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

Statement of Evidence of Micah Sherman (Company)

Dated: 19 July 2024

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

A Hawkins (annabel.hawkins@chapmantripp.com)



STATEMENT OF EVIDENCE OF MICAH SHERMAN

INTRODUCTION

- 1 My full name is Micah Weld Sherman.
- I am a Renewable Development Programme Manager at Meridian Energy Limited (*MEL*).
- I have a Bachelor of Applied Science in Mechanical Engineering from the University of Colorado and a Masters Degree in Environmental Science from Lund University.
- I have held my current role since August 2020. I have over 20 years' experience in the energy and electricity sectors in the United States, Australia and the Torres Strait, Pacific Islands, and New Zealand, with a specific focus on renewable energy. My previous experience includes roles as an engineer, project manager, and advisor at MEL, Ergon Energy Limited, Right House Limited, Infratec Renewables Limited, and the US Department of Energy.
- In my current role, my responsibilities include prospecting for new sites, engaging with landowners, Mana Whenua, and other stakeholders, managing feasibility studies, managing external consultants, managing preliminary design and grid applications, and managing resource consenting through to business case approval for a number of grid scale solar, wind and battery energy storage system (*BESS*) projects throughout New Zealand.
- I am authorised to give this evidence on MEL's behalf in relation to MEL's application to Northland Regional Council (Council) for regional consents associated with the proposed Ruakākā solar farm (Proposal). As also noted in **Grant Telfar's** evidence for MEL, MEL has already obtained the necessary district consents from Whangarei District Council, as well as all necessary consents for the related Ruakākā BESS. I have been closely involved with the development of the BESS and the Proposal since 2021 and am very familiar with the design and consenting processes.
- As an employee of MEL, I am not purporting to give this evidence as an independent expert witness. However, to the extent that my evidence covers certain technical and operational matters that are within my area of professional expertise, I confirm that I have read the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2023, and I have complied with it when preparing my evidence.

SCOPE OF EVIDENCE

- 8 My evidence will address:
 - 8.1 the requirements for grid scale solar development;
 - 8.2 the site selection and acquisition process for the Proposal;
 - 8.3 the development of the project;
 - 8.4 a high-level description of the Proposal, noting that this is covered in more detail in the evidence of **Brett Hood** and MEL's other technical experts;
 - 8.5 engagement/consultation undertaken by MEL with various stakeholders; and
 - 8.6 MEL's response to submissions and the Council's section 42A report.
- I have read and am familiar with the evidence of **Mr Telfar** for MEL, which provides an overview of MEL and addresses energy demand and supply options, as well as the benefits of the Proposal. My evidence is intended to provide specific details about the site selection and development of the Proposal. I have also read and am familiar with the evidence of MEL's expert witnesses.

SUMMARY OF EVIDENCE

- 10 The development of grid scale solar in New Zealand requires certain key conditions to be met. The location of the Proposal meets all of those key requirements, including, in particular, close proximity to an existing national grid substation, appropriate topography and sufficient project scale.
- 11 MEL undertook a careful and thorough process of project development. This was informed by the input of experienced, technical advisors and engagement with iwi. The Proposal for which consent is now sought is accordingly the most appropriate outcome in terms of the full range of relevant factors.
- Most importantly, it will result in a functioning solar farm while at the same time, as confirmed by Boffa Miskell Limited (*Boffa Miskell*), addressing ecological effects as per the effects management hierarchy under the National Policy Statement on Freshwater Management 2020 (*NPS-FM*).
- MEL has sought to respond to matters raised in submissions and by the Council's reporting officer and technical experts. We are confident, based on the application and full package of supporting evidence for this hearing, that all relevant matters have been

appropriately responded to and that the Proposal is deserving of consent.

REQUIREMENTS FOR SOLAR DEVELOPMENT

- 14 **Mr Telfar's** evidence outlines the context for the unprecedented growth in renewable energy demand due to domestic and international decarbonisation commitments and the decarbonisation of the industrial and transportation sectors.
- In general terms, renewable development is the process of identifying and advancing the best renewable energy projects as efficiently as possible, to the point they are ready for construction. Every project is different, so MEL uses its experience and, that of consultants, to identify issues that could prevent a project from being successful early in the process. On the remaining sites, we work through the site-specific issues in order of risk (high risk first) until each site is understood at a high-level. This enables us to spend time and resources on the projects that will most likely be successful and of the highest quality, as more detailed assessments are carried out.
- In terms of solar specifically, grid scale solar was essentially non-existent in New Zealand prior to 2020. This was due to the lack of a need for new generation but also due to the poor economics of grid scale solar.
- 17 From 2020, MEL began to investigate grid scale solar and sought to understand site conditions that would generally be required to develop a successful grid scale solar farm. From this work, MEL identified the following key conditions that will affect the suitability of solar farm sites in New Zealand:
 - 17.1 Close proximity to the power grid or, more specifically, to an existing substation that allows for a technically straightforward and low-cost grid connection.
 - 17.2 High irradiance.
 - 17.3 Topography presenting a gentle gradient.
 - 17.4 Sufficient project scale, i.e. projects are required to be of a certain size to achieve economies of scale and overcome the fixed costs associated with development.
 - 17.5 High nodal pricing (i.e. high wholesale electricity prices) as an indication of unmet generation demand.
- In terms of the "proximity" condition (paragraph 17.1 above), if a grid scale solar project is not located adjacent to a grid, then transmission infrastructure (towers and lines) is required to span

the distance from the (new) generation project to the grid. The further the project is from the grid, the longer the transmission lines must be and the more complex, and costly, the project becomes. Electrical transmission from a solar generation site to the Grid Injection Point (GIP) results in electrical losses, carries additional consenting risks (due to the visual, ecological, and other impacts), and likely requires easements from private landowners which increases uncertainty.

- 19 The "proximity" condition is also tied to the question of project scale. While a very large solar project might be able to support the construction of a new substation, this is not the case for solar projects that are of a similar size to the Proposal. Grid scale solar projects the size of this Proposal, c. 100-150 MW, require direct connection to an existing substation.
- Solar farms must also be consentable and various factors including landscape and visual, ecological, glint and glare, and noise affect the potential solar development areas available. These factors may limit the possibilities for solar development in areas which have, for example, public view points and/or are close to residential areas or rural residential (lifestyle) development with views over the site. While these factors are not necessarily barriers to consent, mitigation of potential impacts can add complexity and cost to solar farm development.
- 21 Natural hazards and geotechnical conditions must also be considered when considering solar farm site selection. Natural hazard risk factors include storms, floods, tsunami, and bush fires. In some instances, these factors will rule out potential solar farm development entirely. Flooding is generally of the most concern for sites MEL is considering for solar development. This again, is due to the general need to develop solar on flat land and flat land is often located in flood plains or areas where flooding can occur. Constructing solar projects in areas with poor geotechnical conditions (such as those with high compressibility, low shear strength and/or low bearing capacity) also results in additional civil construction and mounting system costs.
- As outlined at paragraph 17.4, land parcel size is also a consideration when prospecting for suitable locations to develop a solar farm. While small land parcels with multiple landowners can be grouped together, doing so increases the cost and complexity of project development. In most instances, MEL seeks out land titles of a sufficient size to support a solar farm on their own or with limited requirement for amalgamation.
- When considering all of the aforementioned site requirements and site constraints associated with solar farm development, the locations where grid scale solar projects can be feasibly developed in New Zealand are limited.

SITE SELECTION PROCESS

- In late 2020, MEL became aware of a site in Ruakākā (now Site 1 of the Proposal) as a potential grid scale solar farm site because it was uniquely positioned to meet all of the requirements listed in my "Requirements for Solar Development" section above.
- In around August 2020, MEL had also started prospecting for suitable locations to develop New Zealand's first grid scale BESS. A key requirement for the BESS location was that it should allow for a quick and inexpensive connection to the national grid. The Ruakākā site also met the requirements for a BESS due to the proximity to the Bream Bay Substation, availability of a 33kV connection, and the capacity of the existing transformers at the substation.
- As a result, in early 2021 Meridian entered into direct discussions with the entity that at that stage had an agreement to purchase the Ruakākā site. In October 2021, MEL purchased the site itself. Development of the BESS was the priority for MEL after the purchase of the land.
- During the site acquisition process, investigations had shown that the site (i.e. what is now Site 1 of the Proposal), on its own, was not of sufficient size for a grid scale solar project. As such, in September 2021, MEL began seeking to acquire more land in the Ruakākā area to enable expansion of the site. Site 2 and Site 3 were acquired in January 2022 and November 2022, respectively.
- As noted above, the Ruakākā site (comprising Sites 1, 2 and 3) is uniquely positioned to meet all of the key conditions outlined above for a successful solar farm development.
- In terms of the grid connection and topography requirements, MEL's investigations had determined that there are in fact limited locations where grid scale solar can be developed in Northland, because (as illustrated pictorially in **Figure 1** below):
 - 29.1 22% of land in Northland has topography that is suitably flat (0-7 degrees) to construct a solar farm, however much of this land is located too far from the national grid.
 - 29.2 0.2% of land in Northland has topography that is suitably flat to construct a solar farm and is within 2km of a substation. Of this flat land, much of it is tied up in other uses, not of a sufficient size, or would be precluded from development due to one, or more, of the risk factors or issues previously described.
 - 29.3 There is limited grid availability in Northland, particularly north of the Bream Bay Substation where Transpower's higher capacity 220kV network ends.

29.4 There are only seven Transpower substations in Northland.
Of these, only Bream Bay Substation has sufficient capacity, a
33kV connection and suitably sized transformers that would
allow connection of a Ruakākā sized solar farm without costly
and time-consuming upgrades.



Figure 1. Map of Northland showing national grid assets (blue dots and green squares represent substation locations, red lines represent 110kV lines, and orange lines represent 220kV lines)

- The large, flat site in close proximity to the Bream Bay Substation therefore met the key conditions (outline at paragraphs 17-22 above) for viable solar development.
- In terms of the other key conditions, the Ruakākā site is also particularly suitable due to the high nodal pricing in Northland. Electricity prices in Northland vary from moment to moment but are typically 2.5% higher than those seen in Auckland and 15% higher than reference prices in the South Island. High nodal pricing is a market signal that there is not sufficient generation in the area.
- While this is a matter more for **Mr Hood's** planning evidence, I note that the Northland Regional Policy Statement (Objective 3.9), addresses the lack of generation in Northland and states that this is detrimental to the social and economic wellbeing of the region. From MEL's perspective, a lack of generation together with a lack of

- solar sites heightens the suitability of solar development in this location.
- As to project scale, the acquisition of all of the sites enabled the development of a project of sufficient scale. The development of the BESS on Site 1 was also crucial for functional and commercial reasons. Collocating the BESS and a solar farm at the site would enable the BESS to subsidise some aspects of the solar farm, including portions of the grid connection capital costs, the annual transmission charges, and the O&M building.
- The Bream Bay Substation is defined by Transpower New Zealand Limited as a 'Connected' asset, which means that generators and/or offtakers at this substation must meet all annual charges associated with the substation. This is in contrast to 'Interconnected' assets which generally form part of the backbone to the national grid and where costs are shared across a larger pool of generators and offtakers. The Bream Bay Substation was built in 1982 to a high specification using Gas Insulated Switchgear (GIS) for the 220kV bus due to the national importance of the Marsden Point Oil Refinery. The presence of the GIS results in high annual charges and, for MEL, it meant that a solar farm was unlikely to be viable unless the BESS led the way and was able to absorb some of the annual transmission charges.
- The site's Heavy Industrial zoning was seen as an additional indication that this was a suitable location for a development of this nature.
- Finally, I note that during the site acquisition process, MEL and/or its agents approached four other landowners in the Ruakākā area who advised they were not interested to sell or lease their land for the purposes of solar. This further limited the available options for site selection.

DESCRIPTION OF PROPOSAL

- 37 This section of my evidence briefly describes the Proposal. The next section of my evidence outlines the development of the Proposal in more detail.
- The Proposal is located at Marsden Point in Ruakākā. The Proposal encompasses three sites (as shown in **Figure 2** below) and a total of 201 Ha. The sites have largely been used for farming since at least 1942. The history of these sites is explained in detail in the Archaeological Assessment included in the application for resource consents.



Figure 2. Ruakākā Energy Park Sites

- 39 Site 1 is located between the Bream Bay coastline and State Highway 15/Port Marsden Highway, Allis Bloy Place and Rama Road. The property lies between the Ruakākā Wastewater Treatment Plant (the implications of which are described in the ecology and hydrology evidence for MEL), Bream Bay Substation, and the Channel Infrastructure fuel terminal. Site 1 is zoned Heavy Industrial. Site 1 is 105 Ha in total and will contain solar arrays, supporting infrastructure, the BESS (currently under construction), an existing kānuka forest (approximately 5ha) which is to be retained and protected, and retained or restored wetland areas. There is also a midden (site Q07/1501) that was discovered in July 2023 which will remain undeveloped. Approximately two-thirds of Site 1 is currently leased for grazing cattle. The remaining one-third in the North-East includes the BESS site and areas that are covered with rank grass, gorse, remnant wetlands, and the kānuka forest.
- 40 Site 2 is zoned Light Industrial and located on McCathie Road. Site 2 is currently leased for grazing. It is 41.5 Ha in total with the entirety of the site to be used for solar arrays and supporting infrastructure.
- 41 Site 3 is located on Marsden Point Road and is zoned Rural Production. It is also currently leased for grazing. Site 3 has both 110 kV and 220 kV Transpower assets traversing the site and a total of four transmission towers located in the Southern half of the site. Site 3 is 55 ha in total and will consist of a restored wetland on the southern end of the site with the remainder of the site to be used for solar arrays and supporting infrastructure.
- The Proposal will connect to the national grid at the Bream Bay Substation via a 33 kV switchboard on Site 1. The switchboard is

currently under construction having been funded by the BESS project. Sites 2 and 3 will be connected to the 33 kV switchboard on Site 1 via a 33 kV overhead transmission line that runs within the road reserve.

The Proposal is expected to be approximately 100-150 MW with final sizing to be determined during the detailed design phase. It will produce an estimated 150-200 GWh of electricity per year. As outlined in **Mr Telfar's** evidence, the cost of the Proposal will have a total budget of approximately \$185-200 million.

DEVELOPMENT OF THE PROPOSAL

- Having undertaken the site selection process and acquired the site, MEL then embarked on the development of the Proposal.
- A key aspect of the development of the Proposal was to adopt an 'envelope approach'. The envelope approach enables MEL to have a degree of flexibility over the choice of solar panels, array structure, array and roading layout and other aspects of the solar farm design. Under the envelope approach, detailed aspects of the solar farm are not specified within the consent design, but parameters such as the site area and maximum height of the solar farm are defined in order to determine the maximum potential effects.
- This approach was borrowed from MEL's wind farm developments and is based on the principle that renewable energy technology changes rapidly. As a result, by the time a consent is issued for a project and preparation for construction is underway, changes in technology such as the solar panels dimensions and electrical parameters (voltage, current, etc) are likely to have occurred. These changes impact the solar farm layout, framing type (fixed vs tracked), and associated civil works. Therefore, flexibility is required in the consent to avoid unnecessary delays and expense in later stages of development.
- 47 In the context of preparing resource consent applications, MEL evaluates the maximum potential effects within the envelope zones for a project. MEL's approach is therefore inherently conservative, ensuring the effects from the completed solar farm (or other renewable development) will be equal to or less than those assessed during the consenting process.
- During MEL's due diligence investigations, MEL had been made aware that Site 1 contained wetlands and was given access to a map developed by Wildlands Consultants Limited, showing their preliminary view of wetland delineation and the wetland characteristics on Site 1. In particular, it showed that the vast majority of wetlands had been defined as rush land with exotic grasses. During the project development phase, with regards to the wetlands, MEL understood that in respect of qualifying wetlands, the

- NPS-FM required an 'effects management hierarchy' approach to address the potential adverse effects, i.e., avoid adverse effects where practicable, then minimise, offset, or compensate.
- 49 In February 2022, MEL engaged Boffa Miskell Limited (*Boffa Miskell*) to undertake ecological assessments of the site to inform the development of the Proposal.
- In December 2022, MEL engaged Beca Limited (*Beca*) to undertake consent design of the Proposal. Included in the scope of works was specific instruction for Beca to investigate the solar farm's impact on the site ecology, as informed by the Boffa Miskell assessment, and to consider the NPS-FM. Beca was instructed that the solar farm design would require an iterative process to consider and apply the effects management hierarchy as it related to the impact of the solar farm on the wetlands. MEL instructed Beca to consider the relative benefits and risks of a number of solar farm layout scenarios.
- As per the effects management hierarchy, included in the options that required consideration was a project layout that completely avoided areas that meet the NPS-FM definition of wetlands. In total Beca assessed seven scenarios and produced a document titled "Engineering Alternatives and Optimisation Report Ruakākā Energy Park Solar Farm" which was included with the application and considered the following seven solar farm layout options (note all options considered allowed for full utilisation of Site 2):
 - 51.1 Option 1 Avoid all solar development on Site 1. Solar development on Site 2 and Site 3 only.
 - 51.2 Option 2 Full wetlands removal on Site 1 with full offset on Site 3.
 - 51.3 Option 3 Solar development on Site 1 while maintaining existing wetlands (i.e. construction of the solar farm in and above wetlands on Site 1). Full utilisation of Site 3 (with no requirement for offsetting).
 - 51.4 Option 4 Partial wetland removal on Site 1 to avoid most open water pond habitat and removal of solar from the eastern third of the Site (i.e. no solar development on approximately one-third of the Site), partial offset on Site 3.
 - 51.5 Option 5 Partial wetland removal on Site 1 to avoid the majority of wetlands (i.e. no solar development on approximately two-thirds of the Site), partial offset on Site 3.
 - 51.6 Option 6 Partial wetland removal on Site 1 to avoid most southern open water areas and enlarging and enhancing the

- wetland in this area while creating an ecological corridor to the kānuka forest, partial offset on Site 3.
- 51.7 Option 7 Partial wetland removal on Site 1 to avoid most eastern wetland areas, partial offset on Site 3.
- Initially MEL had intended to use all of Site 1 for solar development (Option 2), however this approach was discounted based on advice from Boffa Miskell with regards to the ecological values of the open water wetland areas on Site 1.
- During the investigation phase of the development, among the options considered was one to drive piles, and build the solar farm, through areas dominated by wetland rushes (Option 3) such that they could potentially retain their wetland characteristics. This mitigation option was considered under the effects management hierarchy as an alternative to wetland removal. After a period of consideration and investigation, this option was discounted due to health and safety concerns raised by the MEL Renewable Construction Team and independent contractors, specifically it was determined that safe piling and construction could not be undertaken if it was done within wetlands. It was also concluded that this option could present risks and challenges during the operational life of the solar farm.
- Beca assessed the various options through a multi-criteria analysis considering criteria including economics, constructability, safety, sustainability, and impacts on wetlands. From this analysis, it was concluded that Option 6 (which would become the basis for the consent design) presented the most appropriate outcome when considering all aspects. Option 6 particularly provided for high energy yield and capacity, which was critical to ensuring the solar farm was commercially viable and would be a functioning project, while also optimising the overall ecological value of existing and potential future wetlands and accounting for flooding, safety and maintainability. Under this option, Beca concluded, wetland removal would be avoided to the extent practicable as directed by the NPS-FM (and National Environmental Standards for Freshwater 2020). This position is also supported by Boffa Miskell.
- In the Section 92 Request and again in the Ecological Review included with the Section 42A Report, Rural Design 1984 Limited has suggested that the solar development should utilise more land on Site 3. However, investigations carried out on Site 3 during the pre-purchase due diligence phase, and later, during the consent design phase, by Tonkin and Taylor, identified both the presence of peat-based soils and significant flood risks on Site 3 (see **Figure 3** below). Based on the pre-purchase assessment findings, MEL concluded that the southern end of the site would not be suitable for solar farm development. While solar panel support structures can be raised to allow them to remain above flood waters there are

additional engineering complexities, and costs, to do so. The complexity and costs are increased further when weak soils, such as those found on Site 3, are present. Additionally, the proposed transmission line that would connect Sites 2 and 3 to Site 1 will not have capacity sufficient to enable expansion of solar on Site 3, beyond that which is specified in the application. The presence of the Transpower assets in the southern part of Site 3 further restricts expansion of the solar farm within this site. Thus, while there may be less ecological constraints on Site 3, other factors have meant that additional solar development on this site is not possible.

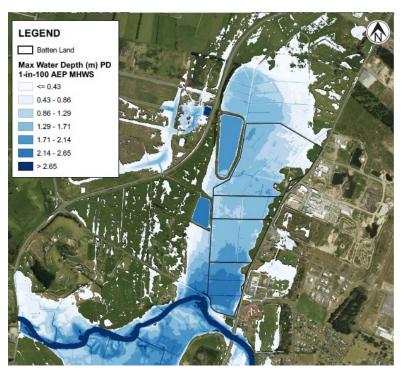


Figure 3. Pre-Purchase Assessment of Site 3. Maximum Flood Water Depth (m) in a 1-in-100 AEP in Present Day.

- During a series of technical hui with Patuharakeke's Taiao Unit (Patuharakeke), from July 2023 to September 2023, MEL sought to again examine whether the development could avoid additional wetlands on Site 1. This analysis was conducted, at the behest of Patuharakeke, by MEL's internal solar technical experts. The analysis considered an additional four scenarios all of which were variations on Option 4 (from the previous Beca analysis). Based on this analysis, it was confirmed that in order to maintain a functioning project, no further wetland removal on Site 1 could be avoided.
- 57 However, MEL has committed to ongoing joint discussions with Patuharakeke about the final solar array layouts on Site 1 and Site 3 which will occur during the detailed design stage. MEL has also committed to the development of a kaitiaki monitoring programme, as recorded in the proposed consent conditions.

- 58 Ultimately, MEL is confident that we have followed a robust process for the development of the Proposal, including avoiding development in high value wetland areas to the extent practicable while maintaining a functioning, commercial project.
- I note that MEL has now issued a Contractor Request for Tenders, which signals that MEL is committed to the prompt development of the project, should consents be granted.

ENGAGEMENT/CONSULTATION AND RESPONSE TO SUBMISSIONS

- As is MEL's usual approach, we sought to be open and transparent with the local community and key stakeholders through the development of the Proposal and undertook a significant amount of engagement and consultation prior to lodging the resource consent applications.
- Once the applications were lodged and the submissions period closed, we carefully reviewed the submissions received to see if we could undertake further engagement and/or undertake any measures to address concerns raised. While the submissions raise important matters for those making the submissions, we were heartened to receive only 12 submissions in total.
- In this section of my evidence I outline the pre-lodgement consultation undertaken as well as the post-submissions consultation and, where relevant, MEL's response to the submissions received. I note that the majority of the response to submissions is provided by **Mr Hood** and MEL's other technical experts.

Northland Regional Council and Whangarei District Council

MEL undertook two pre lodgement meetings with Councils' consent managers to discuss the proposed solar farm. MEL has subsequently responded to information requests and provided legal advice from Chapman Tripp on the question of functional need.

Patuharakeke

- Soon after purchasing Site 1 in October 2021, MEL enquired with Council to determine who held mana whenua in this rohe. Council advised that Patuharakeke held mana whenua for Site 1. For both the BESS and Proposal together, 24 hui have occurred with Patuharakeke, including:
 - 64.1 One month after buying the land for Site 1 (15 November 2021), a video conference was held with Patuharakeke for MEL to introduce itself as newcomers to their whenua.

- 64.2 A further video conference was held between Patuharakeke and members of MEL's Executive Team and Board of Directors in December 2021.
- 64.3 A site blessing, sod turn ceremony and pōwhiri at Takahiwai Marae and kōrero about MEL's plans was held on 8 March 2023 to commence works on the BESS project and to discuss further details on the Proposal.
- 64.4 A visit to a solar farm in the Marlborough region on 30 May 2023 to provide Patuharakeke's Taiao Unit with an appreciation for a similar, existing solar farm's scale, componentry, and operations.
- 64.5 Two more formal, subsequent hui-a-hapū and pōwhiri occurred at Takahiwai Marae on 6 May 2023 and 6 July 2023 to consult with whānau on the Proposal.
- Discussions on the solar farm development were held at all 24 of these hui. However, given the design and effects phase of the solar project did not kick-off formally until December 2022 the first 11 of those hui had a higher focus on the BESS development, with the remaining 12 having a stronger focus on the Proposal.

Te Parawhau & Ngātiwai

During a solar consenting kick-off meeting between MEL, Whangārei District Council and the Council on 29 November 2022, both Councils advised MEL that engagement with two additional hapū and iwi (Te Parawhau Hapū and Ngātiwai) was recommended for the solar project. Contact was made with both Te Parawhau and Ngātiwai within three weeks of this advice being provided to MEL, with hui set up with both for the new year.

Te Parawhau Hapū

- Six hui have been held with Te Parawhau since contact was made in December 2022, including the following:
 - 67.1 Two in person hui. One, on 8 March 2023, which was held between Te Parawhau and MEL only. And a second held between Te Parawhau, Patuharakeke and MEL prior to one of the hui-a-hapū on 7 July 2023.
 - 67.2 Attendance by Te Parawhau at the two Takahiwai Marae huia-hapū on 6 May 2023 and 6 July 2023 at which MEL presented on its solar farm development and answered questions from whānau.
 - 67.3 Three informal phone call discussions and various solar development emails.

Te Parawhau confirmed they were happy to generally tautoko the work Patuharakeke had done with MEL on the solar farm development. They have also prepared their own Cultural Effects Assessment for the solar farm development, reflective of their attendance at the two hui-a-hapū and other hui with MEL.

Ngātiwai

- Two hui have been held with Ngātiwai since contact was made with them in December 2022, including the following:
 - 69.1 One in person hui with Ngātiwai's environmental unit (Marino Armstrong and Alyssce Te Huna) and then Ngātiwai CEO Hūhana Lyndon (who video called in) on 8 March 2023.
 - 69.2 A second in person hui with Simon Mitchell and Ngātiwai's environmental unit on 9 May 2023.
 - 69.3 Various follow-up emails after the two aforementioned hui.
 - 69.4 Invitations for Ngātiwai to attend the two solar farm hui-hapū at Takahiwai Marae on 6 May 2023 and 6 July 2023. Although Ngātiwai did not attend the two hui-a-hapū, MEL was able to summarise the main outcomes from the first hui-a-hapū with Ngātiwai during its 9 May 2023 hui. This included discussions on the design of the solar development.
 - 69.5 A video conference was held between MEL's General Manager of Development, Guy Waipara, and the then Ngātiwai CEO Hūhana Lyndon on 13 June 2023.
- 70 During the first hui, Alyssce Te Huna (Ngātiwai Environmental Manager) confirmed that Ngātiwai would like to be involved in a role where they support Patuharakeke through reviews and input to Patuharakeke Cultural Effects Assessment.
- During the video conference between MEL's General Manager (Guy Waipara), and Ngātiwai's CEO (Hūhana Lyndon), Hūhana advised that Ngātiwai will tautoko (support) Patuharakeke in their work on the solar development. Patuharakeke also confirmed that in a discussion with Ngātiwai's CEO that Ngātiwai had confirmed their general support for Patuharakeke's work with MEL, without undertaking a review of Patuharakeke's Cultural Effects Assessment.

Submitters

- On 23 May 2024, MEL met with Forest and Bird Freshwater Advocate, Tom Kay. During this meeting MEL provided additional information on the Proposal and discussed the concerns outlined in Forest and Bird's submission.
- 73 Ross and Norma Scobie were contacted by MEL in early 2023 to inform them of the proposed development. In April 2023, Littoralis

Landscape Architecture, who authored the Landscape, Visual Amenity and Rural Character Assessment and developed the Screen Planting Concept (both of which were provided with the AEE), visited the Scobies. A letter from MEL was provided to the Scobies in early May 2023 providing general information about both the BESS and proposed solar development.

74 Dr Mere Kepa attended both Hui-a-Hapū described in Paragraph 64 above. After the first of the Hui-a-Hapū, there was correspondence between MEL and Dr Kepa via email which related to the history of Te Poupouwhenua and the Proposal's name, among other matters. Dr Kepa also offered to provide bird siting data that had been collected by Pest Strategy: Takahiwai Hills and Forest. This offer was taken up in June 2023. Since that time, Dr Kepa has frequently included MEL in group emails which generally relate to Takahiwai panui, local environmental issues and land rights in the Ruakākā area.

Section 42A report

75 MEL has carefully reviewed the Section 42A Report. While the recommended outcome is to decline consent, MEL appreciates the careful consideration of the application and supporting material and the acknowledgement that in many respects the Proposal meets the relevant requirements for consent. MEL and its experts have carefully considered those areas where it is suggested that further evidence is required or that the Proposal does not meet the relevant requirements. MEL is confident that its package of evidence addresses these matters.

19 July 2024

Micah Weld Sherman