the LSSEG does not specifically mandate a response for 'potential' development. However, for most potential locations, only 10-30 hours per year was predicted.
- [52] The mitigation tools that Mr Hayman identifies at [21] of his SOE are vegetation screening and software adjustments to control the rest angle of the tracking system of the solar tables.
- [53] When screening is established, no existing receiver locations will be affected by glint and glare. Therefore, any effect on existing locations will be temporary before screening is established. Some glare will remain even after screening for potential locations because of their elevated nature—for example, the Moore property at Dougherty's Road.
- [54] The key propositions for EBL on glint and glare are the following:
 - (a) Proposition 1 Software adjustments reducing the farms' energy conversion efficiency before screening is established are not required

²⁶ Hayman SOE at [7].

²⁷ Hayman SOE at [19].

- to prevent the predicted magnitude of glint and glare on existing properties. After the screening is established, the effects of glint and glare will be minor.
- (b) Proposition 2 Predicted glint and glare at potential dwelling locations could be mitigated by the landowners, and it is inappropriate to require internalisation of those effects or mitigation on Site when the receptor location can mitigate that effect. Furthermore, the predictions are speculative and are not supported by evidence the locations are places likely to be developed.
- [55] Concerning Proposition 1, there is little guidance from the case law on glint and glare. However, the Commissioner is asked to consider the decision of the Environmental Protection Agency in *Harmony Energy Limited* concerning the Tauhei solar farm in Te Aroha West, Waikato (ABOA Item 4). The decision-makers included Simon Berry and Paul Cooney. The question of glint and glare is addressed in section 7 on page 33 onwards of the decision.
- [56] The *Harmony Energy Limited* application identified 13 dwelling receptors effected by glint and glare and the question the Panel asked is what was the effect on the Applicant of delaying construction until screening was established in the first 2.5 3 years. The position summarised by the Applicant at <u>7.84</u> of the Decision states:

"..a 3.5 year delay will:

- (i) deny New Zealand the opportunity to generate circa 900 GWh of clean energy from solar and require it to generate the same from coal-fired production, at a time when it is pursuing ambitious carbon reduction commitments;
- (ii) risk stifling economic activity post COVID and undermining the purpose of the Fast-track consent process;
- (iii) put the entire project in jeopardy due to the uncertainty that will be injected into the development programme in relation to the market, finance, off-take, grid capacity and land; and
- (iv) jeopardise the Applicant's ability to bring forward a project which offers New Zealand a wide range of environmental and social benefits beyond clean energy generation."

- [57] On that matter, the Panel stated at 7.85:
 - "[7.85] The Panel finds these points very compelling given the purpose of the FTCA and the NPS-REG, which we are required to place significant weight on in making our decision on this application, particularly given the narrow compass of potential local adverse effects and their duration."
- [58] Many of the concerns about delaying construction raised by Harmony Energy Limited apply to this case. The Commissioner can ask questions of Mr Archibald about that.
- [59] Mr Hayman's evidence and the planning evidence is that it is disproportionate to require establishment of the planting as mitigation before construction. Virtually every large-scale project requires mitigation of some form and requirements to mitigate in advance to avoid effects is an exceptional treatment that is rarely prescribed because it is unreasonable.
- [60] Investment certainty is a critical part of achieving NPSREG targets, and that cannot be achieved with implementation delays because financial viability is determined based on pricing when a decision to construct is made.
- [61] Concerning Proposition 2, EBL notes:
 - (a) Solar farming is part of the REG portfolio that NPS-REG directs plans must provide for it in developing REG activities.²⁸
 - (b) While the existing environment can include potentially new dwellings, following the *Hawthorn v. Queenstown District Lakes*²⁹ approach (ABOA Item 2), this cannot be applied unreasonably and can only be applied where the evidence establishes the activity or consent is likely to be implemented. In two related judgments in *Royal Forest and Bird Protection Society New Zealand v. Buller District Council*₃₀ (ABOA Item 3) the High Court cautioned against reading *Hawthorn* out of context and

²⁸ NPS-REG (Policy E1).

²⁹ Hawthorn v. Queenstown District Lakes [2006] NZRMA 424.

³⁰ Royal Forest and Bird Protection Society New Zealand v. Buller District Council [2013] NZHC. 1324; Royal Forest and Bird Protection Society New Zealand v. Buller District Council [2013] NZHC 1346.

- applying it speculatively. What is required is a real-world analysis of the future environment.
- (c) The internalisation of effects is not required beyond that which is reasonable.³¹
- (d) The TDP only requires mitigation to the extent *possible* (Policy 2.8.4.2.(b)).
- (e) The Rural Management Area is not a residential area, and any new residential dwelling that will be occupied is ancillary to production activity and can be designed to mitigate effects.
- (f) The assessment criteria in TDP, Method 5.3.7.4(c), requires a focus on the amenity effects of *existing* dwellings, not potential dwellings.
- [62] Mr Bashford implicitly responds to these principles at [53] concerning submitters 4 and 5 overlooking the Mangamaire Valley concerning landscape and visual effects. At [53], he states:

"Generally speaking, it is likely that the solar farm will be visible from the view from dwellings if they were constructed on this land. However, without knowing exactly where any such dwelling was to be located or its orientation, it is difficult to assess an exactly level of effect. Although it would be a permitted activity constructed dwelling on land, at this stage, no dwellings exist and no building consent applications for dwellings have been lodged with TDC, and the land is farm land. Given this, if the solar farm proceeds, any future dwelling can be designed to take the solar farm and its visual effects into account."

[63] The same observations of Mr Bashford are true for glint and glare. Put simply, there is no prospect of implementing NPS-REG if one accepts in the rural environment the ability of any landowner to postulate hypothetical locations for dwellings and assume worst-case scenarios for glint and glare that appropriate and reasonable steps by the landowner can mitigate.

³¹ Winstone Aggregate v. Matamata-Piako District Council [2004] 11 ELRNZ 48 (EnvC).

Conclusion

[64] The planning evidence confirms that it is appropriate to grant consent, and EBL seeks consent accordingly.

J W Maassen

Counsel for the Applicant

Attachment 1

Analysis of the implications of the CCRA as amended in 2019 for Policy B of NPS-REG

Context of New Zealand's international commitments concerning GHG emissions reductions

- [1] National Policy Statements are treated as secondary legislation to be construed according to the Legislation Act 2019, making the context relevant.³²
- [2] International instruments of New Zealand concerning climate change goals are relevant context³³ and inform the following:
 - (a) The appropriate recognition of the benefits of renewable energy as directed by Sub-Objective A and Policy A in NPS-REG.
 - (b) To appreciate the practical implications of achieving New Zealand's target for electricity generation from renewable resources under Sub-Objective B.
 - (c) To scale the degree to which meeting and sustaining the target will require the significant development of renewable electricity generation activities under Sub-Objective B, Policy B.
 - (d) The enduring nature of the CCRA regime affects the *energy demand* context.
- [3] The relevant international covenants demonstrate the need for a long-term commitment to renewable energy development. These commenced with the Kyoto Protocol, with the 2nd Kyoto Commitment approved around the same time as the NPS-REG for the long-term management of GHG emissions.
- [4] On 12 December 2015, New Zealand adopted at the UN Climate Change Convention (COP21) in Paris (the Paris Agreement) an overarching goal to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. The UNFCCC at its website states:³⁴

"Implementation of the Paris Agreement requires economic and social transformation based on the best available science. The Paris Agreement works on a five-year cycle of increasingly ambitious climate action -- or ratcheting up - carried out by countries. Since 2020, countries have been submitting their national climate action plans, known as nationally determined contributions (NDCs). Each successive NDC is meant to reflect an

³² The usual interpretation tools apply in performing the interpretation task, and the Legislation Act 2019, s 10 provides an accepted standard of analysis based on RMA, s 52(4), which states; *A national policy statement under this section is secondary legislation*. The method involves ascertaining meaning from its text and in the light of its purpose and its context.

³³ LoNZ Statutes, Statutory Interpretation: External Contextual Guides pt V - see para 165 The Laws of New Zealand; and Carter, Statute Law 5th Edn Lexis Nexis. Chapter 15.

³⁴ https://unfccc.int/process-and-meetings/the-paris-agreement.

increasingly higher degree of ambition compared to the previous version".

[5] To reinforce their importance to the CCRA framework, the Kyoto Protocol and Paris Agreements articles are annexed to the CCRA.

CCRA 2022

- [6] The purpose of the CCRA, following the Kyoto Protocol and the Paris Agreement, is to develop a framework to:³⁵
 - (a) Contribute to the global effort under the Paris Agreement to limit the global average temperature to 1.5°C above pre-industrial levels.
 - (b) Allow New Zealand to prepare for and adapt to the effects of climate change.
- [7] Under the CCRA, a more ambitious, wide-ranging and sophisticated approach to GHG emissions reduction is established. That includes the development of an Emissions Reduction Plan for each emission budget period defined in the CCRA to achieve the *2050 target*. The first Emissions Reduction Plan is available from the Ministry for the Environment website.³⁶
- [8] That 2050 target and the framework to achieve it is addressed in the CCRA in Part 1B at s 5Q onwards. The 2050 target is a defined term to reach net zero greenhouse gas emissions by 2050 under s 5Q(1)(a).³⁷
- [9] The 2050 target will be achieved by energy budgeting for the prescribed energy budget periods using plausible energy demand, substitutionary and mitigation scenarios over emission budget periods.
- [10] To achieve the 2050 target, it will be necessary to reach close to 100% renewable electricity for:
 - (a) All existing and new demands for electricity; and
 - (b) growth in renewable energy supply to replace current fossil fuel use and all future energy demand.

The NPS-REG and its target

- [11] The NPS-REG should be:
 - (a) Applied to circumstances as they arise under Legislation Act, s 11. In this case, the *energy demand context* informs the significance of most

³⁵ CCRA, s 3.

³⁶ First Emissions Reduction Plan.

³⁷ CCRA, s 5.

- policies in the NPR-REG and the requirement to sustain the 90% target.
- (b) The other side of the coin of (a) is that the NPS-REG is always speaking while in force.
- [12] The target referred to in the NPS-REG Objective is a level of generation of 90% of electricity generated from renewable sources. Please refer to the third paragraph of the Preamble to NPS-REG. That is derived from the affirmation of that generation level in New Zealand Energy Strategy 2011–2021. The 2025 achievement date recognises that in 2011 the generation level was well below that level. It does not mean that the target, if achieved in 2025, the GHG reduction project ceases despite increasing so that planning for renewable energy ceases to matter. The reasons for that are somewhat obvious and include:
 - (a) The context of the NPS-REG is achieving the long-term project of GHG reductions to meet New Zealand's international climate change commitments.
 - (b) The broader NPS-REG aims can only be achieved by meeting anticipated electricity demand over reasonable timeframes.
 - (c) The reference to 2025 in the NPS-REG only functions to make the 90% level timebound, not to ossify the instrument, so there is no long-term planning for renewable energy beyond that date. To read the instrument any other way would be unreasonable.
 - (d) The companion strategy, called New Zealand Energy Strategy 2011–2021, was for a defined period to provide a clear pathway but in the context of meeting long-term GHG reductions over the long term to meet New Zealand's international commitments, i.e. beyond 2025.
- [13] The NPS-REG Objective aims to achieve a proportion of New Zealand's electricity generation that *meets or exceeds* the New Zealand Government's national target.³⁸ The point about exceeding the target is emphasised. In light of the current circumstances,³⁹ any decision-maker today should aim to exceed the national target percentage of renewable electricity generation. To meet peak demand, some fossil fuel contribution will be required to provide security of supply. It is not necessary to assume that 100% renewables will achieve acceptable levels of security of supply. But it must be close to that percentage to meet the *2050 target*.

-

³⁸ NPS-REG, Objective.

³⁹ Including the current Emissions Reduction Plan under Climate Change Response Act 2002. New Zealand has also signed up to the Powering Past Coal Alliance, which commits New Zealand to phasing out coal in electricity generation by 2030.

[14] The NPS-REG Objective must assume that renewable electricity generation will supply the requisite proportion of energy arising from growth in demand. Hence, the Preamble of NPS-REG in paragraph 2 states:

"New Zealand's energy demand has been growing steadily and is forecast to continue to grow. New Zealand must confront two major energy challenges as it meets growing energy demand. The first is to respond to the risks of climate change by reducing greenhouse gas emissions caused by the production and use of energy. The second is to deliver clean, secure, affordable energy while treating the environment responsibly."

[15] NPS-REG Objective B and Policy B states:

"B. Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources

POLICY B

Decision-makers shall have particular regard to the following matters:

- a) maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource; and
- b) even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output; and
- c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities". (emphasis added)

Attachment 2

An interpretation of the NPSHPL with an eye to its potential implications for solar farm applications on HPL

- [1] The NPSHPL is also secondary legislation to be interpreted following the Legislation Act 2019.
- [2] The relevant statutory context for national policy is the following provisions of the RMA, s 45 and 45(a) below.

"45 Purpose of national policy statements

- (1) The purpose of national policy statements is to state objectives and policies for matters of national significance that are relevant to achieving the purpose of this Act.
- (2) In determining whether it is desirable to prepare a national policy statement, the Minister may have regard to-
 - (a) the actual or potential effects of the use, development, or protection of natural and physical resources:
 - (b) New Zealand's interests and obligations in maintaining or enhancing aspects of the national or global environment:
 - (c) anything which affects or potentially affects any structure, feature, place, or area of national significance:
 - (d) anything which affects or potentially affects more than 1 region:
 - (e) anything concerning the actual or potential effects of the introduction or use of new technology or a process which may affect the environment:
 - (f) anything which, because of its scale or the nature or degree of change to a community or to natural and physical resources, may have an impact on., or is of significance to, New Zealand:
 - (g) anything which, because of its uniqueness, or the irreversibility or potential magnitude or risk of its actual or potential effects, is of significal 1 ce to the environment of New Zealand:
 - (h) anything which is significant in terms of section 8 (Treaty of Waitangi):
 - (i) the need to identify practices (including the measures referred to in section 24(h), relating to economic instruments) to implement the purpose of this Act:
 - (j) any other matter related to the purpose of a national policy statement."

"45A Contents of national policy statements

- (1) A national policy statement must state objectives and policies for matters of national significance that are relevant to achieving the purpose of this Act.
- (2) A national policy statement may also state-
 - (a) the matters that, local authorities must consider in preparing policy statements and plans:
 - (b) methods or requirements in policy statements or plans, and any specifications for how local authorities must apply those methods or requirements, including the use of models and formulae:
 - (c) the matters that local authorities are required to achieve or provide for in policy statements and plans:
 - (d) constraints or limits on the content of policy statements or plans:
 - (e) objectives and policies that must be included in policy statements and plans:
 - (f) directions to local authorities on the collection and publication of specific information in order to achieve the objectives of the statement:
 - (g) directions to local authorities on monitoring and reporting on matters relevant to the statement, including-
 - (i) directions for monitoring and reporting on their progress in relation to any provision included in the statement under this section; and
 - (ii) directions for monitoring and reporting on how they are giving effect to the statement; and
 - (iii) directions specifying standards, methods, or requirements for carrying out monitoring and reporting under subparagraph (i) or (ii):
 - (h) any other matter relating to the purpose or implementation of the statement.
- (3) A national policy statement may apply-
 - (a) generally; or
 - (b) to any specified district or region of any local authority;

- (c) to any specified part of New Zealand.
- (4) A national policy statement may include transitional provisions for any matter, including its effect on existing matters or proceedings".
- (5) Consultation undertaken before this section comes into force in relation to a matter included in a national policy statement satisfies the requirement for consultation under section 46A."
- [3] It is notable that other than RMA, s 45A(2)(e), RMA, s 45A does not authorise the use of national policy to reach down and supplant existing settled lower-order planning objectives and policies when performing resource consent discretions before the national policy is implemented under Part 5.
- [4] It is also noteworthy that the NPSHPL does not specify any objectives and policies that must be immediately included in regional or district plans. It provides a timeframe for giving effect to a national policy statement which is directed to amending plans under RMA, Part 5.
- [5] There is an interim definition of *highly productive land* pending regional mapping. This does not suggest that NPSHPL is to reach down and affect discretions under RMA, s 104 because the interim definitions are mainly useful for managing rezonings under clauses 3.6 and 3.7.⁴⁰
- [6] In addition, it is a stretch to suggest that the NPSHPL affects settled subdivision or development policies because most plans have subdivision controls setting minimum lot sizes, often classifying the activity as controlled or restricted discretionary. Clause 3.8 is not intended to operate in a way that overrides those provisions.
- [7] Both clauses 3.8 and 3.9 refer to territorial authorities taking *measures* referred to in subclauses 3.8(2) and 3.9(3). In their context, the reference to *measures* in these clauses do not refer to the performance of discretions under RMA, s 104. Rather, *measures* are strategic planning techniques for achieving well-conceived outcomes using the RMA, Schedule 1 process.
- [8] In the case of clause 3.9(3) governing inappropriate use and development, the *measures* required include minimising or mitigating actual loss or potential cumulative loss or availability and productive capacity of highly productive land.
- [9] The verb phrase "minimises" or "mitigates" in clause 3.9(3) contains contextual determiners and suggest scope for evaluating the degree to which

⁴⁰ See for example, Balmoral Developments (Outram) Ltd v. Dunedin City Council, [2023] NZEnvC 59 (2023).

otherwise appropriate development should be controlled.⁴¹ That assessment requires an integrated assessment meeting the requirements of clause 3.2, which requires taking a long-term strategic approach to protecting and managing highly productive land for future generations.

- [10] Excluded from the definition of "inappropriate use" under clause 3.9.2 is item 3.9(2)(j), which reads:
 - "(j) it is associated with one of the following, and there is a functional or operational need for the use or development to be on the highly productive land:
 - (i) the maintenance, operation, upgrade, or expansion of specified infrastructure:
 - (ii) the maintenance, operation, upgrade, or expansion of defence facilities operated by the New Zealand Defence Force to meet its obligations under the Defence Act 1990:
 - (iii) mineral extraction that provides significant national public benefit that could not otherwise be achieved using resources within New Zealand:
 - (iv) aggregate extraction that provides significant national or regional public benefit that could not otherwise be achieved using resources within New Zealand."
- [11] Renewable energy developments are specified infrastructure under NPS-REG.
- [12] The assessment under clause 3.9(2)(j) is not whether there is an alternative location but whether the activity has a functional or operational need to be located on *the* highly productive land on which it to be sited.
- [13] The term "functional need" is not defined, but it is defined in the NPS-IB as follows:

"Functional need means the need for a proposed activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment."

- [14] Policy C of NPS-REG provides some insight into the functional and operational needs as follows:
 - "C. Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

⁴¹ The definition of 'Minimise" = reduce (something, especially something undesirable) to the smallest possible amount or degree.

POLICY C

Decision-makers shall have particular regard to the following matters:

- a) the need to locate the renewable electricity generation activity where the renewable energy resource is available;
- b) logistical or technical practicalities associated with developing, upgrading, operating or maintaining the renewable electricity generation activity;
- c) the location of existing structures and infrastructure including, but not limited to, roads, navigation and telecommunication structures and facilities, the distribution network and the national grid in relation to the renewable electricity generation activity, and the need to connect renewable electricity generation activity to the national grid".
- [15] Solar farming does not affect the land's productive capacity but, to a limited degree, its availability for primary production.⁴² Productive capacity is defined in NPSHPL as follows:

"productive capacity, in relation to land, means the ability of the land to support land-based primary production over the long term, based on an assessment of:

- (a) physical characteristics (such as soil type, properties, and versatility); and
- (b) legal constraints (such as consent notices, local authority covenants, and easements); and
- (c) the size and shape of existing and proposed land parcels".
- [16] In developing measures to achieve clause 3.9(3) NPSHPL, a territorial authority must recognise the point above and the direction in NPS-REG, Policy A(d) of the reversibility of the adverse effects on the environment of some renewable electricity generation technologies.

Section 2 – how to 'have regard to' the NPSHPL under RMA, s 104

[17] The features of the NPSHPL identified above show that the national directions' primary function is for an inventory of HPL and a management regime in the lower-order plans that include matters of assessment required as part of the *measures* to achieve the requirements of the NPSHPL. While some elements of the HPS-HPL may be regarded as "directive", an important point is to recognise they are directive concerning a particular function, i.e. the preparation and changing of plans under RMA Part 5, not RMA s 104. Caution, therefore, is required as to the extent to which the NPSHPL is *relevant*

-

⁴² We discussed ways of pointing this out in our recent discussion.

and the weight that should be given to that statutory factor in an RMA, s 104 assessment of current proposals to develop solar farms.

- [18] The following additional points are also pertinent:
 - The statutory requirement in preparing plans is to give effect to both (a) the NPS-REG and the NPSHPL.⁴³ There is no case law as to the appropriate scope of evaluating national direction in circumstances where different national priorities are expressed in different statements. The leading case is the Environmental Defence Society v. New Zealand King Salmon Company Limited⁴⁴ that case, however, concerned a single NPS governing the entire coastal environment and in circumstances where the Court found that the lower order instruments adequately implemented that instrument which was the counterfactual against which an assessment was made of the extent to which the proposed marine farms met the NZCPS. In circumstances where there are competing national priorities, the scope for evaluation must exist, suggesting that the somewhat highly textual approach to the assessment of the NZCPS in King Salmon (on the basis of an internally consistent instrument) must yield somewhat to an evaluation of competing priorities in unrelated statements to meet the requirements of RMA, Part 5.
 - (b) It is an error of law to elevate the NPSHPL in the context of an RMA, s 104 application so that it is treated as a set of well-constructed policies implemented according to the circumstances of all territorial areas and, therefore, to be placed on an equal footing with policies that implement NPS-REG in relevant district plans. The NPSHPL is not an NES.
- [19] It is also relevant and reasonably necessary when determining any current renewable energy application to consider that the NPSHPL policy is relatively recent and existing applications are for infrastructure planned and designed before the national policy was gazetted. The point of the NPS-REG was to encourage investment by coherent strategic planning.
- [20] It is incorrect to interpret the NPSHPL as equivalent to a prohibition affecting existing applications for specified infrastructure and to treat the requirements in NPSHPL 13.9 as standards setting the gateways to avoid that prohibition. It is even more unreasonable when the scale of impact on highly productive land from renewable energy development from any individual application is low in the district, and the development does not affect productive capability.

⁴³ RMA, Part 5.

⁴⁴ Environmental Defence Society v. New Zealand King Salmon Company Limited [2014] NZSC 38.

Section 3 – some thoughts on a potential reconciliation of NPSHPL and NPS-REG in the future

- [21] The thesis of this assessment is that it is presumptuous for a decision-maker under RMA, s 104 to presume a reconciliation of NPSHPL and NPS-REG appropriate to the circumstances of a district. Despite that, here are some preliminary thoughts that may inform a strategic assessment.
- [22] Both the NPSHPL and NPS-REG implement matters pertaining to RMA, s 7. I disregard the broad language of RMA, s 5 which lacks operative features. The NPS-REG in particular aims at the matters in RMA, s 7(i) and (j). The NPSHPL has its provenance in RMA, s 7(b) and (g).
- [23] The significance of renewable energy generation can be seen from the fact that RMA, s 6 matters can be overcome by renewable energy generation in other national policies such as NPS-IB.
- The finite characteristics of productive land are its capability for use in primary production, where renewable energy may not have permanent adverse effects. The relative significance of availability compared with capacity needs to be read in the context of RMA, s 7(b) and efficient use and development that not does effect the capability and only to some degree availability is normally delivered through market mechanisms. That may inform how the minimisation or mitigation is pursued through planning measures. Furthermore, in addressing the measures under NPSHPL, it will be necessary to reconcile the requirements of NPS-REG and NPSHPL, and that, in part, will be informed by the availability of resources and the contribution a district can make to national renewable energy targets.

Attachment 3

Additional Approval Forms



Written approval of affected persons

Section 9È Resource Management Act 1991

This form will be scanned by electronic equipment. It is important that you.	
Please note, in most instances the Council will require the approval of the legal owners and property.	the occupiers of the affected
Applicant details (Please print in CAPITALS)	
Title: Mr Mrs Miss Ms	
Energy Bay Limited First names	
Surname	1-1-1-1-1-1-1-1-1-1
129 Tutaekara Road & 410 Mangamaire Road, Pahiatua	
Address of proposed activity	
Brief description of proposed activity	
To establish and operate a solar farm over several parcels of land associ Pt Section 150 Blk XIV Mangahao SD, Section 139 Blk XIV Mangahao Mangahao SD, Subdivision 13 SECT 8 Blk XIV Mangahao SD, Lot 1 D	SD, Section 140 Blk XIV
Affected persons (Please print in CAPITALS)	
Affected persons (Please print in CAPITALS) KAREN SMITH & STEWART SMI Full name of affected person(s) 126 TUTAEKARA ROAD RD7 PAHIATUA,	
Affected persons (Please print in CAPITALS) KAREN SMITH & STEWART SMI Full name of affected person(s) 126 TUTAEKARA ROAD	
Affected persons (Please print in CAPITALS) KAREN SMITH & STEWART SMITHING STEWART SMITH STEWART SMITH STEWART SMITH STEWART SMITHING SMITH	17#
Affected persons (Please print in CAPITALS) KAREN SMITH STEWART SMITHING STEWART SMITH STEWART SMITHING SMITH	ation for resource consent you have
Affected persons (Please print in CAPITALS) KAREN SMITH STEWART SMITHING SMITHING SMITHING STEWART SMITHING STEWART SMITHING SMITH	ation for resource consent you have
Affected persons (Please print in CAPITALS) KAREN SMITH STEWART SMIF Full name of affected person(s) 1.26 TUTAEKARA ROAD RD7 PAHIATUA, Address of affected property I am/we are the Vowner(s) Voccupier(s) You should only sign below if you support or have NO OPPOSITION to approval of the application asked to consider. 1. I/We have been given details of the full and final proposal including a copy of the application environmental effects and plans, and plans to which I/we are giving approval. 2. I/We agree that we have signed the resource consent application and each page of the plans.	ation for resource consent you have ion form, assessment of the ns shown to us in respect of this nt of any actual or potential effects of
Affected persons (Please print in CAPITALS) KAREN SAITH STEWART SAITH STEWART SAITH ARE NOAD I 2 & TUTAEKARA ROAD RD7 PAHIATUA. Address of affected property I am/we are the Vowner(s) Voccupier(s) You should only sign below if you support or have NO OPPOSITION to approval of the application environmental effects and plans, and plans to which I/we are giving approval. I/We have been given details of the full and final proposal including a copy of the application environmental effects and plans, and plans to which I/we are giving approval. I/We agree that we have signed the resource consent application and each page of the pla application. I/We understand that by giving my/our written approval, the Council cannot take account the activity on my/our property when considering the application. The fact that any such	otion for resource consent you have ion form, assessment of the ns shown to us in respect of this nt of any actual or potential effects of effects may occur shall not be relevant
Affected persons (Please print in CAPITALS) KAREN SAITH STEWART SAITH STEWART SAITH ART SAITH ART SAITH STEWART SAITH STEWART SAITH ROAD 126 TOTAEKARA ROAD RD7 PAHIATUA, Address of affected property I am/we are the Vowner(s) Voccupier(s) You should only sign below if you support or have NO OPPOSITION to approval of the application asked to consider. 1. I/We have been given details of the full and final proposal including a copy of the application environmental effects and plans, and plans to which I/we are giving approval. 2. I/We agree that we have signed the resource consent application and each page of the pla application. 3. I/We understand that by giving my/our written approval, the Council cannot take account the activity on my/our property when considering the application. The fact that any such grounds upon which the Council may refuse to grant its consent to the application. 4. Further, I/we understand that at any time before the determination of the application I/we	otion for resource consent you have ion form, assessment of the ns shown to us in respect of this nt of any actual or potential effects of effects may occur shall not be relevant

Attachment 4

General Conditions

- 1. The consent holder must undertake the activity in general accordance with the consent application including all accompanying plans and documents first lodged with the Tararua District Council on 3 October 2022, and the information included in the following further information responses and plans:
 - a. Further information response dated 20 February 2023.
 - b. The following specific plans attached to and forming part of this consent:
 - General Arrangement Plan, prepared by Rough Milne Mitchell Landscape Architects Limited
 - Proposed Landscape Mitigation Plan, prepared by Rough Milne Mitchell
 Landscape Architects Limited
 - Indicative Cross Sections, prepared by Rough Milne Mitchell Landscape Architects Limited
 - Mechanical Layout Information, prepared by Rough Milne Mitchell Landscape
 - Architects Limited
 - Solar Panel and Inverter Information, prepared by Rough Milne Mitchell
 Landscape Architects Limited
 - Inverter Enclosure, prepared by Marshall Day Acoustics
- 2. The consent holder must ensure that the solar panel arrays of the Mangamaire Solar Farm conform to the following setbacks as specified on the General Arrangement Plan:
 - a. 10 metres from wetland area
 - b. 10 metres from roads
 - c. 20 metres from 110kV transmission lines
 - d. 3 metres from other boundaries
- 3. The consent holder must construct, operate and maintain the Mangamaire Solar Farm in general accordance with all management plans submitted to, and certified by, the Team Leader Compliance & Monitoring, Tararua District Council as part of the conditions of this resource consent.
- 4. The consent holder must ensure that all contractors engaged to undertake activities authorised by this resource consent are supplied with a copy of and made aware of the conditions and management plans that apply to this resource consent that are relevant to

their work area and the measures required for compliance with the conditions.

5. The consent holder must notify the Team Leader Compliance & Monitoring, Tararua District Council at least **20 working days** before works on Site commence.

Advice Note: The notification of work can be sent to the following email planning@tararuadc.govt.nz using the reference Condition 5 of 202.2022.136.1

Pre-construction

6. Detailed design of the project shall include an attenuation design for the inverters. The attenuation design shall consider selection, orientation, and acoustic screening (though barriers), enclosure, lined ducting, or other measures as appropriate. The attenuation design must ensure that the noise level at any receiver complies with the nighttime noise limit. The attenuation design shall minimise or eliminate tonality (as defined by NZS 6802:2008) where it is practicable to do so. The attenuation design shall further aim to achieve noise levels that are appreciably below the District Plan night-time noise limits where practicable. The attenuation design should be undertaken by a recognised acoustician and recommended attenuation option(s) for each inverter shall be submitted to Council prior to commencement of construction. It is recognised that the attenuation design may require commissioning works on Site during construction to suitably refine and improve the attenuation design.

Advice Note: The attenuation design can be sent to the following email planning@tararuadc.govt.nz using the reference Condition 6 of 202.2022.136.1

7. All vehicle crossings used for construction traffic, must be upgraded to meet Council's District Plan standards outlined in Appendix 12 to the District Plan before construction of the Mangamaire Solar Farm commences. The consent holder must notify the Council of the intent to construct the crossing 10 working days prior to construction commencing to allow time for an inspection should it be deemed necessary.

Advice Note: The notification can be sent to the following email planning@tararuadc.govt.nz using the reference Condition 7 of 202.2022.136.1

- 8. Before construction of the solar farm commencing, the consent holder must ensure that the landscape planting is planted as set out in the Proposed Landscape Mitigation Plan. This includes:
 - a. Planting of the boundary of the Site with staggered double row of *Phormium tenax* (Harakeke) at 2.0m spacing either Cypress or Totara hedgerow at 1.5m spacing; and
 - b. Planting of a 10m wetland buffer as specified on the mitigation plan, with an average density of 1.5m spacing.
- 9. Evidence of the planting, including photos, must be submitted to TDC within one week of planting being completed.

Advice Note: The evidence of planting can be sent to the following email planning@tararuadc.govt.nz using the reference Condition 9 of 202.2022.136.1

10. The consent holder must ensure that a Site Management Plan (SMP) is prepared. The objective of the SMP is to ensure best practice principles, techniques, inspections and monitoring are used during site works including construction traffic and earthworks (including but not limited to dust, sediment run-off including stormwater controls during and post construction, staging of works, accidental discovery and management of fill including the loading and unloading of trucks) alongside compliance with the conditions of this consent.

The SMP must include but not be limited to:

- a. The name and contact details (mobile phone and email) for the on-site manager where contact could be made 24 hours a day / 7 days a week,
- b. A communication and complaints procedure for adjoining property owners/occupiers,
- c. Details of any proposed safety fencing and associated signage for the construction site,
- d. The measures to ensure dirt, mud, debris or other materials are not left on roads,
- e. The methods by which noise associated with the work will comply in all aspects with the controls set out in NZS 6803:1999 and how all persons undertaking day-to-day activity management will adopt the best practical option at all times to ensure the emission of noise from the Site does not exceed a reasonable level in accordance with section 16 of the Resource Management Act 1991, and
- f. Management of site earthworks in accordance with the condition objective including an Erosion and Sediment Control Plan.

Advice Note: Prior to earthworks commencing it is likely that a consent will be required from Horizons Regional Council for earthworks under rule 13-2 of the One Plan. this will likely include the requirement to provide an Erosion and Sediment Control Plan. Any plans submitted to Tararua District Council must be consistent with the plan(s) certified by Horizons.

11. The SMP must be submitted to the Team Leader Compliance & Monitoring, Tararua District Council for technical certification at least **twenty (20) working days** before works commence on the Site.

Advice Note: Team Leader Compliance & Monitoring will provide technical certification of this plan in consultation with Council's Land Development Engineering and Council's Roading Manager.

Advice Note: The SMP can be sent to the following email planning@tararuadc.govt.nz using the reference Condition 11 of 202.2022.136.1

12. Certification (or withholding certification) of the SMP is based on whether the SMP meets the requirements of the conditions of this resource consent, with specific focus on the matters outlined in Condition 10.

- 13. Where Council is unable to certify the SMP on the basis that it does not address the matters contained within Condition 10 the Council will advise the Consent Holder in writing, outlining the reasons why technical certification has been refused within **ten (10) working days** of receipt.
- 14. The Consent Holder must then submit a revised SMP following the procedure set out in Condition 10.
- 15. The SMP may be amended or updated without the need for certification where:
 - a. The amendment is an administrative change, including nominating personnel; and
 - b. The revised SMP is provided to the Team Leader Compliance & Monitoring, Tararua District Council and, within **five (5) working days** of receiving the revised SMP, if the Tararua District Council has not advised in writing that the amendment must be certified under Condition 17 on the basis that the amendments do not meet the requirements of clause A.
- 16. Except as provided for in Condition 15, amendments to the SMP and any appendices must be certified in writing by Team Leader Compliance & Monitoring, Tararua District Council acting in a technical certification capacity prior to the commencement of any works to which the amended SMP relate.
 - a. Certification (or withholding certification) to any amendment to the SMP is based on the Team Leader Compliance & Monitoring, Tararua District Council assessment of whether the amended SMP meets the requirements of the conditions of this resource consent.
 - b. Where Council is unable to certify the amendment to the SMP the Council will advise the Consent Holder in writing, outlining the reasons why technical certification has been refused within **ten (10) working days** of receipt.

The Consent Holder must then submit a revised amendment to the SMP.

- 17. The consent holder must ensure a Pest Control Plan (PCP) is prepared and submitted to the Team Leader Compliance & Monitoring, Tararua District Council for technical certification within 3 months of the landscape planting being completed. The PCP must contain, but not be limited to, the following:
 - a. <u>Mapping the distribution of planting across the Site where pest animal species may reside.</u>
 - b. Methods for the control of pest animal species.
 - c. The ongoing control of pests across the Site.
 - d. Monitoring of the PCP to ensure its effectiveness.

Construction and Earthworks

18. The consent holder must ensure that <u>noise and vibration from</u> construction <u>noise complies</u> activities with the noise limits in Table 2 of New Zealand Standard NZS 6803:1999 "Acoustics - Construction Noise" <u>and German Standard DIN 41503:2016 Vibration in buildings - Part 3: Effects on structures [vibration]</u>. Any measurement and assessment of construction noise and vibration must be undertaken in accordance with that Standard.

Advice Note: These limits relate to construction noise only. Upon the Site becoming operational the operational noise conditions must be complied with as detailed in Condition 29.

Advice Note: Table 2 of NZS 6803:1999 "Acoustics - Construction Noise" specifies upper limits of 70dBALeq and 85dBAmax for long term duration works between the hours of 7:30am and 6:00pm.

- 19. Construction activities shall only operate within the hours of Monday to Friday 7.30 am 6.00 pm and Saturday 7.00 am 1.00 pm, excluding public holidays.
- 20. The consent holder must ensure the Site is managed in accordance with the certified SMP during the construction period until the Site is stabilised (i.e., no longer producing dust, water-borne sediment or potential contaminants). The SMP shall be improved if initial and/or standard measures are inadequate. All disturbed surfaces shall be adequately surfaced as soon as possible to limit dust, contaminant or sediment mobilisation.
- 21. The finished ground levels (after the cut and fill works) shall not cause ponding/drainage/run-off related nuisance to the neighbouring (surrounding) properties or change of the current drainage patterns (existing overland flow paths) to the detriment of the surrounding properties. In the event that the consented works result in effects of that character these shall be rectified at the expense of the consent holder and to the satisfaction of the Council Infrastructure Team.
- 22. Run-off must be controlled to prevent muddy water flowing, or earth slipping, onto neighbouring properties, legal road, or into a river, stream, drain or wetland. Sediment, earth or debris must not fall or collect on land beyond the Site. All muddy water must be treated, using at a minimum the erosion and sediment control measures detailed in the SMP, prior to discharge.
- 23. If potential contamination is identified during works (accidental discovery), such as potential fill materials, asbestos containing material, and odorous and/or stained soils, the Site Manager should contact a suitably qualified and experienced person (SQEP) to assess the nature of the new material and reassess the potential risk to human health and/or the environment.
- 24. Dust emissions shall be managed so they do not cause nuisance beyond the boundary of the Site. Dust mitigation measures such as water carts or sprinklers shall be used on any exposed areas. The roads to and from the Site, and entrance and exit, must remain tidy and free of dust and dirt at all times.
- 25. All loading and unloading of trucks with excavation or fill material is to be carried out within the application site.

- 26. The consent holder must ensure that all construction traffic accesses the Site from Mangamaire Road only.
- 27. The consent holder must ensure that any debris tracked onto Mangamaire Road from construction traffic is cleared from the carriageway immediately.
- 28. In the event of an archaeological site, waahi tapu or koiwi being discovered or disturbed during the activities authorised by this consent, the consent holder shall immediately cease further works, in the immediate vicinity of the accidental discovery, and inform:
 - a. Rangitāne o Tamaki nui-ā-Rua (06) 374 6860,
 - b. Ngati Kahungunu ki Tamaki nui-ā-Rua (06) 374 9224,
 - c. Tararua District Council Manager Regulatory Services (06) 374 4080; and
 - d. Heritage New Zealand (04) 472 4341.

Further work in the immediate vicinity of the accidental discovery shall be suspended while iwi carry out their procedures for removal of taonga. The Tararua District Council's Manager Regulatory Services will advise the consent holder when work in the Site, may recommence.

In the event that human remains (koiwi) are found the police should be contacted immediately and all works shall cease until advice is given that works can recommence.

Operational

- 29. The consent holder must ensure that the noise levels from the operation of the solar farm does not exceed the following District Plan noise limits at the notional boundary of any existing dwellings (refer to Map XX) on another site in the Rural zone where written approval has not been provided to exceed the noise limits:
 - a. 55 dB LAeq(15-min) from 0700 to 1900 hours
 - b. 45 dB LAeq(15-min) and 70dB LAFmax from 1900 to 0700 hours.
- Noise levels shall be measured and assessed in accordance with NZS 6801:2008 Acoustics Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise.
- 31. Within one month the first daylight savings period of any stage of the solar farm becoming operational, the consent holder must monitor noise emissions from the Site to assess compliance with Condition 29 and confirm attenuation of the inverters has been achieved as designed under Condition 6.

Advice Note: 'Operational' is defined as the operation of the solar farm whereby electricity is being generated and provided to the national grid.

Advice Note: Noise monitoring under Condition 31 may have to occur multiple occasions if the solar farm is commissioned in multiple stages.

Advice Note: It is likely that measurements will need to be taken close to the inverters as well as at compliance locations and when the solar farm is operational during the prescribed night-period (i.e., in the evening after 7pm).

32. A report detailing the outcome of the monitoring under Condition 31 shall be provided to Team Leader Compliance & Monitoring, Tararua District Council within one month ten working days of the testing occurring. In the event that intrusive sound characteristics are present at compliance locations, additional attenuation options shall be implemented, as appropriate. The effectiveness of any additional attenuation options shall be confirmed via additional monitoring and reporting to Council.

Advice Note: The report can be sent to the following email <u>planning@tararuadc.govt.nz</u> using the reference Condition 32 of 202.2022.136.1.

- 33. The consent holder shall ensure that all landscape plantings established for the solar farm (as noted on the Proposed Landscape Mitigation Plan) is maintained in a healthy state in perpetuity with any dead or dying plants replaced within the following planting season.
- 34. The consent holder must implement the Pest Control Plan as certified under Condition 17.
- 35. The consent holder shall keep a register of any complaints received in respect of the solar farm and make the register available to an officer of the Tararua District Council upon request.
- 33. A land covenant shall be prepared by the applicant's lawyer and registered at the applicant's expense. The covenant shall read as follows:

Where gravel quarrying activities undertaken in the surrounding area by Hirock Quarries or their successor are carried out in accordance with the relevant District Plan requirements or the conditions of resource consent (Insert Reference to current consent here RM XXXX) the property owner and solar farm operator shall not:

Bring any proceedings for damages, negligence, nuisance, trespass or interference arising from the use of that land; or

Make nor lodge, nor;

Be party to, nor;

Finance nor contribute to the cost of

Any application, proceeding or appeal (either pursuant to the Resource Management Act 1991 or otherwise) designed or intended to limit, prohibit or restrict the continuation of the operations of the Hirock Quarries or their successor which are carried out under the terms of their resource consent (Insert reference to current consent here RM XXXX).

Transpower Conditions (offered by applicant under Augier principle)

Building and Structures

- 36. No buildings or structures (except non-conductive fencing) shall be located within 12m of the centreline of the MGM-MST-A National Grid transmission line.
- 37. No conductive fences shall be located within 5m of any National Grid support structure, without written consent of the line owner.

NZECP Compliance

38. All land use activities, including the construction of new buildings/structures, earthworks, fences, any operation of mobile plant and/or persons working near exposed line parts shall comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of the code.

Vegetation

- 39. Any proposed new trees or vegetation within 12 metres either side of the centreline of the MGM-MST-A National Grid transmission lines must not exceed 2 metres in height at full maturity and must comply with the Electricity (Hazards from Trees) Regulations 2003, or any subsequent revision of the regulations.
- 40. No vegetation shall be planted within 6 metres of the base of any National Grid transmission line support structure.

Construction Management Plan

- 41. Prior to the commencement of construction works the Applicant shall prepare and submit to the Council for approval a Construction Management Plan for the works that are occurring within 12 metres either side of the centreline of the MGM-MST-A National Grid transmission line, to ensure the protection of the National Grid transmission line. The CMP must be given to Transpower NZ Ltd for its certification at least 20 working days prior to it being submitted to the Council. The CMP must include the following (but is not limited to):
 - a. The name, experience and qualifications of the person/s nominated by the consent holder to supervise the implementation of, and adherence to, the CMP.
 - b. Construction drawings, plans, procedures, methods and measures to demonstrate that all construction activities will meet the safe distances within the Transposer New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001) or any subsequent revision of the code; including (but not limited to) those relating to:
 - i. Excavation and Construction near structures (Section 2 of NZECP 34: 2001);
 - ii. Ground to conductor clearances (Section 4);
 - iii. Mobile Plant to conductor clearances (Section 5); and

- iv. People to conductor clearances (Section 9).
- c. Details of any areas that are "out of bounds" during construction and/or areas within which additional management measures are required, such as fencing off, entry and exit hurdles, maximum height limits, or where a safety observer may be required (a safety observer will be at the consent holder's cost.
- d. Demonstrate how the existing transmission lines and support structures will remain accessible during and after construction activities.
- e. Demonstrate how the effects of dust (including any other material potentially arising from construction activities able to cause material damage beyond normal wear and tear) on the transmission lines will be managed.
- f. Demonstrate how changes to the drainage patterns, runoff characteristics and stormwater will avoid adverse effects on the foundations of any support structure.
- g. Demonstrate how construction activities that could result in ground vibrations and/or ground instability will be managed to avoid causing damage to the transmission lines, including support structures.
- h. Details of proposed contractor training for those working near the transmission lines. All activities are to be undertaken in accordance with the approved CMP.

Advice Note: The CMP(s) should be provided to Transpower via Patai Form 5 'Submit a Management Plan' – https://transpower.patai.co.nz

Decommissioning

- 42. At least three months prior to the commencement of decommissioning of the solar farm, the Consent Holder shall submit a Decommissioning Plan to the Team Leader Compliance & Monitoring, Tararua District Council to certify that the plan meets the following objectives. The Decommissioning Plan shall be prepared by a suitably qualified and experienced person and provide for the following objectives:
 - a. Decommissioning of the solar panels and all associated infrastructure in a manner that complies with all legislative requirements;
 - b. Leaving the land in a condition that is safe and suitable for the subsequent land use; and
 - c. Ensuring that the components and infrastructure are disposed of in a way that maximises re-use and recycling. For any parts that cannot be reused or recycled, ensuring that they are disposed of in an environmentally responsible way in accordance with industry best practice.
- 43. The Decommissioning Plan shall include but not be limited to:
 - Details on all infrastructure to be decommissioned, including details, method and location of reuse, recycling or disposal and the reasons why the options have been chosen;

- b. Details of specific infrastructure to remain on-site post-closure and reasons why it will remain on Site;
- c. Scheduling and timing for decommissioning; and
- d. Details for finished ground cover at completion of decommissioning and future intended land use;

Advice Note: The notification of the decommissioning commencement date can be sent to the following email <u>planning@tararuadc.govt.nz</u> using the reference Condition 44 of 202.2022.136.1.

44. The consent holder must notify Tararua District Council at least 30 working days prior, of the commencement date for decommissioning the Solar Farm.

Advice Note: The 10 day notification of the decommissioning date can be sent to the following email <u>planning@tararuadc.govt.nz</u> using the reference Condition 45 of 202.2022.136.1

- 45. The consent holder must notify Tararua District Council at least 10 working days prior to completion of the decommissioning to allow Council staff to carry out site inspections to determine compliance with the certified Decommissioning Plan.
- 46. The consent holder must ensure that a Decommissioning Report is prepared and submitted to Tararua District Council following completion of the decommissioning of the solar farm and no later than 20 working days after the works have been completed. The report shall detail evidence demonstrating that the Site is left in a condition that is safe and suitable for the subsequent land use.

Advice Note: The Decommissioning Report can be sent to the following email <u>planning@tararuadc.govt.nz</u> using the reference Condition 46 of 202.2022.136.1

Review

- 47. The Tararua District Council, under s128 of the Resource Management Act, may once per year, during July, serve notice of its intention to review all conditions of this resource consent for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions must allow for:
 - a. Deletion or amendments to any conditions of this resource consent to ensure adverse effects (including noise and dust) are appropriately mitigated, and/or
 - b. Addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment.

General Advice notes

a. Prior to earthworks commencing it is likely that a consent will be required from Horizons Regional Council for earthworks under Rule 13-2 of the One Plan.

- b. All works must be undertaken in accordance with the National Environmental Standards for Freshwater.
- c. This consent will lapse if not given effect to within 5 years from the date of commencement, under Section 125 of the Resource Management Act 1991.
- d. No buildings, vehicles, materials or debris associated with construction may be kept on Council land, including the road, without prior approval from the Council.