

IN THE MATTER OF the Resource Management Act 1991
AND

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)

DECISION following the hearing of a bundled non-complying activity application by Meridian Energy Limited (MEL) to Northland Regional Council (NRC) for resource consent under the Resource Management Act 1991.

Proposal

To construct, operate and maintain a solar energy farm, including solar panels, inverters and related electrical infrastructure, and ancillary activities such as vegetation clearance, wetland removal, earthworks, transmission lines, control buildings and substations, on three sites located at Marsden Point / Ruakākā.

The application was heard on Monday and Tuesday 5th - 6th August 2024 at Whangarei.

The Application for Resource Consent is GRANTED

Hearing Commissioners:	David Hill (Chair) Sheila Taylor
Application:	App.045356.01.01
Applicant:	Meridian Energy Limited
Site addresses:	Site 1: SH15/Rama Road/Marsden Point Road Site 2: SH15/McCathie Road Site 3: McCathie Road/Marsden Point Road
Legal descriptions:	Site 1 Lot 1 DP 419151, RT 473408 Lot 2 DP 419151, RT 473409 Lot 3 DP 419151, RT 473410 Lots 1 DP 59354, NA16C/580 Lots 2 DP 59354, NA16C/581 Lots 3 DP 59354, NA16C/582 Site 2 Lot 1 DP 386730, RT 347164 Lot 1 DP 348043 and Lot 2 DP 325771, RT 197083 Lot 2 DP 348043, RT 197084 Section 13 SO 32254, RT 159510

	Site 3 Lot 1 DP 406479, RT 422812 Pt Lot 1 DP 36288, NA1008/149 Pt Section 1 Blk VII Ruakākā SD, NA388/187 Pt Section 11 Blk VII Ruakākā SD, NA1073/185 Pt Section 54 and Sections 55 – 57 and 60 Blk VII Ruakākā SD, NA9A/2027
Site area:	Site 1: 105.2404ha Site 2: 41.5538ha Site 3: 55.5794ha Total: 202.3736ha
Zoning:	Site 1: Heavy Industrial Zone Site 2: Light Industrial Zone Site 3: Rural Production Zone Under the Whangarei District Plan 2022
Lodgement:	8 September 2023
S92 request:	3 October 2023
S92 completed:	15 November 2023 – 11 March 2024
Public notification:	22 March 2024
Submissions closed:	23 April 2024
S.42A report:	17 July 2024
Hearing commenced:	5 August 2024
Hearing closed:	26 August 2024
Attending:	<u>Meridian Energy Ltd [Applicant]:</u> Jo Appleyard and Annabel Hawkins - Counsel Grant Telfar – Corporate Micah Sherman – Corporate Dr Sarah Flynn – Ecologist Tanya Cook – Ecologist – wetland delineation Dr Lee Shapiro – Ecologist – avifauna Stephen Fuller – wetland restoration Mandy McDavitt – Hydrogeologist Brett Hood – Planning <u>Submitters:</u> Dr Mere Kepa – Takahiwai Maori Committee Ross Scobie Melanie O’Donnell Northland Fish and Game Council– Craig Deal and Forest and Bird Society Inc: Tom Kay (via Teams) Patuharakeke Te iwi Trust Board – Dave Milner <u>For Council:</u> Alister Hartstone – s.42A Reporting Officer Jack Warden – Ecologist Alissa Sluys - Hearing Administrator

Introduction

1. This decision is made on behalf of the Northland Regional Council (Council) by Independent Hearings Commissioners David Hill (Chair) and Sheila Taylor (the **Hearing Panel**), appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 (the **RMA**).
2. The application was lodged on 8 September 2023, further information requested 3 October 2023, publicly notified on 22 March 2024, with submission closing on 23 April 2024. Twelve submissions were received (including one late submission that was accepted); two in support and ten opposed. No written approvals were received.
3. The s42A RMA hearing report was prepared by Council’s consultant planner, Alister Hartstone, and was made available on or about 17 July 2024.
4. Mr Hartstone’s report was informed by technical reviews on the following:
 - Ecology – Jack Warden (Rural Design Limited);
 - Wetland site visit – Katrina Hansen (NRC Biodiversity Advisor);
 - Flooding – Bertrand Salmi (Water Technology Limited) and
 - Groundwater – Hagen Robertson.
5. The s.42A report noted¹ that a number of submission points fell within the territorial jurisdiction of the Whangarei District Council and were not matters that could be taken into account by NRC. The report identified those matters as concerning visual effects, landscaping / screen planting, noise and vibration, and traffic safety. The Hearing Panel agrees that is the case and we have taken those matters no further.
6. The s42A Report concluded², and recommended on a provisional basis, that consent be refused because the adverse ecological effects resulting from the loss of wetland were “*more than minor and potentially significant*” which did not enable a grant of consent under NES-F Reg 45(6).
7. The matter was heard at Whangarei 5-6 August 2024.
8. The hearing was closed on 26 August 2024 following receipt of the applicant’s reply with an updated set of proposed conditions.

Proposal and site description

9. The s.42A report summarised³ the proposal as follows:

Very briefly, the application provides for preparatory site works that provide for the construction of 200,000 solar panels with a footprint of 172ha across the three sites. The works include bulk earthworks and drainage (including culverts), formation of internal access tracks, landscape planting and screening, security fencing, and formation of a new wetland area. The solar farm will

¹ S.42A report at [28].

² S.42A report at [138 - 140].

³ S.42A report at [16 - 18].

consist of the panel structures utilising either fixed panel or single axis tilt panels. Inverters will be located adjacent to internal accessways throughout the solar farm layout. A satellite control room will be constructed on Site 3, with existing buildings on Site 3 used as an operation and maintenance centre. A number of existing structures and buildings across the three sites will be removed to accommodate the solar farm.

The extent of earthworks required across the three sites is 1,906,400m² in area 1 with the intention to retain a neutral cut to fill ratio across the three sites. Appendix 4 includes an 'Indicative Earthwork Cut and Fill Plan' and indicative long sections for each of the three sites. A significant portion of Sites 1 and 3 subject to proposed earthworks are identified as being within River and Coastal Flood Hazard Zones as defined by NRC, while Site 2 is subject to only small isolated areas of identified flood hazards. The extent of these flood hazard areas as they affect the sites is illustrated in Figures 17 – 19 of the application.

A significant component of the application is removal of an area of wetland on Site 1 to provide for [sic] area for solar panels. The loss of this area is intended to be offset by improvements to wetland to be retained on Site 1, and construction of a large indigenous wetland on Site 3.

10. The application noted that⁴:

MEL have been exploring opportunities to establish a solar farm in the Northland Region with a view to improving regional and national resilience of energy supply. This culminated in the purchase of three sites at Marsden Point, and the consenting and construction of a Battery Energy Storage System (BESS) on the northern-most site (corner Rama Road and SH15) as the first stage of the Ruakākā Energy Park.

The location of the Ruakākā Solar Farm was determined based on functional need. Critically this included:

- (1) A Reliable solar resource.*
- (2) The ability to pair the solar farm with the previously consented Battery Energy Storage System (a logical and planned expansion of the energy park utilising the existing grid connection and operational buildings and facilities, all of which have been oversized to accommodate the solar farm).*
- (3) The proximity to the National Grid and the Bream Bay Substation. Critically, the Bream Bay Substation has sufficient capacity to enable connection of the solar farm.*
- (4) The ability to achieve a low impact/low disturbance design.*

11. The application also proposed the following:

- (a) creation, enhancement⁵ and restoration of 18.86ha of wetland across the three sites to offset the permanent removal of 17.06ha of wetlands on Site 1. Dr Flynn described the loss⁶ as follows:

2.07 ha of open water bodies, including 1.11 ha of significant avifauna habitat; 0.75 ha of indigenous dune swale wetland, including 0.57 ha of significant indigenous wetland; and 13.7 ha of exotic-dominated dune swale wetland.

⁴ Application, Reyburn and Bryant, July 2023 at [1.2.3].

⁵ Including 0.33ha of existing wetland on each of sites 2 and 3.

⁶ Flynn, EiC, 19 July 2024 at [16].

- (b) Protection of a 5ha area of kānuka forest (part of a larger c.15ha remnant on the adjacent DoC reserve) in the north-eastern corner of Site 1.
 - (c) Modification of a number of small drains and enhancement of two larger drains known as the Bercich Drain and K Drain (the latter two qualifying as *rivers* under the RMA and pRPN because they flow intermittently).
12. Land use consent for the solar farm activity has been granted by Whangarei District Council on a non-notified basis by decision of an independent hearing commissioner dated 23 February 2024.
 13. The proposal is for a grid-scale 100-150MW farm estimated to produce 150-200 GWh of electricity per year.
 14. As noted above, part of Site 1 contains the recently consented and partially constructed 100MW Battery Energy Storage System (**BESS**) – due to be commissioned in December 2024. The BESS will connect to Transpower’s adjacent 220kV Bream Bay National Grid substation. This is the same substation that the solar farm is proposed to connect into since it has a 33kV connection and suitably sized transformers. We were told that whilst not dependent on the solar farm application, BESS has been established with that source option in mind.
 15. An aerial locating the three sites is shown below.



16. In broad terms the 3 sites are to be used as follows⁷:
- (a) Site 1 – 105 ha, zoned heavy industrial, will contain solar arrays, supporting infrastructure, and 2.05 ha of open water wetland⁸ and 5ha of kānuka forest to be retained.
 - (b) Site 2 – 41.5 ha, zoned light industrial, entirety of site for solar arrays and supporting infrastructure.
 - (c) Site 3 – 55 ha, zoned rural production, 11.73 ha of open water wetland and 7.05 ha of adjoining wetland will be created⁹ in the southern end, remainder for solar arrays and supporting infrastructure. This site contains four 110kV and 220kV transmission towers and accessways which will be within the overall footprint of the created wetland.
17. The above is sufficient description for present purposes.

Consent required and Activity status

18. Mr Hartstone confirmed that resource consent is required, as follows:
- **Non-complying** activity consent pursuant to Rule C.2.2.6 of the Proposed Regional Plan for Northland (**pRPN**) to undertake earthworks within significant wetlands.
 - **Discretionary** activity consent pursuant to Rule C.2.2.4 of the pRPN to undertake earthworks within natural wetlands.
 - **Discretionary** activity consent pursuant to Rule C.8.3.4 of the pRPN to undertake earthworks within an identified high risk flood hazard area.
 - **Discretionary** activity consent pursuant to Rule C.8.3.4 of the pRPN to undertake earthworks within ten (10) metres of a natural wetland and river.
 - **Controlled** activity consent pursuant to Rule C.8.3.2 of the pRPN to undertake earthworks exceeding 5,000m² of exposed earth at any time as part of the project.
 - **Discretionary** activity consent pursuant to Rule C.8.4.3 of the pRPN to undertake vegetation clearance exceeding 200m² in area and within 10 metres of a natural wetland and river.
 - **Discretionary** activity consent under Regulation 45 of the National Environmental Standard for Freshwater 2020 (**NES-F**) for earthworks and land disturbance within natural wetlands associated with specified infrastructure.
19. A consent duration of 35 years is sought with a 5 year lapse period.
20. It was common ground that the application was to be determined as a non-complying activity (**NC**) overall.

⁷ Sherman, EiC at [39-41].

⁸ Hood, EiC at [47].

⁹ Hood, EiC at [49].

21. It was also common ground that there was no useful permitted baseline.

Relevant Statutory Provisions

22. As an NC, s.104D RMA is in play. That requires an application to satisfy one of the stated tests: either that its adverse effects on the environment will be minor (s.104D(1)(a)), or that it will not be contrary to the objectives and policies of a relevant plan (s.104D(1)(b)). Failure to do so engages an automatic refusal of consent.
23. Having satisfied one or other of those tests, the application is then able to proceed through the normal s.104 considerations.
24. With respect to s.104, the relevant statutory instruments for present purposes include:
- National Policy Statement on Renewable Electricity Generation 2011 (**NPS-REG**).
 - National Policy Statement for Freshwater Management 2020 (**NPS-FM**).
 - National Environmental Standards for Freshwater 2020 (**NES-F**).
 - Regional Policy Statement for Northland (**RPSN**).
 - Proposed Regional Plan for Northland – February 2024 (**pRPN**).
25. As the pRPN is effectively operative in all respects in regard to the consents required by the applicant, and can therefore be held to have addressed the higher order policy statements, following established caselaw no recourse to a Part 2 RMA evaluation is required. There was no material challenge to the proposition that recourse to Part 2 was unnecessary in this instance.
26. As the Courts have noted, any tension between provisions of higher order instruments is expected to be resolved at the plan level. We have followed that expectation in this decision – the clear potential tension being that of renewable energy generation aspirations with freshwater / wetland directions. The key instrument in that respect is the pRPN which gives effect to both of those national policy instruments (as well as the RPSN).
27. There was no dispute that natural inland wetlands are involved.

Tangata whenua

28. The application included cultural effects assessment reports for Patuharakeke and Te Parawhau hapū.
29. It was identified during the hearing that only Patuharakeke had been afforded the opportunity to develop a cultural effects assessment report and that there was some confusion as to whether Patuharakeke Te Iwi Trust was acting on behalf of both Patuharakeke and Te Parawhau hapū.
30. No concern had been raised by Te Parawhau hapū representatives in relation to this matter.

31. In addition to the cultural effects assessments, the following submissions were made by Patuharakeke Te Iwi Trust on behalf of Patuharakeke hapū and the Takahiwai Māori Committee:
 - (a) Patuharakeke Te Iwi Trust supported the application and sought consent. David Milner confirmed that recommendations from the Patuharakeke hapū CEA were either incorporated into the proposed consent conditions or are subject to other discussions under the relationship agreement with MEL.
 - (b) Takahiwai Māori Committee, established via the Māori Community Development Act 1962, opposed the application.
32. When asked what would lift the Takahiwai Māori Committee's opposition to the proposal, Dr Mere Kepa stated that engagement needed to be more meaningful. She stated that "*it is not just about healing the land, it's about healing Te Parawhau*". She also referenced the development of a mara rongoa, a healing garden, as outlined in its submission. That recommendation has subsequently been adopted by MEL and included as a proposed condition.
33. In order to clarify their tangata whenua status in relation to the application sites, both Patuharakeke Te Iwi Trust and Takahiwai Māori Committee representatives were asked to elaborate on this matter.
34. Dr Kepa referred the commissioners to the 2022 Waitangi Tribunal finding that Te Poupouwhenua was owned by Te Parawhau and no-one else. No formal evidence of that finding was provided.
35. Dr Kepa acknowledged that entities representing both Patuharakeke and Te Parawhau undertake kaitiaki practices within the rohe of Te Poupouwhenua (including the sites associated with the resource consent).
36. Patuharakeke Te Iwi Trust representative, David Milner, was asked if he agreed or disagreed with Dr Kepa in relation to her 2022 Waitangi Tribunal comments. Mr Milner advised that he could only comment on what Patuharakeke Te Iwi Trust undertake for Patuharakeke iwi, but that they remain active in the rohe known as Te Poupouwhenua.
37. From the cultural evaluation assessment reports, written and verbal submissions, neither Patuharakeke nor Te Parawhau denied the other's status.
38. We are therefore satisfied that both Patuharakeke and Te Parawhau hapū have ongoing, relevant roles and functions associated with the NPS-FM principles of mana whakahaere, kaitiakitanga and manaakitanga.

Preliminary Matters

39. On the basis of the material lodged prior to the commencement of the hearing, the Hearing Panel advised the hearing that it was satisfied on the papers that:
 - (a) the application is for *specified infrastructure* as that term is defined by cl.3.21 of the NPS-FM;
 - (b) that it would qualify as *regionally significant infrastructure* under Appendix H.9

- 1)f) of the WRPS; and
- (c) that, if granted, it would provide *significant national or regional benefits* as required by cl.3.22(b) of the NPS-FM and Regulation 45(6) of the NES-F.
40. As we had received no material evidence to the contrary, we advised the hearing that we needed no further evidence or submissions on those matters.
41. A contested matter that remained live throughout was the question as to whether the Site 1 wetland comprises essentially a *dune swale wetland* as maintained by Dr Flynn and Ms Cook for MEL or is a *dune slack wetland* as maintained by Mr Warden for Council. It was common ground¹⁰ that Site 1 wetland(s) are highly dynamic and subject to significant variability.
42. The significance of that distinction is twofold –
- (a) In terms of the relative rarity and irreplaceability of a dune slack wetland; and
- (b) In terms of the calculated extent of such for the purpose of offsetting (acknowledging that Mr Warden considered offsetting inappropriate¹¹ even adopting a much higher multiplier ratio than is proposed by MEL).
43. In brief, it was Mr Warden’s opinion that the Site 1 wetland was, structurally and hydrologically, an interconnected mosaic rather than, as MEL proposed, a series of relatively discrete wetlands. He maintained¹² that its significance was therefore independent of its current poor ecological health – noting its potential for future restoration and conservation in line with the requirements of the NPS-FM and Te Mana o te Wai hierarchy which prioritises the *health and well-being of water bodies and freshwater ecosystems*. It was also evident that Mr Warden had little confidence in the efficacy of offset regimes.
44. Based on his attribution of a dune slack wetland with associated vegetation, Mr Warden had estimated¹³ the true extent to be closer to 29-30 ha rather than MEL’s 19 ha. In part that difference of opinion was due to a disagreement about what constituted the *normal* hydrological conditions for the purpose of the wetland delineation exercise (which we discuss further below).
45. We note that Dr Flynn did not “deny” the existence of dune slacks altogether; she herself had identified dune slacks in Site 1A in her primary statement of evidence¹⁴.
46. Dr Flynn discussed the methodology used in undertaking MEL’s vegetation, aquatic, avifaunal, herpetofaunal and bat assessments. She also summarised the soils underlying the wetlands – and which she concludes are dune swales – citing *Johnson and Gerbeaux (2004)* as her authority distinguishing such from dune slack landforms¹⁵;

¹⁰ Warden, Rebuttal evidence, 2 August 2024, at [4.1].

¹¹ Warden, op cit, at [5.2].

¹² Warden op cit, at [2.7].

¹³ Warden, s.42A Report Appendix A, at page [7].

¹⁴ See for example, EIC at [66].

¹⁵ Flynn, op cit, at [156].

the key point being that dune swales are consolidated peaty wetlands inland from the more active seaward coast. Furthermore, Dr Flynn concluded¹⁶ that:

In my opinion, the biota, hydrosystem, peat structure and nutrient status of dune swale features present within Site 1 are all extensively modified to the point that they are no longer representative of an indigenous dune swale ecosystem.

47. Dr Flynn expanded on the differences between those two typologies in her response memorandum of 23 August 2024, included with the closing reply:
4. *The formation of peat requires fairly continuous inundation, the establishment of peat-forming plants, and time. Dune swale wetlands form in the stable dune systems where the water table is at or above ground surface. Wetland plants, and in particular peat forming species such as Machaerina sedges and Sphagnum moss, colonise the wet swale. Over time, dead biomass (roots and litter) is deposited in the saturated environment, and accumulates as decomposition is incomplete due to the low oxygen environment and the fibrous nature of the plant material. As the peat lens thickens, it raises the water table within the swale, aiding the accumulation of more peat. Eventually the centre of the peat may 'dome' in the middle, diverting water to either side and allowing wet tolerant woody vegetation such as mānuka to colonise the slightly elevated centre and form a fen.*
 5. *In contrast, the term "dune slack" wetland in this classification refers to ephemeral wetlands associated with active sand dunes (closer to the sea), with a distinctive community of sedges and herbs, many of which are specific to this habitat. While dune slack and dune swale wetlands come within the same subset of wetlands, in my view (as per the classification system) they should be recognised as different typologies for the purposes of assessing both values and any proposed offsetting...*
 7. *The wetland features within Site 1 would have formed in the way described above (though we do not know how developed they were as peatland ecosystems). However, the following agricultural practices have altered the characteristics of the site that promoted peat formation and preservation to the extent that the characteristics that distinguish dune swale ecosystems as distinctive and ecologically important are no longer present.*
48. We have cited the above in full because we find it both helpful and persuasive.
49. As we understood Dr Flynn's evidence, the more material question for her was not whether either a dune swale or a dune slack wetland could be recreated from its current degraded state (which she maintained both could) but, rather, whether its current state should be ignored in stepping through and reaching a conclusion on the effects management hierarchy as is required by the NPS-FM, NES-F and pNRP. Dr Flynn's position was that present values are an essential starting point in approaching that conclusion - in the sense that we are not engaged in an archaeology of wetland protection. Indeed, and regardless of the typology, if the wetland(s) was not degraded but exhibited high natural values across the spectrum, the option of removal under the NPS-FM would not likely arise.
50. Turning to the question of wetland extent, we note the s.42A Report's criticism of the MEL delineation surveys being conducted either during dry periods or elevated

¹⁶ Flynn, op cit, at [266].

hydrological conditions. Ms Cook responded¹⁷ that site visits to determine extent were not undertaken in summer dry periods or at times following lower than normal rainfall but when groundwater levels were above average and rainfall for the previous 2-3 months were similarly above the monthly average. Those were conducted on 8 days over a 16-month period. Ms McDavitt (hydrogeologist for MEL) confirmed in her evidence¹⁸ that the groundwater levels in the accepted Ruakākā reference bores during the assessment survey period were typically above normal – being close to or above the 90%ile of all data. Accordingly it is MEL’s position¹⁹ that the delineation surveys were conducted under appropriate, albeit elevated, hydrological conditions with that having been taken into account.

51. With respect to the extent of wetland calculated for Site 1 removal, Dr Flynn and Ms Cook provided material evidence both on the methodology by which that was calculated and the justification for differences between their assessments and Mr Warden’s review assessment. The ecologists also agreed that wetland areas, particularly those that are intermittent, are dynamic in their extent such that defining their edges will necessarily lack absolute certainty (vegetation change being the closest proxy in this instance). However that does not explain the significant difference between the MEL estimate and Mr Warden’s – which seemed to result as much from his emphasis on mosaic interconnectivity as his characterisation of the wetland vegetation.

Findings

52. We find that it is more likely than not that overall the wetland(s) on Site 1 comprise dune swale wetlands. We also note that MEL intends protecting and enhancing the c.2.05 ha of higher value open water wetland areas on Site 1’s eastern flank adjacent to the DOC kānuka forest reserve and Whangarei District Council’s Ruakākā wastewater irrigation area.
53. We also find that the delineation surveys conducted by MEL were undertaken and assessed in an appropriate range of conditions such that they could be relied upon for the purpose of the application.
54. On the question of wetland extent we are left with two irreconcilable figures – 19 ha versus 29-30 ha.
55. MEL’s expert ecologists conducted field surveys and analysed aerial photographs / images and recorded datasets. Additional fieldwork was undertaken²⁰ following the release of Mr Warden’s s.42A review. As explained by Ms Cook²¹, this work was undertaken by reference to:

¹⁷ Cook, EIC, 19 July 2024, at [48].

¹⁸ McDavitt, EIC, 22 July 2024, at [13].

¹⁹ Reply submissions, 23 August 2024, at [53].

²⁰ Cook, op cit, at [18].

²¹ Cook, op cit, at [32].

- 32.1 *Wetland delineation protocols (Ministry for the Environment (MfE) 2022a1), which primarily rely on a previously developed vegetation tool (Clarkson et al. 20142);*
- 32.2 *Hydric soils tool – field identification guide (Fraser et al. 20183);*
- 32.3 *Wetland delineation hydrology tool for Aotearoa New Zealand (MfE 20214); and*
- 32.4 *Rapid pasture test from the Pasture exclusion methodology (MfE 2022b5).*
56. Having found that the Site 1 wetland(s) is, in effect, a dune swale wetland we must set aside the unidentified extent of dune slack interconnectivity Mr Warden, we presume, included in his review assessment when he speaks of such wetlands being “... characterised by a pattern of pronounced annual fluctuation of the water table.”²²
57. As we understood the difference, which can be illustrated from the Boffa Miskell Figure 7 to Dr Flynn’s evidence, copied overleaf, it is between connecting the wetland vegetation features laterally and linearly assuming connectivity (Mr Warden) as opposed to treating and summing them effectively as discrete elements (MEL).
58. In this instance, and regardless of the exact scientific merits of the disagreement, we must confine ourselves to the question as to whether the statutory RMA requirements and associated reference guidance have been met in estimating the extent of wetland. MEL’s expert evidence is to the effect that it has done so and has demonstrated that fact – acknowledging that there will inevitably be dispute around the precision of the defined edges.
59. The only hydrogeological evidence given was by Ms McDavitt for MEL. That evidence did not support the broader connectivity argument. Ms McDavitt noted²³ for Site 1:
- Groundwater naturally breaks out in a few low-lying areas, and wetlands in these areas are likely partially or wholly supported by groundwater. Other wetland areas across the site are likely to have a surface water component supporting them.*
- And
- Due to the site’s topography, rainfall recharge would likely pond in depressions on top of the surficial peat deposits before slowly infiltrating through the peat to the groundwater table.*
60. With respect to the Site 1 hydrogeology, Ms McDavitt concluded²⁴:
- 57.3 *Groundwater, under average seasonal conditions may daylight in localised areas where the ground surface is at low elevations. In these areas wetlands may be partially or wholly supported by groundwater.*
- 57.4 *In higher areas on site, groundwater likely sits below the surface within the sand deposits. In these areas, any wetlands are more likely to be supported by surface water.*
61. While the s.42A groundwater reviewer, Hagen Robertson, had as noted above, raised questions about what he considered a too simplistic analysis of the connection between groundwater and the wetlands, we are satisfied that those queries were

²² Warden, op cit, at page [9]

²³ McDavitt, EIC, 22 July 2024, at [17] and [34].

²⁴ McDavitt, op cit, at [57].

appropriately responded to by Ms McDavitt.



62. Mr Warden has raised legitimate questions but those have been addressed and, it says, answered by MEL and, as noted by several of MEL’s witnesses and by Ms Appleyard, Mr Warden was engaged by Council to undertake an Ecological Peer

Review²⁵; he was not engaged to conduct independent field research

63. On the evidence we find that the c.19 ha wetland extent assessment by MEL for Site 1 wetland removal is sufficient for the purpose of determining the application and any offset required.

Key Issues for Determination

64. The key matters for determination are:

- (a) whether the application satisfies the minimum requirements for consideration of a grant of consent, being the four conjunctive tests of cl.3.22(1)(b) of the NPS-FM – i.e.
- i) The activity is necessary for construction of the specified infrastructure;
 - ii) The specified infrastructure will provide significant national or regional benefits;
 - iii) There is a *functional need* for the specified infrastructure in that location – which term is defined in cl.3.21 of the NPS-FM as - *means 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*; and
 - iv) The effects of the activity can be managed through applying the effects management hierarchy - which is defined in cl.3.21 of the NPS-FM as follows:
 - (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*
 - (f) *if aquatic compensation is not appropriate, the activity itself is avoided.*

Noting that subparagraphs ii) – iv) in the above are mirrored as mandatory discretionary activity satisfaction requirements under Regulation 45(6) of the NES-F. They are also carried directly into policy D.4.23 of the pRPN.

- (b) Whether the application can give effect to both the NPS-FM and NPS-REG such that no conflict arises.
- (c) Whether the MEL surveys were conducted in conditions consistent with the

²⁵ Warden, op cit, at page [4].

appropriate groundwater standard for wetland delineation purposes.

- (d) Whether there are any other material policy, plan or adverse effect matters that bring s104D and/or s.104 RMA into question.

Clause 3.22(1)(b)(i) – Construction of specified infrastructure

65. There was no dispute that the activity was necessary for construction of the specified infrastructure. Clearly a relatively flat parcel(s) of land capable of siting solar arrays with its attendant infrastructure and connecting to a terminal grid point was fundamental to the project.

Clause 3.22(1)(b)(ii) – Significant national or regional benefits

66. Furthermore, as already noted, the national and regional electricity generation benefits were not disputed. Much is currently being made of electrical supply issues nationally and regionally, and the NPS-REG 2011 specifically recognises, encourages and endorses renewable generation and supply in its sole Objective and, in particular, Policies A and, for solar, E1. These are mirrored in the pNRP – for example policies D.2.5, 2.7, 2.8 and 2.11 relating to Regionally Significant Infrastructure and D.2.6, 2.9, 2.10 and 2.12 relating to National Grid Infrastructure and renewable energy – and in the earlier RPSN – for example objectives 3.7 to 3.9 relating to the same matters.

Clause 3.22(1)(b)(iii) – Functional need

67. Some submitters (Forest & Bird and Northland Fish and Game Council for example) had challenged the application on the grounds that the specified infrastructure did not have a functional need to be in the location requiring the removal of such a large area of wetland; and that this was not the only environment in which it could occur.
68. The Panel accepts that this was a material hurdle, over which the application needed to pass. We also sought a consideration as to whether the recently operative provisions of the pNRP set a higher bar by deliberately distinguishing functional from operational need in its definitions and therefore in its policy interpretation.
69. While MEL had addressed the generic issue of functional need in its corporate, legal and planning submissions / evidence, it characterised its argument more succinctly in reply. Ms Appleyard replied as follows:

19 ... *The key points establishing functional need for a grid-scale proposal of this nature are:*

19.1 *To make the proposal functional, there obviously needs to be sunshine (i.e. a location with the right topography and irradiance).*

19.2 *However, in order for the energy generated by that sunshine to be used, there needs to be sufficient proximity to a substation capable of dealing with the energy generated (for a project of this scale) and transmission lines with sufficient capacity to carry the energy.*

19.3 *As outlined in the evidence of Mr Sherman, there are no other viable alternative sites in proximity to the necessary substation and transmission infrastructure to enable a solar farm development at this scale to function.*

20 *Functional need is therefore clearly established in this case.*

70. Mr Sherman (Renewable Development Programme Manager) had told us that the Bream Bay Substation had the necessary infrastructure and capacity for connection purposes via the solar farms' 33kV switchboard and transmission line into the National Grid (including its 220kV and 110kV transmission towers and lines etc). That capacity was now available because the Marsden Point oil refinery no longer required it. The essential point of the application was that it was a grid scale generation development. There was no other accessible Grid Injection Point – and to purpose build such would void the project's relatively marginal (we understood) viability. Its proximity and linkage with the BESS was further evidence of need (while providing some development cost subsidies²⁶).
71. Mr Sherman also provided a later note (dated 6 August 2024) in response to questions explaining the way in which the weighting of alternatives had been carried out in the multi-criteria analysis of options – and which weighed project viability criteria (such as *cost, yield, flood risk, safety and maintainability*) more highly than, for example, *wetland effect or sustainability* – noting that at the time of optimisation assessment, the economics of the solar farm were marginal.
72. The Panel questioned this matter closely and have concluded in agreement with Ms Appleyard. Whilst we accept that the additional cost to a project from the requirement to construct significant new and additional infrastructure such as a substation may not, itself, get a project over the functional need line, in this instance the availability of an existing grid substation facility clearly represents both efficient use of infrastructure and avoids the effects that might be created by establishing such elsewhere.
73. That finding is consistent with caselaw which, in short, establishes that a strict interpretation of the phrase is not required, any more than it is required to demonstrate that the specific location is the only conceivable location.
74. We therefore find that functional need is established in this instance – which enables us to move to a consideration of the effects management hierarchy.

Clause 3.22(1)(b)(iv) – Effects management hierarchy

75. With respect to managing the activity through applying the effects management hierarchy, it was MEL's position that:
- (a) it was not practicable to avoid removing 16.73 ha of wetland within Site 1 and a further 0.33 ha from both Sites 2 and 3 for the reasons already stated;
 - (b) that the area to be lost / removed had been minimised as much as possible leaving 2.05 ha of open water area on Site 1 to be restored and/or enhanced;
 - (c) that it was not possible to remedy the wetland area to be lost; and
 - (d) therefore aquatic offsetting (in accordance with the principles set out in Appendix 6 of the NPS-FM) to a standard such that the adverse effects were no more than minor (effectively the gateway s.104D(1)(a) test) was to be

²⁶ Sherman, EIC, 19 July 2024, at [33].

undertaken. In that regard, MEL proposed an 11.73 ha constructed wetland on Site 3 and 7.05 ha of constructed / restored wetland on Site 1 adjoining the 2.05 ha open water area.

76. The proposed Site 1 wetland restoration plan is shown below.

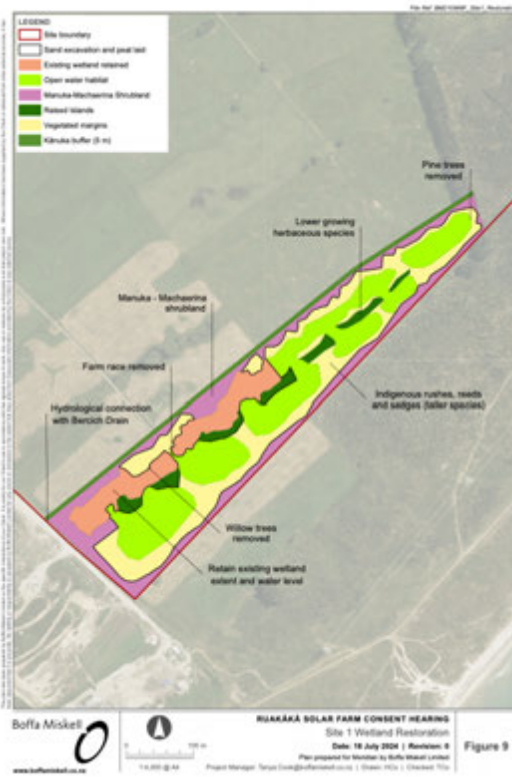
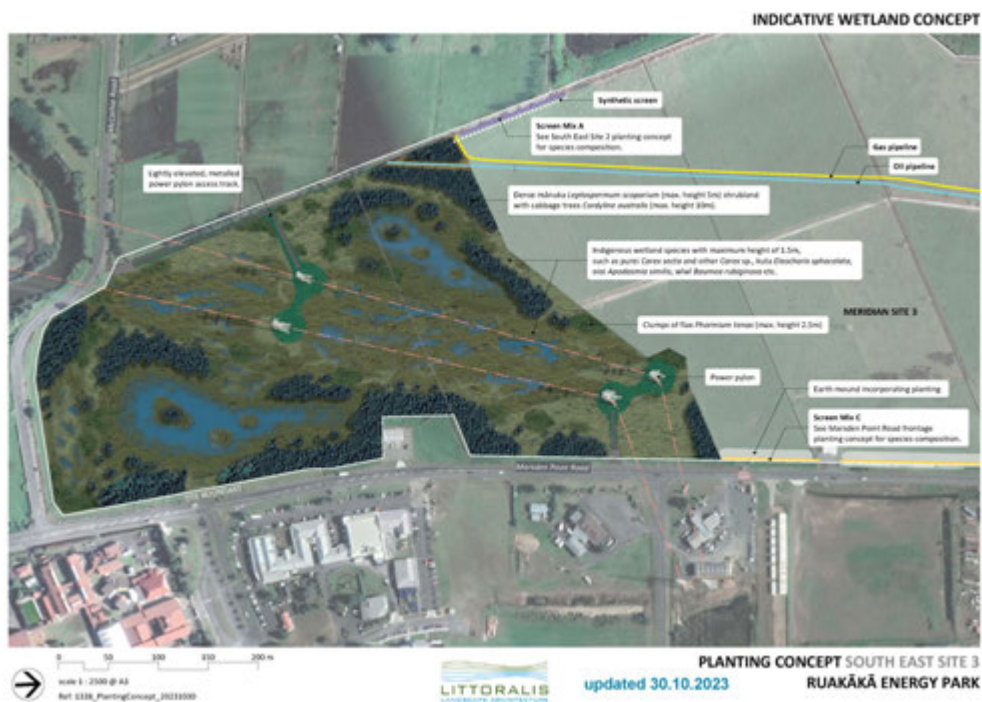


Figure 9

77. The proposed Site 3 created wetland is shown below:



78. We note that Dr Flynn (and Dr Shapiro) had identified that the kānuka forest and the open water area on Site 1 are consistently used as habitat by threatened avifauna – and that these were priority areas for avoidance. This enabled her to conclude that, in addition to the proposed created wetland on Site 3, the offset ratio of 18.78 ha of high value restored/created wetland was appropriate for the 17.06 ha of relatively lower value wetland that is to be lost. Dr Flynn noted²⁷:

The objectives of the proposed reinstatement and enhancement are to replace the full extent of wetlands removed, and ensure the restored wetlands have better habitat and ecological function than those that are to be removed....

I consider that the proposed offset meets all principles for aquatic offsetting of natural inland wetlands set out in Appendix 6 of the NPS-FM.

79. The NPS-FM Appendix 6 aquatic offsetting principles articulate a requirement for like-for-like quantitative calculation of the values to be lost and a preference for a net gain offset – being additional to what might otherwise be required ordinarily to minimise or remedy a proposal’s adverse effects. Those principles also accept that the gains are able to be achieved over the life of any consent granted (but not more than 35 years).
80. The MEL evidence, and particularly that of Mr Fuller with respect to examples of successfully created large-scale wetlands, some in close proximity with transmission lines, over relatively short time periods, provides confidence that such can be achieved - a matter that was of concern to Mr Warden.
81. We therefore find that MEL’s updated proposal can satisfy the requirements of the NPS-FM’s effects management hierarchy and that the offsetting proposed will more likely than not result in higher value aquatic and ecological values. In that regard we note that MEL has, in its conditions, accepted direct consultation with Patuharakeke and Te Parawhau hapū and Northland Fish and Game Council in the design of the wetland(s).

NPS-FM v NPS-REG

82. In this location there was potential for the two particular national policy statements to be pulling in opposite directions. That is, a potential conflict between the priority avoidance of wetland destruction against the national significance of renewable energy generation.
83. As discussed above, the MEL proposal is able to give effect to both NPSs by satisfying the Subpart 3 Specific requirements of NPS-FM 3.22(1)(b).
84. As such no conflict arises that we are required to address.

Groundwater assessment standard

85. As noted above, the s.42A groundwater reviewer had queried whether the assessment surveys had been conducted in conditions that were outside the normative standard for rainfall events.

²⁷ Flynn, op cit, at [18 - 20].

86. This matter was comprehensively addressed by Ms McDavitt for MEL, as again summarised in Reply²⁸, and we are satisfied that the assessments and conclusions drawn fall within appropriate parameters and are sufficiently reliable for the purpose.

Section 104 Effects

87. in his s.42A Report Mr Hartstone determined²⁹ that the only remaining material s.104(1)(a) effects on the environment of allowing the activity, and which therefore needed to be determined, were:
- (a) Cultural effects;
 - (b) Ecological (avifauna, lizards and fish) effects;
 - (c) Flood hazard effects;
 - (d) Construction effects; and
 - (e) Positive effects.
88. Mr Hartstone concluded that all adverse effects were capable of management by appropriate consent conditions such that they would be minor or less. The only matter that he found different, being more than minor, was the loss of wetland – which we have addressed above – noting that MEL has accepted the suggestion that construction of the wetland on Site 3 be commenced 12 months earlier than previously proposed, reducing the time overlap between wetland removal on Site 1 and effective establishment of a viable Site 3 wetland.
89. Cultural effects have been discussed above.
90. Further evidence was given by Dr Shapiro for MEL on avifauna and the potential for bird collision with the solar arrays - he also noted that birds have clearly habituated to the existing electricity infrastructure that transects the proposed wetland on Site 3 but is also in the general vicinity of the two large stormwater pond to the north that have been created for the Marsden City subdivision and that are used by many birds. In response, MEL proposes a condition requiring the construction of a 2m earth bund along the dual road frontages adjacent to the restored wetland on Site 3 in order to elevate birds away from the road. Conditions also require the development of a Native Avifauna Collision Management Plan in the event that monitoring establishes that at-risk or threatened status native avifauna are colliding with the arrays.
91. On the matter of flood hazard, submitter Ross Scobie of 109 McCathie Road, whose property on two sides abuts Sites 2 and 3, was particularly concerned about the potential for flooding and silt runoff onto his property during the substantial earthworks period required for developing those two sites and before the wetland and final drainage patterns are established. He noted, as did we from our site visit, the extensive drainage network in that area and its proximity to the Ruakākā Stream.

²⁸ Reply submissions at [50].

²⁹ s.42A Report at [37] following.

92. In Reply³⁰, Ms Appleyard noted that following the hearing MEL had reviewed the flood hazard condition in light of Mr Scobie’s concerns and this had been amended to require no flood level increase on any land outside of Sites 1-3, addressing his concern.
93. Construction effects will, as is common, be managed by means of a comprehensive Construction Environmental Management Plan.
94. Mr Hartstone accepted (as do we) that there would be positive electricity generation effects providing increased supply resilience for Northland.
95. Submitter Shaun Erikson raised a concern regarding the potential for heat island and micro-climatic effects. Mr Hood and Ms Appleyard addressed those matters for MEL noting that as the proposed solar farm was to be constructed in a vegetated environment, i.e. in pasture with surrounding vegetation, such effects were not likely to arise.

Finding

96. Having considered the above matters we accept that any adverse effects can be mitigated and/or managed by conditions of consent such that their resultant effects will be minor in that context.

Statutory Assessment – RMA, Policies and Plans

97. In terms of the statutory planning instruments that we have identified at paragraph [24] above:
 - (a) Mr Hood undertook a detailed statutory planning assessment in Chapter 6 of the application AEE and at paragraphs [90–142] of his evidence, concluding that the proposal “aligns”.
 - (b) Mr Hartstone also undertook a comprehensive assessment of the relevant provisions in the s.42A report at paragraphs [91-128] concluding that, putting aside NES-F Reg 45(6), the proposal was consistent with those provisions and satisfied the gateway test of s.104D(1).
98. Those conclusions were not challenged by any other expert planning evidence and, having considered the matter, we find in agreement with the conclusions drawn.

Section 104D, 104 and Part 2

99. In terms of our discussion above, we are satisfied that the proposal meets the gateway tests of s.104D(1)(a) and (b), in that the residual adverse effects will be minor and the proposal is not contrary to the objectives and policies of the relevant plans.
100. Furthermore, the actual and potential effects on the environment of allowing the activity, in the longer term, will, more likely than not, be nett positive.
101. As noted at paragraph [25] above, and in line with contemporary caselaw authority, we see no need to refer back to Part 2 RMA. The pRPN is the most up-to-date relevant

³⁰ Reply submissions at [58].

plan that incorporates all the higher order policy instruments and there is no evident ambiguity or gap in its coverage.

Conditions and Duration

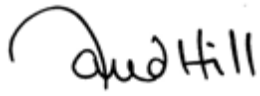
102. As directed during the Hearing, MEL and Council conferred and provided a draft set of conditions, which were further developed following the Hearing with some provisional commentary from the Hearing Panel, and provided in Reply. Those were provided on 23 August 2024.
103. Key revisions were made, including to the purpose and substance of the various proposed management plans; the involvement of certain nominated parties; fuller definition of the wetland restoration, management and sequencing matters; clarification around the plan certification process; greater certainty around flood monitoring, detention and design; and the inclusion of an Augier condition relating to a community fund.
104. Having reviewed those draft conditions, and the proposed 35-year duration, we accept that they are now appropriate and adopt and impose the same as **Attachment 1**.

Decision and Reasons

105. In exercising delegated authority under sections 34 and 34A of the Resource Management Act 1991 (RMA) and having regard to the foregoing matters and sections 104D, 104 and 104B of the RMA, the application by Meridian Energy Limited to Northland Regional Council for consents to construct, operate and maintain a solar energy farm, including solar panels, inverters and related electrical infrastructure, and ancillary activities such as vegetation clearance, wetland removal, earthworks, transmission lines, control buildings and substations, on three sites located at Marsden Point, Ruakākā, is granted with the conditions attached to this decision.

Summary reasons for the decision

106. After having regard to the actual and potential effects on the environment of allowing the proposed activity, and taking into account the relevant statutory provisions, we find that consent for the proposed activities should be granted for the reasons discussed throughout this decision and, in summary, because:
 - (a) the adverse effects of the activity, when considered in the round and with the mitigation proposed and positive effects accounted for, will be minor;
 - (b) the activity of the specified infrastructure is not contrary to the objectives and policies of the relevant plans;
 - (c) the proposed activity is broadly consistent with the provisions of the relevant statutory documents and, with the conditions imposed, will avoid, remedy or mitigate as required the adverse effects that might otherwise be created; and
 - (d) granting consent is consistent with the sustainable management purpose and principles of the RMA and Council's functions under section 30 of the RMA.

A handwritten signature in black ink that reads "David Hill". The signature is written in a cursive style with a large, sweeping initial 'D'.

David Hill (Chair)
Independent Hearings Commissioner

and for Commissioner Sheila Taylor

23 September 2024

ATTACHMENT 1: RESOURCE CONSENT CONDITIONS