Before Independent Hearings Commissioners appointed by the Northland Regional Council

under: the Resource Management Act 1991

in the matter of: an application by Meridian Energy Limited for resource

consents for earthworks, associated stormwater diversion and discharges and vegetation clearance for the construction of a solar farm at Ruakākā, Northland

(APP.045356.01.01)

between: Meridian Energy Limited

Applicant

and: Northland Regional Council

Consent Authority

Opening Legal Submissions for Meridian Energy Limited

Dated: 2 August 2024

Reference: J Appleyard (jo.appleyard@chapmantripp.com)

A Hawkins (annabel.hawkins@chapmantripp.com)



MAY IT PLEASE THE COMMISSIONERS

INTRODUCTION AND SUMMARY

- These legal submissions are presented on behalf of Meridian Energy Limited (*MEL*). MEL seeks the necessary regional resource consents for earthworks and associated stormwater diversion and discharges and vegetation clearance to facilitate the construction of a solar farm at Ruakākā, Northland (the *Proposal*).
- The Proposal is part of the Ruakākā Energy Park, comprising the solar farm and the country's first grid-connected battery energy storage system (*BESS*).
- The Proposal is precisely what is needed to assist the urgent and significant challenge of Aotearoa New Zealand's transition to a low-carbon economy. In simple terms, meeting the country's decarbonisation goals requires the development of five Ruakākā size solar farms each year until 2050. The need for this Proposal cannot be overstated.
- 4 The BESS is consented, under construction and due to become operational in December 2024. District consents for the Proposal have been granted. If regional consents for the Proposal are granted, MEL is ready to start construction imminently. This is an exciting prospect for the electricity sector and the country.
- The significant local, regional and national benefits of the Proposal are, of course, not enough on their own to obtain the necessary consents. MEL is an experienced operator in the RMA regulatory field and has undertaken a responsible and thorough process of developing the Proposal. This has involved the input of highly qualified and experienced experts, as well as significant engagement with key stakeholders, including iwi. MEL and its experts have carefully addressed all relevant effects, planning documents and matters raised by Northland Regional Council (*Council*) staff/consultants and submitters.
- It is acknowledged that the Section 42A Report does not contain a favourable overall recommendation. However, on our reading, the reporting planner, Mr Alister Hartstone, supports development to the extent it is proposed on Sites 2 and 3, with the remaining contention limited to Site 1. In this respect, Mr Hartstone has, in our view, made clear that if a finding is made that the effects management hierarchy has been correctly applied, a pathway for granting consent is open.

¹ As is required under Regulation 45(6)(c) of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (*NES-FW*).

² Section 42A Report, paragraphs 125 and 128.

- Accordingly, MEL has provided detailed evidence addressing the effects management hierarchy and responding specifically to the matters raised by Mr Hartstone and the Council's ecological peer reviewer, Mr Jack Warden. In particular, MEL's evidence illustrates that:
 - 7.1 The extent of natural inland wetlands on Site 1³ has been properly determined. This is based on the comprehensive and correct application of the Wetland Delineation Protocols by Boffa Miskell Limited (*Boffa Miskell*), as required under the National Policy Statement for Freshwater Management 2020 (*NPS-FM*).⁴
 - 7.2 The natural inland wetlands have been properly valued. While there are some areas of high value, most of the wetland areas are of lower value. This is due to the use of the Site for stock grazing, the dominance of invasive exotic plant species, and artificial drainage on the Site and in the surrounding area. It is important to recognise both the current condition and differences in values (some high, more low) across the wetland areas. It is not appropriate to apply a blanket and historical lens to what may have existed in the past, or what could exist in future with significant intervention. It is the status quo that is relevant for the purposes of assessment of the Proposal.
 - 7.3 The adverse effects of the Proposal on the extent and values of the wetlands have been avoided where practicable, then minimised where practicable, then remedied where practicable. The careful development of the Proposal by MEL, with the input of Boffa Miskell (ecology) and Beca Limited (Beca) (alternatives and optimisation), has fulfilled the requirements of the first three tiers of the effects management hierarchy.⁷
 - 7.4 Aquatic offsetting is proposed to address the more than minor residual adverse effects, as per the fourth tier of the effects management hierarchy. Offsetting is available in the circumstances because the wetlands are not irreplaceable or vulnerable, a like-for-like offset resulting in no let loss and a net gain is able to be achieved in a suitable timeframe, and the amount of offsetting proposed will address the residual adverse effects. In fact, the net gain and additionality of the

³ Note that the Proposal comprises Sites 1, 2 and 3. In these submissions, each site is either specifically referred to, or the overall site is referred to as "the Site".

⁴ Evidence of Tanya Cook, paragraphs 32-54.

⁵ Evidence of Dr Sarah Flynn, paragraphs 12, 13, 21 and Table 1 on page 19.

⁶ Contact Energy Ltd v Waikato RC (2000) 6 ELRNZ 1 (EnvC); Queenstown Lakes District Council v Hawthorne CA45/05, 12 June 2006 at [84].

Feridence of Dr Sarah Flynn, paragraphs 137-138, 140 and Table 2 on pages 23-24; evidence of Micah Sherman, paragraphs 44-58.

proposed offsetting will result in positive ecological outcomes. The proposed approach therefore fully complies with Principles 1-6 for aquatic offsetting in in Appendix 6 of the NPS-FM.⁸ Furthermore the aquatic offsets will be protected and endure in the long-term.⁹

8 Based on MEL's full suite of evidence, together with the application and supporting documentation, in our submission the Commissioners can be satisfied that the Proposal meets the relevant statutory requirements and is deserving of consent.

STRUCTURE OF SUBMISSIONS AND EVIDENCE

- 9 These submissions briefly introduce the Proposal, then address:
 - 9.1 Three legal matters relating to the interpretation and application of the NPS-FM and NES-FW, specifically:
 - (a) the effects management hierarchy;
 - (b) the relevance of Policy 4 of the NPS-FM; and
 - (c) the "best information" requirement under the NPS-FM.
 - 9.2 The overall assessment of the Proposal.
- 10 As noted above, a detailed suite of evidence has been filed for MEL:
 - 10.1 **Mr Grant Telfar** and **Mr Micah Sherman** have provided company evidence on behalf of MEL. **Mr Telfar** provides an overview of MEL, New Zealand's energy system and future demand and supply options. He also addresses the Proposal at a high level and the associated benefits. **Mr Sherman** addresses the site selection and development/design of the Proposal in more detail. His evidence is relevant to the question of functional need and the application of the effects management hierarchy.
 - 10.2 Four highly qualified and experienced Boffa Miskell ecology experts have provided evidence. Dr Sarah Flynn describes and assesses the ecological values of the flora and fauna of the Site and the ecological effects of the Proposal. Ms Tanya Cook explains the wetland delineation process for Site 1. Dr Lee Shapiro provides further specific assessment related to threatened bird species, especially wetland birds and their

Evidence of Dr Sarah Flynn, paragraphs 146-152 and Table 3 on pages 26-27; evidence of Dr Lee Shapiro, paragraphs 61-75; evidence of Stephen Fuller, paragraphs 51-52.

⁹ See proposed Condition 19(h) in evidence of Brett Hood, Exhibit 2.

- habitats. **Mr Stephen Fuller** addresses the requirements for successful wetland restoration.
- 10.3 Ms Mandy McDavitt has provided hydrogeology evidence, addressing the hydrogeological conditions at Sites 1 and 3 and the key hydrogeological factors for successful wetland restoration.
- 10.4 **Mr Brett Hood's** planning evidence provides an overall planning assessment of the Proposal against the relevant statutory and planning tests.
- In their evidence, the MEL witnesses have responded to the Section 42A Report (including the peer reviews in the appendices) and submissions, where relevant to their area of expertise.
- 12 Each of the witnesses has prepared a summary statement which they will present at the hearing. Aside from evidence from the submitter Dr Mere Kepa, which is addressed below, no other expert evidence has been filed for submitters.

THE PROPOSAL AND KEY BACKGROUND

- In September 2023, MEL applied to the Council and Whangārei District Council for all necessary district and regional consents to establish, operate and maintain a solar farm of approximately 200 hectares across three sites (referred to collectively as "the Site") at Marsden Point in Ruakākā, Northland.
- In February 2024, Whangārei District Council granted the district consents on a non-notified basis. These consents cover the operation of the solar farm and certain construction elements, and relate broadly to traffic, stormwater, contaminated land, noise, landscape and visual matters.
- 15 In March 2024, the application, as it relates to the regional consents, was publicly notified. When the submissions period closed in late April 2024, a modest number of submissions (only 12) had been received. ¹⁰ Notably, the submission from Patuharakeke Te Iwi Trust Board (*Patuharakeke*) is in support of the Proposal, which reflects the positive Cultural Effects Assessment included with the application.
- The elements for which the regional consents are sought are described in detail in **Mr Hood's** evidence. Broadly, the Proposal covers earthworks and associated stormwater and stream diversion, discharges and vegetation clearance to facilitate the construction of the solar farm.

 $^{^{10}}$ We note that the Northland Fish & Game Council submission was received late on 6 May 2024.

- The Marsden Point location can best be described as predominantly an industrial area, with a range of industrial and commercial activities and electricity and servicing infrastructure in the general vicinity of the Site. This includes the Whangārei District Council's Ruakākā wastewater treatment plant on land immediately to the east of Site 1. The Site itself is zoned Heavy Industrial, Light Industrial and Rural Production. It has historically been, and continues to be, used for farming.
- Importantly, Site 1 contains the already consented, and under construction, BESS. Transpower New Zealand Limited's Bream Bay Substation is located immediately north-east of Site 1, across Rama Road. The Proposal's proximity to this key electricity infrastructure for grid connection purposes is a critical justification for both the selection of the Site and the way in which the Proposal has been developed on the Site.
- In our submission, the characteristics of the general area and the non-notified grant of district consents indicate the appropriateness of the Proposal and the suitability of the location and Site. These aspects are key parts of the background to the Proposal for the purposes of the Commissioners' decision making. They also complement the conclusions in the Section 42A Report that there are no flooding issues associated with the Proposal, construction-related effects will be minor, and the positive effects "weigh heavily" in favour of the Proposal.¹¹

LEGAL MATTERS

- As will be clear from our introduction, the focus of this hearing is likely to be on the ecology evidence, within the framework of the NPS-FM, NES-FW and relevant regional planning documents. The legal matters addressed in these submissions therefore relate to the interpretation and application of certain provisions of the NPS-FM and NES-FW.
- As set out in the application and **Mr Hood's** evidence, the Proposal requires discretionary activity resource consent under Regulation 45 of the NES-FW, for vegetation clearance, earthworks and land disturbance associated with specified infrastructure within natural inland wetlands.
- Regulation 45(6) states that resource consent for a discretionary activity must not be granted unless the consent authority has first: 12
 - (a) satisfied itself that the specified infrastructure will provide significant national or regional benefits; and

¹¹ Section 42A Report, paragraphs 70, 73 and 79.

¹² We note that Regulation 45(6) is effectively replicated in Policy D.4.23 of the Proposed Regional Plan for Northland (*PRPN*).

- (b) satisfied itself that there is a functional need for the specified infrastructure in that location; and
- (c) applied the effects management hierarchy.
- These "prerequisites" are, rightly, a key focus of the Section 42A Report. We address them in turn.

Regulation 45(6)(a) – benefits

- It does not appear to be in dispute that the Proposal will provide significant regional and national benefits.¹³
- These benefits are described in detail in the evidence of **Mr Telfar.** At a high level, they include diversity, resilience and security of power supply for Northland, mitigation of power prices in Northland (and potentially across New Zealand), and social and economic contribution to the local, regional and national communities and economies. There are also ecological benefits associated with the Proposal, as described by **Dr Flynn** and **Dr Shapiro.** It is clear that Regulation 45(6)(a) is met.

Regulation 45(6)(b) - functional need

- It also does not appear to be in dispute, at least between MEL and the Council, ¹⁶ that there is a functional need for the Proposal in this location. Chapman Tripp provided legal advice to MEL on functional need on 27 June 2024, a copy of which was provided to the Council and uploaded onto the Council's website. For ease of reference, the legal advice is included as **Appendix 1** to these submissions. In summary:
 - 26.1 The establishment of functional need depends on the nature and degree of a proposal's need to be in a particular location. This requires consideration of the elements that are necessary to make the proposal functional and the characteristics and constraints of the location.
 - 26.2 The existence of alternatives is not a fatal flaw to the establishment of functional need. Any alternatives must be thoroughly examined and are, in fact, likely to be informative as to whether the functional need threshold is met.

¹³ Section 42A Report, paragraph 104. We note that Mr Hartstone considers the Proposal will provide at least significant regional benefits. MEL's position is that the Proposal will provide significant regional and national benefits. The minor difference in position is irrelevant for the purposes of meeting Regulation 45(6)(a), which only requires significant national or regional benefits.

¹⁴ Evidence of Grant Telfar, paragraphs 61-72.

Evidence of Dr Sarah Flynn, paragraph 23; evidence of Dr Lee Shapiro, paragraph 75; evidence of Stephen Fuller, paragraph 52.

¹⁶ Section 42A Report, paragraphs 105-107.

- 26.3 Here, there is a functional need for the Proposal in this location due to the nature of the solar infrastructure and its role in the electricity system, the requirements for a functioning solar farm, and the fact that the alternatives are constrained by cost, energy yield/capacity, constructability (including worker safety), ecological and maintenance issues.
- The matters contributing to functional need are outlined in more detail in the evidence of **Mr Sherman** and also touched on at a high level in the evidence of **Mr Telfar**. Put simply, the need for the Proposal to locate on the Site, in the manner proposed, is not simply operational convenience. It is necessary for a functioning project. The Proposal accordingly meets Regulation 45(6)(b).

Regulation 45(6)(c) – effects management hierarchy

- This leaves Regulation 45(6)(c). Mr Hartstone considers, adopting Mr Warden's advice, ¹⁷ that the effects management hierarchy has not been appropriately applied, therefore this prerequisite is not met.
- 29 In our submission, the evidence for MEL clearly establishes that the effects management hierarchy has been correctly applied. We address the effects management hierarchy in detail in the next section of our submissions.

EFFECTS MANAGEMENT HIERARCHY

The effects management hierarchy is defined in Clause 3.21(1) of the NPS-FM as follows:

Effects management hierarchy, in relation to natural inland wetlands and rivers, means an approach to managing the adverse effects of an activity on the extent or values of a wetland or river (including cumulative effects and loss of potential value) that requires that:

- (a) adverse effects are avoided where practicable; then
- (b) where adverse effects cannot be avoided, they are minimised where practicable; then
- (c) where adverse effects cannot be minimised, they are remedied where practicable; then
- (d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided where possible; then
- (e) if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided; then

¹⁷ Section 42A Report, paragraphs 109-110.

- (f) if aquatic compensation is not appropriate, the activity itself is avoided.
- 31 The application of the effects management hierarchy requires, firstly, a determination of the *extent* of wetlands on the Site and an assessment of their *values*, then a careful stepping through of each tier of the hierarchy.
- 32 It is important to recognise that the effects management hierarchy is applicable because the Proposal is for specified infrastructure, as defined in the NPS-FM. As such, the Proposal has a discretionary activity consenting pathway under the NES-FW. There is no outright requirement to avoid adverse effects, as might be the case for another activity not granted such a consenting pathway. This reflects Parliament's express recognition in the NPS-FM and NES-FW that some activities within, and with certain effects on, natural inland wetlands are appropriate due to other policy priorities. This is important context for the consideration of the Proposal.
- In the following sections, we address a series of questions about the extent and values of the subject wetlands and each tier of the effects management hierarchy, with reference to MEL's evidence and in response to matters raised by Mr Warden. Having answered all of these questions in the affirmative, in our submission, it is clear that the effects management hierarchy has been correctly and appropriately applied.

Has the extent of wetlands been properly determined?

- 34 Yes in 2022, the Ministry for the Environment published Wetland Delineation Protocols for delineating wetlands under the Resource Management Act 1991 (RMA) and NPS-FM. Ms Cook's evidence sets out the basis for, and requirements of, the Wetland Delineation Protocols.¹⁸
- 35 Clause 3.23(3) of the NPS-FM provides that in the case of uncertainty or dispute about the existence or extent of a natural inland wetland, a regional council must have regard to the Wetland Delineation Protocols. Clause 1.8(3) of the NPS-FM provides that all material incorporated by reference in the NPS-FM is available at a specified Ministry for the Environment website. This includes the Wetland Delineation Protocols.
- Wetlands can be complex and dynamic environments, and their mapping is not necessarily a straightforward task. However, this is the very reason why the NPS-FM prescribes a methodology for how they are to be delineated, particularly in cases of uncertainty.
- Here, as explained in detail in **Ms Cook's** evidence, Boffa Miskell undertook a comprehensive and diligent process to delineate the

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¹⁸ Evidence of Tanya Cook, paragraphs 32-37.

wetlands on the Site, following the Wetland Delineation Protocols. ¹⁹ Mr Warden has raised various concerns about Boffa Miskell's process. In addition, despite expressly stating that his evidence is in the nature of a peer review, he appears to have undertaken his own delineation exercise. But while Boffa Miskell's process was undertaken over a series of site visits, in reliance on a number of site plots, and in accordance with the Wetland Delineation Protocols, Mr Warden's delineation exercise was based on one site visit, ²⁰ relying on one site plot, with substantial additional reliance on current and historic imagery.

- Ms Cook's evidence responds in detail to the matters raised by Mr Warden and confirm that the concerns raised are either unfounded or have been addressed. Ms McDavitt's evidence provides support for Ms Cook's position in relation to the climatic conditions encountered over the course of the Boffa Miskell delineation exercise and how this impacted the application of the Wetland Delineation Protocols. 22
- In our submission, the Commissioners can be satisfied that MEL's experts properly followed the Wetland Delineation Protocols and have correctly established the extent of wetlands on the Site.

Have the values of the wetlands been properly established? Yes – Dr Flynn's evidence sets out the methodology used for establishing the values of the wetlands across the Site. Boffa Miskell undertook a comprehensive process of identifying the ecological features, including wetlands, on the Site and assessing their ecological significance according to the criteria in Appendix 5 of the Regional Policy Statement for Northland (RPSN).²³

- 41 As **Dr Flynn** explains, there are some wetland areas of ecological significance (i.e. high value) on Site 1, including small remnants of indigenous-dominated wetlands and open water bodies in the lowest-lying dune swales. However, most wetlands across Site 1, and in Sites 2 and 3, are in a highly modified, degraded condition and dominated by exotic vegetation communities, and are therefore of low value.²⁴
- 42 **Dr Flynn** has addressed the concerns raised by Mr Warden as to Boffa Miskell's assessment of the values of the subject wetlands. ²⁵ As outlined by **Dr Flynn**, Mr Warden appears to have afforded all of

¹⁹ Evidence of Tanya Cook, paragraphs 32-54.

 $^{^{20}}$ Noting that we understand he has visited the Site on other occasions albeit not for the purposes of a delineation exercise.

²¹ Evidence of Tanya Cook, paragraphs 59-112.

²² Evidence of Mandy McDavitt, paragraphs 65-89.

²³ Evidence of Dr Sarah Flynn, paragraphs 24-51.

²⁴ Evidence of Dr Sarah Flynn, paragraphs 52-89 and 118-129.

²⁵ Evidence of Dr Sarah Flynn, paragraphs 153-177.

the wetland areas the same high value status, and this is likely in recognition either of what they once were, or of what they could be if entirely restored and protected in an ongoing manner.

- 43 It is well-established that it is the current environment, or current condition of the wetlands, against which the adverse effects of the Proposal must be assessed. There is no legal basis for assessing adverse effects against some past environment which was less degraded, or some future environment which cannot occur without human intervention.²⁶
- On this basis, Boffa Miskell has correctly established the values of the subject wetlands, and it is these current values that form the basis for the assessment of the adverse effects of the Proposal.

Have adverse effects on the extent or values of the wetlands been avoided, minimised and remedied, where practicable?

- Yes having established the extent and values of the subject wetlands, this leads to a careful stepping through of the respective tiers of the effects management hierarchy. This includes avoiding adverse effects, where practicable, then minimising adverse effects, where practicable, then remedying adverse effects, where practicable.
- In applying these tiers, we note that "practicable", as defined by the Courts, means:²⁷

"[P]ossible to be accomplished with known means or resources" and synonymous with "feasible", being more than merely a possibility and including consideration of the context of the proceeding, the costs involved and other matters of practical convenience.

- The evidence for MEL establishes that the avoid, minimise and remedy steps were followed in respect of the Proposal, within the bounds of the "where practicable" requirement.
- As **Mr Sherman's** evidence outlines, MEL engaged Beca to undertake a detailed alternatives and optimisation assessment. ²⁸ The basis for the report was the extent and values of the wetlands identified by Boffa Miskell. The focus of the report was avoiding the loss of wetlands "where practicable". Beca's assessment considered seven options which would avoid wetland impacts to differing extents. For a variety of reasons, Option 6 was determined to be the optimal design.

²⁶ Contact Energy Ltd v Waikato RC (2000) 6 ELRNZ 1 (EnvC); Queenstown Lakes District Council v Hawthorne CA45/05, 12 June 2006 at [84].

²⁷ Royal Forest and Bird Protection Society of New Zealand Incorporated v Whakatane District Council [2017] NZEnvC 51, referring to Union Steam Ship Co of NZ Ltd v Wenlock [1959] 1 NZLR 173 (CA).

²⁸ Evidence of Micah Sherman, paragraphs 50-55.

- 49 Option 6 includes:
 - 49.1 retention of as much high value wetland area in the southern part of Site 1 (as identified by Boffa Miskell) as practicable;
 - 49.2 partial wetland removal on Site 1, largely of low value wetland areas, to enable the development of the solar infrastructure;
 - 49.3 offsetting of the loss of these wetland areas through the:
 - (a) enlargement and enhancement of the high value wetland area in the southern part of Site 1; and
 - (b) recreation of an enhanced wetland area on Site 3.
- In response to a request from Patuharakeke, MEL made further investigations into further avoiding adverse effects on the wetlands on Site 1 (i.e. avoiding development in additional wetland areas). Ultimately, this was not considered practicable because it would have meant that overall the project would not be functional.²⁹
- In addition, MEL proposes an adaptive approach in detailed design and during earthworks to avoid wetland features where practicable. Careful design and location of the infrastructure, together with the creation of replacement habitat for certain species (for example, wetland birds³⁰) will further minimise the adverse effects of the Proposal.
- In terms of the effects management hierarchy's "remedy" tier, the nature of the Proposal means that remedying the loss of the wetlands is not practicable. This is because in the approximately 17 hectares of wetland areas on Site 1 not able to be avoided, earthworks are required to remove the wetlands altogether. As explained by **Mr Sherman**, MEL investigated whether the wetlands could be maintained and restored under the solar infrastructure (i.e. under the panels), as this might have been an option to "remedy" effects. However, for construction and operational feasibility and safety reasons, this was not practicable.³¹
- In our submission, the effects management hierarchy was appropriately applied to this point. This meant that the next tier, aquatic offsetting, should be considered.

²⁹ Evidence of Micah Sherman, paragraphs 56-57.

³⁰ Evidence of Dr Lee Shapiro, paragraph 75.

³¹ Evidence of Micah Sherman, paragraph 53.

Is aquatic offsetting of the more than minor residual adverse effects possible?

- Yes the proposed offsetting approach is described in detail in the evidence of **Dr Flynn**. ³² In basic terms, it comprises the creation, enhancement and restoration of 18.78 ha of wetlands across Sites 1 and 3, to offset the permanent removal of 17.06 ha of wetlands on Site 1. The objectives of the proposed reinstatement and enhancement are to replace the full extent of wetlands removed, ensure the restored wetlands have better habitat and ecological function than those that are to be removed, put in place comprehensive pest management, and provide ongoing legal protection for the restored areas.
- Aquatic offsetting under the NPS-FM and NES-FW is guided by the principles in Appendix 6 of the NPS-FM. **Dr Flynn's** evidence has addressed these principles, with supporting evidence from **Dr Shapiro** and **Mr Fuller**. Their evidence specifically responds to the concerns raised by Mr Warden in respect of the offsetting proposal.
- In particular, their evidence outlines that: 33
 - 56.1 The subject wetlands are not irreplaceable or vulnerable such that offsetting is not available in the circumstances.³⁴
 - 56.2 The offsetting approach will result in no net loss and a net gain, as well as additionality (i.e. positive environmental outcomes). 35
 - 56.3 The offsetting approach is achievable and can be achieved in an appropriate (3-5 year) timeframe to address the loss of extent or values of wetlands on Site 1.³⁶
- Further, the design and implementation of the proposed offsetting will be transparent, informed by science, and include tangata whenua participation to seek to enhance the cultural values of the restored wetland areas.³⁷ The consolidation and improvement of these wetland areas is an additional ecological benefit and an important feature of the Proposal.
- It is clear that the proposed offsetting approach is in full compliance with Appendix 6 of the NPS-FM and is an appropriate way of

³² Evidence of Dr Sarah Flynn, paragraphs 142-144.

³³ Evidence of Dr Sarah Flynn, paragraphs 146-152 and Table 3 on pages 26-27; evidence of Dr Lee Shapiro, paragraphs 61-75; evidence of Stephen Fuller, paragraphs 51-52..

³⁴ NPS-FM, Appendix 6, Principle 2.

³⁵ NPS-FM, Appendix 6, Principles 3 and 4.

³⁶ NPS-FM, Appendix 6, Principle 8.

³⁷ NPS-FM, Appendix 6, Principles 9-11. See proposed Condition 22 in evidence of Brett Hood, Exhibit 2.

managing the residual adverse effects of the Proposal. As **Drs Flynn** and **Shapiro** and **Mr Fuller** outline, it is an achievable proposition that will, overall, result in positive ecological outcomes when compared to the status quo. In other words, it is a beneficial outcome for the Site that, in our submission, should be encouraged and welcomed by the Council.

Conclusion on effects management hierarchy

In our submission, the evidence for MEL establishes that the effects management hierarchy has been correctly applied. In particular, the evidence has responded and satisfactorily addressed the concerns raised by Mr Warden. This means that the Commissioners need not prefer the evidence of one ecology expert (or group of experts) over the other. Rather, you can be satisfied that all relevant matters have been addressed and the Regulation 45(6)(c) prerequisite is met.

POLICY 4 OF THE NPS-FM

- Policy 4 of the NPS-FM provides that: Freshwater is managed as part of New Zealand's integrated response to climate change.
- The legal and planning position for MEL is that Policy 4 provides support for the Proposal, in that climate change considerations must factor into decision-making on energy-related proposals with adverse effects on freshwater, including wetlands.
- The Section 42A Report suggests that Policy 4 is not directly relevant to the Proposal because it is more relevant to the generation of hydro-electric power.³⁸
- Policy 4 did not feature in the original 2014 version of the NPS-FM. It was introduced in the new NPS-FM in 2020. The Ministry for the Environment's Section 32 Report for the 2020 NPS-FM outlined that Policy 4 was included as part of a programme of reform towards a sustainable, low emissions economy and as a commitment to the Climate Change Response (Zero Carbon) Amendment Act 2019, to allow New Zealand to prepare for, and adapt to, the effects of climate change.³⁹
- While the NPS-FM contains specific provision for setting lower target attribute states for freshwater management units affected by New Zealand's five major hydro-electricity generation schemes, 40 this is a specific implementation provision. Policy 4, by contrast, is part of the overall objective and policies that guide the implementation of the NPS-FM in its entirety. Nothing in Policy 4 limits its applicability

³⁸ Section 42A Report, paragraph 99.

³⁹ Action for Healthy Waterways (Section 32 Evaluation), Ministry for the Environment, 22 July 2020.

⁴⁰ NPS-FM, clause 3.31.

- to the generation of hydro-electric power, and its meaning must be ascertained from its text and in light of its purpose and context.⁴¹
- On this basis, Policy 4 must be read as applying across the board to New Zealand's response to climate change, as it relates to managing freshwater resources, including wetlands. Policy 4 is accordingly directly relevant to the assessment of the Proposal.

BEST INFORMATION REQUIREMENT IN NPS-FM

- As noted in the Section 42A Report, the NPS-FM contains a "best information" preliminary provision, which reads:
 - (1) In giving effect to this National Policy Statement, local authorities must use the best information available at the time, which means, if practicable, using complete and scientifically robust data.
 - (2) In the absence of complete and scientifically robust data, the best information may include information obtained from modelling, as well as partial data, local knowledge, and information obtained from other sources, but in this case local authorities must:
 - (a) prefer sources of information that provide the greatest level of certainty; and
 - (b) take all practicable steps to reduce uncertainty (such as through improvements to monitoring or the validation of models used).
 - (3) A local authority:
 - (a) must not delay making decisions solely because of uncertainty about the quality or quantity of the information available; and
 - (b) if the information is uncertain, must interpret it in the way that will best give effect to this National Policy Statement.
- The Section 42A Report suggests that while clauses (1) and (2) have been addressed (i.e. appropriate and practicable steps have been taken in attempting to reduce uncertainty), clause (3) "applies".⁴² It states further that the assessment of Regulation 45(6) of the NES-FW suitably informs giving effect to the NPS-FM.
- 68 It is slightly unclear what the outcome of clause (3) "applying" means for the Proposal. We assume Mr Hartstone is suggesting that due to uncertainty, or disagreement between the ecology experts, the most conservative position (i.e. a precautionary approach) must be favoured. In addition, in the context of Regulation 45(6) of the

⁴¹ Legislation Act 2019, section 10(1).

⁴² Section 42A Report, paragraphs 88-89.

- NES-FW, this may require a different approach in how the effects management hierarchy is to be applied.
- We have outlined above that the uncertainty or disagreement between the ecology experts has been resolved, by way of the evidence for MEL. On this basis, there are no remaining uncertainty issues that would give rise to the application of clause 1.6(3).
- However, more fundamentally, in our submission, Mr Hartstone is reading in a meaning of clause 1.6(3) that does not exist on the words of the clause, nor in the remainder of the NPS-FM.
- 71 Clause 1.6(3) simply provides that if the information is uncertain, decision making must not be delayed and the information must be interpreted in the way that will best give effect to the NPS-FM. It is a direction to decide, it goes no further. In particular, it does not go on to reference additional caution or a precautionary approach.
- 72 This is in contrast to, for example, the information principles in the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (*EEZ Act*). Under that regime, the marine consent authority is required to base its decisions on the best available information. If the information is uncertain or inadequate, the marine consent authority must favour caution and environmental protection. 43
- Onder the NPS-FM regime, a decision maker simply has to take any ostensibly uncertain information and interpret it in a way that will best give effect to the NPS-FM. We say this means that the Commissioners must consider all of the ecological evidence before them and interpret and weigh it in a way that gives effect to the NPS-FM as a whole. No inherent conservatism is required, simply a determination of the evidence as it stands.
- We also note that clause 1.6 did not feature in the 2014 NPS-FM and was introduced in the new 2020 NPS-FM. However, the 2014 NPS-FM did, in the Preamble, reference the best available information and scientific and socio-economic knowledge in the context of setting limits. Relevantly it stated that:⁴⁴

Setting enforceable quality and quantity limits is a key purpose of this national policy statement. This is a fundamental step to achieving environmental outcomes and creating the necessary incentives to use fresh water efficiently while providing certainty for investment. Water quality and quantity limits must reflect local and national values. The process for setting limits should be informed by the best available information and scientific and socio-economic knowledge.

⁴³ EEZ Act, section 61.

⁴⁴ National Policy Statement for Freshwater Management 2014.

Further, for the 2020 NPS-FM, the Section 32 Report outlined that the intent of clause 1.6(3) was to speed up plan development processes and implementation of the NPS-FM by regional councils. ⁴⁵ Again, this refers to the use of available information in setting limits, rather than decision making on resource consent applications in alignment with a "precautionary approach".

ASSESSMENT OF PROPOSAL

76 Having established that the three prerequisites in Regulation 45(6) of the NES-FW are met, there is a clear pathway for consents to be granted for the Proposal. In this final section of our submissions, we address several matters of relevance to the overall assessment of the Proposal under sections 104 and 104D of the RMA.

Section 104D gateways

- 77 The Proposal meets both gateways of section 104D of the RMA because, as confirmed in **Mr Hood's** evidence:⁴⁶
 - 77.1 the adverse effects of the Proposal will be minor (or less); and
 - 77.2 the Proposal is not contrary to the objectives and policies of all relevant plans.
- On this basis, assessment of the Proposal and a decision to grant consent under section 104 of the RMA is available to the Commissioners.

Cultural effects

- 79 Through engagement with Patuharakeke, Te Parawhau Hāpu and Ngātiwai, cultural effects have been appropriately addressed, and are further provided for in the processes established in the proposed conditions of consent. ⁴⁷ In our submission, this illustrates the consistency of the Proposal with the fundamental concept of Te Mana o te Wai in the NPS-FM, ⁴⁸ as well as assisting to demonstrate that suitably certain information is before the Commissioners for the purposes of your decision-making. ⁴⁹
- We note that Patuharakeke have reviewed the proposed conditions of consent included with **Mr Hood's** evidence and have picked up some typo errors, including in relation to the correct use of

⁴⁵ Action for Healthy Waterways (Section 32 Evaluation), Ministry for the Environment dated 22 July 2020 at [7.1.2] - [7.1.3].

⁴⁶ Evidence of Brett Hood, paragraph 143.

⁴⁷ See proposed Condition 22 in evidence of Brett Hood, Exhibit 2..

⁴⁸ NPS-FM, Clause 1.3.

⁴⁹ With reference to Clause 1.6 of the NPS-FM.

- macrons. These will be corrected in an updated set of conditions proposed to be provided at the close of the hearing.
- The submitter Dr Mere Kepa has filed two statements of evidence dated 3 July 2024 and 24 July 2024. Where relevant, the matters raised have been addressed in the evidence for MEL, including through engagement throughout the process with Te Parawhau Hāpu and addressing adverse effects and seeking to provide net positive ecological outcomes.

Matters raised by submitters

- The matters raised by other submitters have also been addressed, where relevant to the regional consents, in the evidence for MEL. A summary of matters raised and confirmation that all relevant matters have been addressed in provided in **Mr Hood's** evidence. In particular, **Mr Hood** has addressed the heat island effect raised by submitter Mr Shaun Erikson, which the Section 42A Report requested that MEL address. 22
- As noted in **Mr Sherman's** evidence, MEL contacted submitters and met with them to discuss their concerns where the submitters wished to do so.⁵³

Positive effects

- The Proposal will result in significant positive effects, which are a factor that will likely weigh heavily in the overall section 104 assessment, as noted by Mr Hartstone. The positive effects to some extent go without saying, however it is useful to highlight the key benefits, as set out in the evidence of **Mr Telfar** and the Boffa Miskell ecology experts. These include:
 - 84.1 Meeting the urgent need for New Zealand to maximise the capture and use of valuable renewable energy. We note that on 2 December 2020, Parliament passed a government motion declaring a climate emergency the motion also committed to implementing the policies required to meet the targets in the Climate Change Response (Zero Carbon) Amendment Act 2019, and to increase support for striving towards 100% renewable electricity generation and low carbon energy and transport systems.
 - 84.2 Improving the reliability, resilience and security of Northland's electricity supply.

⁵⁰ Evidence of Brett Hood, paragraphs 148-163.

⁵¹ Evidence of Brett Hood, paragraph 158.

⁵² Section 42A Report, paragraph 29.

⁵³ Evidence of Micah Sherman, paragraphs 72-74.

⁵⁴ Section 42A Report, paragraphs 75-79.

- 84.3 Investment in the local/regional economy and work force.
- 84.4 Superior ecological outcomes, including a net improvement in wetland values (including ecological and amenity values).

National Policy Statements

- The National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) requires decision-makers to recognise the benefits of renewable electricity generation and to acknowledge the practical implications of achieving New Zealand's target for electricity generation from renewable resources. 55
- The NPS-REG also acknowledges the practical constraints associated with the development of new renewable electricity generation activities. Amongst other things, decision-makers must have particular regard to the location of existing infrastructure, including the distribution network, and the need to connect renewable electricity generation activity to the national grid.⁵⁶
- 87 The Proposal clearly achieves the objective and policies of the NPS-REG by providing a significant amount of new renewable electricity generation in a location where it can efficiently connect into the national grid. That is precisely why this Site has been chosen.
- 88 Further, the Proposal will assist in contributing to broader legislated climate change targets in domestic and international legislation and agreements, and the statutory requirements for an Emissions Reduction Plan, which currently recognises the need for massive electrification.⁵⁷
- We note that the National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB) does not apply to the Proposal due to the express carve out for the development, operation, maintenance or upgrade of renewable electricity generation assets and activities. ⁵⁸ As noted in the Ministry for the Environment's Recommendations and decisions report on the NPS-IB, the carve-out was included in response to submitters and stakeholders concerns that the provisions would not sufficiently enable the deployment of renewables at the scale and pace required to meet emissions targets and decarbonise Aotearoa's economy. ⁵⁹ This is

⁵⁵ NPS-REG, Policies A and B.

⁵⁶ NPS-REG, Policy C.

⁵⁷ New Zealand Government, Te hau mārohi ki anamata, Towards a productive, sustainable and inclusive economy, Aotearoa New Zealand's First Emissions Reduction Plan, May 2022. Note the Second Emissions Reduction Plan is currently being publicly consulted on.

⁵⁸ NPS-IB, Clause 1.3(3).

⁵⁹ Ministry for the Environment, *Recommendations and decisions report on the National Policy Statement for Indigenous Biodiversity*, July 2023, page 98.

- important recognition from Parliament as to the importance of renewable energy development.
- 90 Nor does the New Zealand Coastal Policy Statement 2010 apply to the assessment of the Proposal, the kānuka block on Site 1 being the only area located in the coastal environment, as explained by Mr Hartstone and **Mr Hood**. 60

Regional planning documents

- 91 **Mr Hood's** evidence has addressed the relevant regional planning documents, being the RPSN and PRPN. Overall, **Mr Hood** has outlined that the Proposal is consistent with the relevant objectives and policies of both the RPSN and PRPN. ⁶¹
- 92 Mr Hartstone has also carefully assessed the relevant regional planning provisions in the Section 42A Report and concludes that if a finding is made that the effects management hierarchy has been appropriately applied (as per Regulation 45(6) of the NES-FW), "then the [P]roposal is open to a finding that it is consistent with all relevant planning provisions". 62 This is particularly the case for the key PRPN policy, D.4.23, which is underpinned by the requirements of Regulation 45(6), as noted by Mr Hartstone. 63 In our submission, MEL's evidence has confirmed that the effects management hierarchy has been appropriately applied and, as such, the Proposal is consistent with all relevant planning provisions.
- On this basis, and based on MEL's full suite of supporting documentation and evidence, in our submission it is appropriate to grant the consents sought.

CONCLUSION

- 94 It is clear that the Proposal has been carefully designed and thoroughly assessed.
- The Site contains some features of high ecological value and these areas have been treated accordingly. This includes by avoiding adverse effects to the extent practicable, as well as through the enhancement of these features.
- 96 Much of the rest of the Site contains lower value features that are currently in a degraded condition. These features will not be improved without intervention and under the status quo are likely to further deteriorate. Through the proposed offsetting approach, these features will be replaced, with the restored and recreated

⁶⁰ Section 42A Report, paragraph 93; evidence of Brett Hood, paragraph 170.

⁶¹ Evidence of Brett Hood, paragraphs 124 and 142.

⁶² Section 42A Report, paragraph 128.

⁶³ Section 42A Report, paragraphs 123-125.

- areas resulting in no net loss, ongoing protection and, in fact, positive ecological outcomes.
- 97 At the same time, the Proposal brings a host of benefits for the local, regional and national communities and economies, at a time when a secure, reliable and sustainable power supply is critical.
- 98 Based on the comprehensive package of information now before the Commissioners, in our submission you can be satisfied that it is appropriate to grant the consents sought for this exciting Proposal.

Dated 2 August 2024

J Appleyard / A Hawkins

Counsel for Meridian Energy Limited



27 June 2024

Humphrey Tapper Meridian Energy Limited From: Jo Appleyard / Annabel Hawkins

Direct: +64 3 353 0113 Mobile: +64 27 442 3595

Email: annabel.hawkins@chapmantripp.com

Partner: Jo Appleyard

Ref: 100613401/3454-5301-7645.3

By Email

Dear Humphrey

Introduction

- We have been engaged by Meridian Energy Limited (*MEL*) to assist with the hearing of its application to Northland Regional Council (*NRC*) for resource consents for earthworks, associated stormwater diversion and discharges and vegetation clearance for the construction of a solar farm at Ruakākā (APP.045356.01.01) (the *Proposal*).
- You have asked for our preliminary advice on a legal matter associated with the Proposal, namely "functional need". We have reviewed the application and supporting material afresh, together with the case law and other guidance that is available in relation to this matter.

Summary

- The case law has established that functional need depends on the nature and degree of a proposal's need to be in a particular location. This requires consideration of the elements that are necessary to make the proposal functional and the characteristics and constraints of the location. The existence of alternatives for a proposal is not a fatal flaw to the establishment of functional need. Any alternatives must be thoroughly examined and are, in fact, likely to be informative as to whether the functional need threshold is met.
- 4 Ultimately, a purposive interpretation is required, taking into account the words of the functional need definition and the legislative framework in which it sits.
- Based on our application of the relevant legal principles to the information provided by MEL, we consider that the Proposal satisfies the functional need test. There is a functional need for the Proposal in the proposed location due to the nature of the solar infrastructure and its role in the electricity system, the requirements for a functioning solar farm, and the fact that the alternatives are constrained by cost, energy yield/capacity, constructability (including worker safety), ecological and maintenance issues.
- This means the jurisdictional requirement under Regulation 45(6)(b) of the National Environmental Standard for Freshwater Regulations 2020 (*NES-FW*) is met and the Proposal can be considered substantively for consent.

Functional need trigger

As part of the overall package of consents for the Proposal, discretionary activity resource consent is required under Regulation 45 of the NES-FW, for vegetation



clearance, earthworks and land disturbance, associated with specified infrastructure, within natural inland wetlands.

- Regulation 45(6) states that resource consent for a discretionary activity must not be granted unless the consent authority has first:
 - 8.1 satisfied itself that the specified infrastructure will provide significant national or regional benefits; and
 - 8.2 satisfied itself that there is a functional need for the specified infrastructure in that location; and
 - 8.3 applied the effects management hierarchy.
- The focus of this advice is functional need in Regulation 45(6)(b). However, in reviewing the application and supporting material we have considered the other clause 6 requirements. In our view, it is clear that the Proposal will provide significant national and regional benefits and that the effects management hierarchy has been correctly applied. We are able to provide further advice on these matters, noting that we will address them in legal submissions at the hearing.
- We have also proceeded at this stage on the basis that, for the purposes of the NES-FW and National Policy Statement for Freshwater Management 2020 (NPS-FM), the relevant wetlands in question are "natural inland wetlands", and the Proposal is specified infrastructure. Again, we will cover these matters in legal submissions at the hearing, as required.

Functional need definition and relevant case law

- To define functional need, the NES-FW refers to the definition in the NPS-FM.¹ The NPS-FM defines functional need as "the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment".² This definition is the same as that found in the National Planning Standards 2019 (National Planning Standards).
- Both national environmental standards and national policy statements are secondary legislation and, as such, are to be interpreted in accordance with the Legislation Act 2019 (*Legislation Act*).³ The Legislation Act provides that the meaning of legislation must be ascertained from its text and in light of its purpose and its context.⁴ This is commonly known as the purposive approach to interpretation, where words should be given their plain and ordinary meaning, but a literal interpretation should not preclude them from achieving their intended purpose.⁵

¹ NES-FM, Regulation 3.

² NPS-FM, Part 3, Subpart 3, Clause 3.21.

³ RMA, sections 43(5) and 52(4).

⁴ Legislation Act, section 10(1).

⁵ Powell v Dunedin City Council [2004] NZRMA 49 (HC), at [35]; affirmed by the Court of Appeal in Powell v Dunedin City Council [2004] 3 NZLR 721 at [12].



- The objective of the NPS-FM is to ensure that natural and physical resources are managed in a way that prioritises: first, the health and well-being of water bodies and freshwater ecosystems; second, the health needs of people; and third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and into the future. Of particular relevance to the Proposal, the NPS-FM contains policy direction both that:
 - 13.1 there should be no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted; ⁶ and
 - 13.2 communities are enabled to provide for their social, economic and cultural well-being in a way that is consistent with the NPS-FM.⁷
- To that end, the NPS-FM contemplates regional planning frameworks containing specific pathways for certain activities that may impact natural inland wetlands in certain circumstances, for example specified infrastructure. The pathways relate to both the activities proposed and the condition of the subject wetlands (i.e. through the application of the effects management hierarchy).8
- The NES-FW set nationwide requirements for carrying out certain activities that pose risks to freshwater and freshwater ecosystems. In particular, the NES-FW are designed to protect natural inland wetlands. However, like the NPS-FM, they contain specific pathways for certain activities that may impact natural inland wetlands.⁹
- It is clear that the requirements of both the NPS-FM and NES-FW, as they relate to natural inland wetlands, are not absolute. There are pathways for certain activities and there is recognition that such activities may necessarily impact the wetlands. It is in this context that Regulation 45(6)(b) of the NES-FW and the term "functional need" must be interpreted and applied.
- 17 The Courts have considered the definition of functional need, including in the context of Regulation 45(6)(b), in several key cases.¹⁰ We briefly set out the facts of these cases in **Appendix 1** and summarise the decision-makers' findings below. We have also included a recent consenting decision which, albeit at the council level, provides assistance on the legal issues at hand.

⁶ NPS-FM, Policy 6.

⁷ NPS-FM, Policy 15.

⁸ NPS-FM, Part 3, Subpart 3, Clause 3.22.

⁹ NES-FW, Regulation 45.

Poutama Kaitiaki Charitable Trust v Taranaki Regional Council [2022] NZHC 629; Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2019] NZEnvC 196 (affirmed in Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2020] NZHC 3388; affirmed in Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2022] NZCA 598; note Supreme Court has granted leave to appeal: Sustainable Otakiri Inc v Whakatane District Council [2023] NZSC 35).



Summary of key principles

- In our view, the findings in the decisions discussed in **Appendix 1** can be distilled into the following key principles:
 - 18.1 The functional need test imposes a high threshold but it is not absolute. Whether it is met depends, in the particular circumstances, on the nature and degree of a proposal's need to be in a particular location.
 - 18.2 The "need" is to be assessed in terms of the "functioning" of the proposal, that is, what are the necessary elements that make the proposal functional. This must be ascertained by way of expert evidence as to the design of the proposal and the characteristics and constraints of the location.
 - 18.3 The existence of alternatives is not a fatal flaw to the establishment of functional need. Alternatives must be thoroughly scrutinised by the relevant experts and may indeed be informative as to whether the functional need threshold is met.
 - 18.4 The relevant "environment" for the application of the functional test is the broader area, not just the specific site (or, as in this case, specific wetland).
 - 18.5 A purposive interpretation is required, taking into account the words of the functional need definition and Regulation 45(6)(b) of the NES-FW, and the broader context and purposes of the NES-FW, NPS-FM and RMA. In terms of that context, while the planning framework recognises the importance of natural inland wetlands, it does not provide for their absolute protection. Rather, there are pathways for certain activities in certain circumstances, related to both the activity and the condition of the wetlands.

Is there is a functional need for this Proposal in this location?

- 19 We have reviewed the information provided by MEL in the application and initial (9 October 2023) and further (11 March 2024) section 92 responses. We have also had additional discussions about certain aspects of the Proposal with MEL's company representatives and planning advisor.
- In our view, in the circumstances and based on the information provided by MEL, there is a functional need for the Proposal in the proposed location. In this respect, we note that we agree with the analysis on functional need provided by MEL's planner as part of the 11 March 2024 section 92 response.
- 21 As a starting point for our analysis, we note that:
 - 21.1 The infrastructure in this case is a solar farm. On its face, it would seem that a solar farm is different in nature to the examples discussed in **Appendix 1** of roads, water extraction and mining. Roads have a start and end point which must necessarily connect; water extraction depends on a point source; and mining depends on an extractable mineral.



- 21.2 However, when these examples (and the findings in the relevant decisions) are considered in more detail it becomes evident that the need for them to traverse, locate or operate in a particular environment is not clear cut or absolute. There are options for how a road gets from A to B; water extraction depends on a resource but that resource may be found in many places and extraction alone is not the only component of the operation; and similarly mining depends on a mineral resource but that resource may also be found in various locations and the overall process will dictate where exactly the activity in fact needs to occur.
- 21.3 The upshot is that all proposals generally have alternatives and the necessary assessment is to consider the nature of the project and how that dictates the design and location. Once that is established, a determination can be made as to whether the functional need threshold is met. In that context, the nature of a solar farm is not in fact substantially different to the examples given in **Appendix 1** and the principles drawn from those cases can be applied in the current circumstances.
- 22 Applying the principles to the current circumstances, at a broader scale:
 - 22.1 By its nature, a solar farm cannot simply be built anywhere and, in fact, it is challenging to find suitable solar sites across New Zealand due to the design requirements and necessary characteristics of a proposed location.
 - 22.2 A location in the Ruakākā/Marsden Point area was necessary in order to connect to the Bream Bay substation and, accordingly, reduce transmission losses and improve the reliability and resilience of the grid. These outcomes are not "nice to haves"; a different location in Northland would be unviable from both an electrical practicability and commercial perspective.
 - 22.3 A location in the Ruakākā/Marsden Point area was also necessary to support the already consented, and currently under construction (with operations scheduled to commence in December 2024), Ruakākā Energy Park Battery Energy Storage System (*BESS*). The BESS is projected to provide sufficient energy for an average of 50,000 households for a duration of two hours. In this case, even on a strict/literal interpretation of the functional need definition, the BESS is essentially the road connection, the water source or the extractable mineral.
 - 22.4 In our view, due to the location of the Bream Bay substation and the BESS, this "particular environment" (i.e. the Ruakākā/Marsden Point area) is the only possible broader location for the Proposal.
 - 22.5 Within that environment, a large, continuous area of flat land that would receive sufficient solar irradiance was necessary for the purposes of yield and capacity. Yield is an important aspect of project viability, servicing the BESS, and providing national and regional benefits (as recognised in the TiGa Minerals decision). We understand that constraints across the rest of the Ruakākā/Marsden Point area for finding such a site include existing land uses



- and ownership, zoning constraints and compatibility, and ecological conditions (i.e. the presence of more wetlands, or wetlands in less degraded condition, on other undeveloped sites).¹¹
- 22.6 Ultimately, various factors, including proximity to the Bream Bay substation and BESS, existing transmission infrastructure, topographical suitability, surrounding land uses, the underlying zoning, support from local iwi and locating near a growth area strongly support the appropriateness of the site for the Proposal and, in fact, indicate there were no real alternatives to the proposed site in the broader area. The fact that MEL has already obtained the necessary district land use consents for the Proposal equally supports this position, with a solar land use already forming part of the existing environment.

23 At the site-specific level:

- 23.1 The Proposal site¹² is large (190ha) and there is a substantial distance between some parts of the site and the BESS and Bream Bay substation. Certain infrastructure components will be shared between the BESS and the solar farm. In part, these aspects dictated the design of the Proposal on the site itself, including the location of the solar infrastructure and the wetland offsets, in order to achieve a functioning solar farm and overall energy park.
- 23.2 Similar to the TiGa Minerals scenario (where it might have been possible to mine outside the wetland setback envelope), here, it might have been possible to propose less intrusion into the wetlands across the three sites, but that would not enable the Proposal to function properly as a whole. Importantly, the uniqueness of the Proposal and its functional requirements mean that it will not create a precedent for establishing solar farms in wetlands as a blanket approach. Any such proposal would need to be considered based on its functional requirements and the condition of the subject wetlands (as the Boffa Miskell Report considers here).
- 23.3 In addition, as outlined in the Beca Alternatives and Optimisation Report accompanying the application, there were various other characteristics and constraints of the site that dictated the design in order to create a functioning (in terms of both construction and at the operational stage) solar farm. These on-site alternatives were thoroughly assessed.
- Based on the above, we consider that due to the nature of the solar infrastructure and its role in the electricity system, the requirements for a functioning solar farm, and the fact that the alternatives are constrained by cost, energy yield/capacity, constructability (including worker safety), ecological and maintenance issues, the Proposal meets the functional need test.

¹¹ We understand that the constraints mapping will be provided in evidence for the hearing.

¹² By site we generally refer to Sites 1, 2 and 3 unless these are specifically identified.



We therefore consider that the "jurisdictional" requirement of Regulation 45(6)(b) of the NES-FW is met, enabling the Proposal to be considered substantively for consent.

Conclusion

- In our view, there is a clear functional need for the Proposal to locate at the subject site and in the manner proposed.
- 27 Please let us know if you would like to discuss any aspects of our advice.

Ngā Mihi Nui

Jo Appleyard / Annabel Hawkins

Partner / Senior Associate



APPENDIX 1 - RELEVANT DECISIONS

Poutama

- Poutama Kaitiaki Charitable Trust v Taranaki Regional Council¹³ concerned a proposal for a new 6km section of state highway north of New Plymouth (referred to as the Mt Messenger bypass). The area contained multiple wetlands and therefore engaged Policy 6 and Clause 3.22 of the NPS-FM, requiring the High Court to determine whether there was a functional need for the specified infrastructure in that location.¹⁴
- In its decision, the High Court acknowledged that the strict language of "can only occur" in the functional need test employs a high threshold. However, the High Court found that the proposal met that threshold due to the nature of the linear infrastructure, the distance of the project, the particular (valley) environment and the fact that the alternatives were constrained by cost, distance, terrain and constructability issues.
- The High Court noted that the existence of alternatives does not mean that, in and of itself, an activity will not satisfy the functional need test. Alternatives will generally always exist for specified infrastructure, so if that interpretation were correct, the specified infrastructure exception would serve no purpose.¹⁷
- The High Court also noted that the focus of the test is the need for an activity to locate in a "particular environment". The High Court observed that the Resource Management Act 1991 (RMA) definition of "environment" is much broader than a "location". The "environment" subject to the activity and therefore relevant for the functional need test was the broader valley area, not just the relevant wetland.¹⁸
- In a similar situation, Waka Kotahi NZ Transport Agency v Manawatū-Whanganui Regional Council¹⁹ concerned a new stretch of state highway (Te Ahu a Turanga: Manawatū Tararua). The proposal engaged Policy 6 and Clause 3.22 of the NPS-FM. Functional need was only briefly addressed in the decision, with the Environment Court finding that there was a functional need for the project to occur in the proposed location after consideration of options in the route designation process.²⁰

¹³ Poutama Kaitiaki Charitable Trust v Taranaki Regional Council [2022] NZHC 629 (Poutama).

¹⁴ We note there was debate about whether the wetlands in question were "natural inland wetlands", however, as the High Court found the specific infrastructure exemption was met, it did not need to determine the status of the subject wetlands.

¹⁵ Poutama, at [48].

¹⁶ At [58].

¹⁷ At [57].

¹⁸ At [54], [55] and [58].

¹⁹ Waka Kotahi NZ Transport Agency v Manawatū-Whanganui Regional Council [2020] NZEnvC 192.

²⁰ At [314].



Ngāti Awa

- Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council²¹ concerned a proposal to expand an existing water extraction and bottling operation in Otakiri. This involved both new consents and changes to conditions of existing consents.
- The meaning of functional need was relevant in order to determine whether the proposal was for a discretionary or non-complying activity. To be discretionary, it had to be a "rural processing activity" and, by definition, either rely on the productive capacity of land or have a functional need for a rural location. It would otherwise be an "industrial activity", with non-complying activity status.
- The Environment Court considered that the term functional need was best understood "in contradistinction to its fraternal twin, operational need".

 "Operational need" is defined in the National Planning Standards as "the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints". The Environment Court noted that the difference between functional and operational need is usually obvious when dealing with infrastructure, but that it could be more complex when dealing with activities where the nature of the function and the operational requirements may be less sharply defined.²²
- 9 The Environment Court held that the taking of water at this location reflected a functional need. While it might be possible to take groundwater from many locations, the assurance of access to the resource in this particular location demonstrated a functional need.²³ The Environment Court held further that while the extraction of water was the principal activity, the other ancillary components, including blow-moulding the plastic bottles, bottling the water, and packaging the bottles on pallets for transport formed part of the proposal which was, overall, a rural processing activity, and therefore a discretionary activity.²⁴
- 10 The Environment Court's findings on functional need were upheld on appeal by both the High Court and Court of Appeal.²⁵

TiGa Minerals

TiGa Minerals²⁶ concerned a mining proposal on the West Coast. The proposal triggered a discretionary activity consent under Regulation 45D of the NES-FW as it proposed works, for the purpose of the extraction of minerals and ancillary activities, within a 100m setback from a natural inland wetland. Regulation 45D contains the

²¹ Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2019] NZEnvC 196 (Ngāti Awa).

²² At [223] and [224].

²³ At [225].

²⁴ At [226]-[228].

²⁵ Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2020] NZHC 3388 at [235]; Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council [2022] NZCA 598 at [152].

²⁶ Application by TiGa Minerals and Metals Limited for resource consents (West Coast Regional Council RC-2023-0046, Greymouth District Council LUN-3154/23), 29 April 2024.



same clause 6 as Regulation 45, requiring the consent authority to be satisfied that there is a functional need for the extraction of minerals in that location.

- Three independent Commissioners were appointed by the relevant regional and district councils to hear and decide the applications. Their decision considered functional need in detail. They concluded that there was a functional need for the proposal in the location. While at the council level, we consider the legal analysis in the decision assists in the current context. We have therefore considered, but not relied upon it, in forming our opinion.
- The applicant's planner contended that the functional need test was met by a straightforward analysis that because extractable minerals were found within the 100m setback envelope, the functional need test was met. The regional council's reporting planner initially²⁷ maintained the opposite, that because extractable minerals were found both within and outside the setback envelope, it could not be said that the mining activity could *only* be located within the envelope, as required on the face of the functional need definition.
- The Commissioners disagreed with both positions and found that a more nuanced approach was required. The assessment was a mixed question of law and fact encompassing consideration of the characteristics of the proposal in its entirety and not simply based on the presence and distribution of extractable minerals on the site or nearby. In particular, the assessment required a good appreciation of all the expert evidence about the proposal's design.²⁸
- 15 The Commissioners' key findings were:
 - 15.1 The functional need test relates to the nature and degree of a proposal's need to be in a particular location. The term points to a need that arises from the necessary elements that make the proposal functional. When comparing functional and operational need, functional need focuses attention on the strength of the need as it relates to the functioning of the proposal.²⁹
 - 15.2 The words "can only occur" in the functional need definition require an applicant to demonstrate that the activity or proposal traverses, locates or operates in the particular environment as an "inevitable but undesirable outcome" of the location's characteristics and constraints. In that case, the functional need arose when the proposal's design inevitably encroached into the setback envelope for the system to operate practically. The imperatives the applicant had to address and trade-offs it had to manage to inform a design that delivered an achievable proposal all contributed to meeting the functional need standard.³⁰

²⁷ Noting he changed his position through the course of the hearing.

²⁸ At [216].

²⁹ At [227], [229] and [234].

³⁰ At [237], [241] and [242].



- 15.3 It is reasonable to assume that Parliament, when creating the exceptions in Regulations 45-45D of the NES-FW, considered that proposals that would benefit from the exceptions because they are nationally or regionally significant would be sizeable, complex operations.³¹
- Ultimately, the totality of the applicant's evidence satisfied the Commissioners that there was a functional need for the extraction of minerals and ancillary activities forming the proposal within the wetlands setback envelope.³²

³¹ At [240].

³² At [259].