

**BEFORE THE HEARING PANEL
CONSTITUTED BY THE OTAGO REGIONAL COUNCIL**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of submissions on the Proposed Otago
Regional Policy Statement 2021
(excluding parts determined to be a
freshwater planning instrument)

AND

IN THE MATTER of submissions and further submissions
by Meridian Energy Limited

**STATEMENT OF EVIDENCE BY SUSAN RUSTON
FOR MERIDIAN ENERGY LIMITED
DATED 23 NOVEMBER 2022**

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EXECUTIVE SUMMARY

- [1] This planning evidence addresses the key matters that Meridian Energy Limited (**Meridian**) submitted on concerning the Otago Regional Council's (**ORC**) Proposed Otago Regional Policy Statement 2021 (**pORPS**). In particular, chapters SRMR, IM, EIT-EN and ECO.
- [2] The National Policy Statement for Renewable Electricity 2011 (**NPSREG**) and the National Policy Statement for Freshwater Management 2020 (**NPSFM**) establish the significance of renewable electricity generation (**REG**) activities, including their crucial function in reducing reliance upon greenhouse gas emissions and the associated effects of climate change. The role of the regional policy statement is to move these higher-order policies along, with increasing detail, to provide a clearer picture of how to achieve the Act's purpose within the region while viewing the region as part of a national enterprise concerning renewable energy.
- [3] On this basis, the SRMR and IM chapters should identify the high-level resource management issues and objectives for the region and provide strategic direction on how these are to be achieved, including providing direction on how tensions between related objectives and policies throughout the regional policy statement are to be resolved. In my opinion, the notified chapters and the recommended changes by s42A reports fall substantively short of appropriately recognising and providing for the national significance of REG activities in Otago, despite one of New Zealand's largest hydro-electricity generation schemes (the Clutha Scheme) being located in the region.
- [4] To appropriately give effect to the national policy statements, I recommend that the SRMR and IM chapters be amended to go beyond considering the effects of climate change as an issue to also address the importance of reducing greenhouse gas emissions and addressing the following:
- a. what is needed to achieve this; and

b. how to protect existing REG activities and provide for the development of new REG activities

while at the same time meeting achievable environmental expectations in the region.

[5] To achieve this, the IM provisions, in particular, need to be refined to provide greater certainty on how tensions between related provisions are to be resolved.

[6] Concerning the EIT-EN provisions, I do not agree with Mr Langman's position that there is no justification for treating REG infrastructure differently from other regionally and nationally significant infrastructure.¹ Rather, I consider that the NPSREG provides a clear national policy for exactly this. The pORPS must be advanced to meet the requirements of the NPSREG and to manage tensions that may result. On this basis, I consider REG-specific provisions are an efficient approach to complying with national policies.

[7] To assist the Commissioners, Manawa Energy Limited, Contact Energy Limited and Meridian have worked together to recommend new Energy provisions to address their concerns collectively. These new EN provisions and other recommendations to address matters raised in my preceding paragraphs are provided in Annexures 1 and 2 of this evidence.

INTRODUCTION AND SCOPE OF EVIDENCE

Name, Qualifications, and Experience

[8] My full name is Susan Clare Ruston.

[9] I am a resource management and planning consultant. I am currently employed by PPM Consulting Limited, where I am a Director and majority shareholder.

¹ Supplementary Evidence 11, Brief of Evidence of Marcus Hayden Langman Energy Infrastructure and Transport, paragraphs 24 and 25

- [10] For over 30 years, I have provided resource management and planning services to a range of sectors, for example, agriculture, forestry, horticulture, energy generation, aggregate extraction, waste management, hazardous substances, irrigation, roading, tourism, property development, and central and local government (with PPM Consulting Ltd 2020-2022, Enspire Consulting Ltd 2017-2020, Pure Savvy Ltd 2008-2009, Meritec Limited 1998 to 2002, and PF Olsen and Company Ltd 1994 to 1997).
- [11] I have led policy development in the areas of resource management reform, environmental risk, and hazardous substances and new organisms at the Ministry for the Environment (during the periods 2002 to 2005 and 2009 to 2012), and I have provided resource management policy and risk management expertise to large private sector organisations such as Fonterra Co-operative Group Ltd (as Environmental Policy Manager for the South Island 2013 to 2017).
- [12] Core areas of my expertise include policy development and design of regulatory frameworks, evaluation of planning documents, preparation and evaluation of resource consent applications, and the preparation of expert planning evidence for council and Court hearings.
- [13] I hold a Bachelor of Forestry Science Degree (Hon) and an Executive Masters in Public Administration. I am a member of the Resource Management Law Association, the New Zealand Planning Institute, and the Resolution Institute.

Code of Conduct

- [14] While this is not an Environment Court hearing, I have met the standards in that Court for giving expert evidence.
- [15] I have read the Code of Conduct for expert witnesses issued as part of the Environment Court Practice Note 2014 (Part 7). I agree to comply with the Code of Conduct. I am satisfied that the matters addressed in this statement of evidence are within my expertise. I am unaware of any

material facts that have either been omitted or might alter or detract from the opinions expressed in this statement of evidence.

Scope of Evidence

[16] I have been asked by Meridian Energy Limited (**Meridian**) to evaluate, under the Resource Management Act 1991 (**the Act**), provisions in the following section of the pORPS:

- a) SRMR – Significant resource management issues for the region;
- b) IM – Integrated management;
- c) EIT-EN – Energy; and
- d) ECO – Ecosystems and indigenous biodiversity.

[17] **Annexures 1 and 2** to this evidence summarise my recommended changes to the pORPS.

[18] In preparing this evidence, I have considered the following documents:

- a) pORPS;
- b) The relevant sections of the Act;
- c) The National Policy Statement for Renewable Electricity Generation 2011 (**NPSREG**);
- d) The National Policy Statement for Electricity Transmission 2008 (**NPSET**);
- e) The National Policy Statement for Freshwater Management 2020 (**NPSFM**);
- f) The National Planning Standards, November 2019 (**NPS**);
- g) The submissions and further submissions of Meridian;
- h) The submissions and further submissions of other submitters;

- i) Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)
- j) Brief of Supplementary Evidence of Jacqueline Ann Todd, SRMR – Significant Resource Management Issues for the Region;
- k) Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021 Chapter 6: IM – Integrated management Felicity Boyd 27 April 2022;
- l) Brief of Supplementary Evidence of Felicity Ann Boyd IM – Integrated Management;
- m) Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021 Chapter 10: ECO-Ecosystems and indigenous biodiversity Melanie Hardiman 4 May 2022;
- n) Brief of Supplementary Evidence of Melanie Kate Hardiman, Eco – Ecosystems And Indigenous Biodiversity;
- o) Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021, Chapter 11: Energy, Infrastructure and Transport, Peter Stafford, 4 May 2022, (Para/Heading numbers rectified 18 May);
- p) Supplementary Evidence 11, Brief of Evidence of Marcus Hayden Langman Energy Infrastructure and Transport;
- q) The Statement of Evidence of Mr Andrew Feierabend for Meridian.

Involvement in Process to Date

[19] At the request of Meridian, I provided advice on the content of their submissions and further submissions, I attended ORC's *Pre-hearing*

Discussions on the Energy, Infrastructure, Land and Freshwater, Ecosystems and Indigenous Biodiversity chapters of the pORPS. I also participated in a meeting between ORC and Meridian, Contact Energy Limited and Manawa Energy Limited that discussed the Energy provisions in the pORPS.

OVERVIEW

[20] Meridian made submissions and further submissions on many of the provisions in the pORPS. Of these, I understand that Meridian is particularly concerned about the content and provisions within the SRMR, IM, EN and ECO chapters.

SRMR and IM Chapters

[21] Chapter 2 of the NPS sets the required structure of regional policy statements. Part 1 of this structure is the “*Introduction and General Provisions*”; Part 2 provides a “*Resource Management Overview*”; and Part 3 addresses specific “*Domains and Topics*”.

[22] Inclusion of the *SRMR-Significant resource management issues for the region* chapter is mandatory under the NPS, and it must be located in Part 2 of the regional policy statement. The *IM-Integrated management* chapter, if relevant to the regional policy statement, is also to be Part 2. This, in my opinion, reflects the expected strategic nature of these chapters and the NPS’s intention that they identify the high-level resource management issues and objectives (desired outcomes) for the region, and provide strategic direction on how these objectives are to be achieved. Concerning the latter, a key role of the IM chapter, in my opinion, is to provide direction on how tensions between related (or overlapping) objectives and policies throughout the regional policy statement are to be resolved.

[23] Meridian’s submissions, sought:

- a) Greater recognition in the SRMR chapter that the key means for mitigating potential climate change is reducing greenhouse gas emissions and the nationally significant role that renewable electricity generation plays in achieving such reductions;
- b) Recognition of the existing REG activities in Otago, their significance in supplying local and national electricity needs, their contribution to decreasing greenhouse gas emissions, and the need to at least maintain their generation output; and
- c) Strategic objectives and policies in the IM chapter that recognise and provide for the national significance of REG activities in the Otago region (concerning mitigating the potential for climate change) and that provide direction on implementing the provisions in the pORPS, particularly those in tension, to ensure that the strategic objectives are achieved.

[24] Concerning the SRMR and IM sections, the s42A Report generally did not support Meridian’s submissions on the preceding matters. Instead, the s42A Report considered that:

- a) It is ‘not necessary in the strategic resource management issue addressing the likelihood of climate change impacting the economy and environment (SRMR-I2) to discuss the role of Otago’s renewable energy activities in achieving New Zealand’s climate change and decarbonisation targets’;²
- b) Emphasising the potential effects of climate change, the need to reduce greenhouse gas emissions to avoid further climate change, and the role of REG activities in achieving such

² Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022), paragraph 145

reductions is ‘too specific for a statement on a strategic resource management issue and strays into solutions to the issue’³; and

- c) The IM chapter is not an appropriate location for an objective and policy that recognise and provides for REG activities, including their contribution to displacing greenhouse gas emissions and capacity and security of supply of renewable electricity.⁴

[25] In my opinion, the test of whether an issue and/or associated information (regardless of its level of detail) warrants inclusion in the SRMR and IM chapter is whether the matter is of sufficient overarching importance to achieving the future outcomes for the Otago region based on the priorities expressed in national policy.⁵

[26] The *SRMR-I2-Climate change is likely to impact our economy and environment* and *SRMR-I11-Cumulative impacts and resilience – the environmental costs of our activities in Otago are adding up with tipping points potentially being reached* chapters focus on the effects of climate change (and other matters) and do not address the issue of how to reduce the greenhouse gas emissions that bring about climate change. They also do not acknowledge that the Otago region includes 1 of the five largest hydroelectricity schemes in New Zealand (the Clutha Scheme) and that it plays a key role in providing security of electricity supply to the Otago region and beyond (keeping communities and businesses functioning) and a nationally significant role in reducing New Zealand’s greenhouse gas emissions. Further to this, the notified SRMR chapter does not acknowledge the need to protect the generation capacity of the Clutha Scheme and to provide an opportunity for growth in REG activities so that Otago’s growing demand for electricity can be met from renewable sources. The words the

³ Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022), paragraph 525

⁴ Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021 Chapter 6: IM – Integrated management Felicity Boyd 27 April 2022, paragraph 75

⁵ S62(3) of the Act requires that a regional policy statement must give effect to a national policy statement.

environmental costs of our activities in Otago are adding up with tipping points potentially being reached indicates a regional lens concerning what Otago is causing rather than a national lens recognising the need for a response in the national interest.

[27] In my opinion, it is a planning deficiency to identify a major environmental issue but not prioritise provisions for solving it with a national lens. The REG solution to managing greenhouse gas emissions is of sufficient strategic importance that it must be addressed squarely in the SRMR and IM chapters.

[28] Part of the rationale for this is the requirement in the NPSREG for decision-makers to recognise and provide for the national significance of REG activities, including the national, regional and local benefits of such activities. It is also because the NPSFM, s6 of the Act and other statutory requirements bring about tensions in regional resource management, particularly where new development of REG has the potential to result in adverse environmental effects. Such tensions and how they are to be resolved are, in my opinion, warrant discussion as a significant resource management issue.

[29] The s42A Report's⁶ recommended changes to the policy *IM-P1-Integrated approach* provide some guidance to resolving tensions that may arise when implementing the objectives and policies in the pORPS, but it is limited to:

- a) Considering all provisions in the pORPS that are relevant to the issue and applying them according to the terms in which they are expressed;
- b) If there is a conflict between provisions that cannot be resolved by the application of higher order documents, then prioritising:

⁶ Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021 Chapter 6: IM – Integrated management Felicity Boyd 27 April 2022

- i. The life-supporting capacity and mauri of the natural environment and the health needs to people, and then
- ii. The ability of people and communities to provide for their social, economic, and cultural well-being now and in the future.

[30] In my opinion, this does little to advance guidance on resolving tensions in a manner that gives confidence that the region's strategic objectives will be achieved.

[31] I understand that a regional policy statement should move the higher-order policies along, with increasing detail, to reflect the opportunities and constraints within the region and provide a clearer picture of how to achieve the Act's purpose. I base this on the scheme of the Act, Part 5 (of the Act) with its cascade of planning instruments with specified functions, and the observations of the Supreme Court on the scheme in *Environmental Defence Society Incorporated v. The New Zealand King Salmon Company Limited* at [151] as follows:

...Reflecting the open-textured nature of pt 2, Parliament has provided for a hierarchy of planning documents, the purpose of which is to flesh out the principles in s 5 and the remainder of pt 2 in a manner that is increasingly detailed both as to content and location. It is these documents that provide the basis for decision-making, even though pt 2 remains relevant. It does not follow from the statutory scheme that because pt 2 is open-textured, all or some of the planning documents that sit under it must be interpreted as being open-textured.

[32] In my opinion, the IM chapter predominantly restates the minimum expectations set by the Act and national policy statements and does not apply them in a manner that reflects the natural and built environment in the region or the resource management aspirations of the region. This fails to provide decision makers or plan users with direct guidance on how resource use conflicts should be reconciled, which is a core function of this section of the plan

- [33] The exception is the s42A Report's version of *IM-P12-Contravening environmental limits for climate change mitigation*. This version of IM-P2 puts above the other provisions in the plan (through the phrase "*Despite other provisions in the RPS...*") the ability for a decision maker to allow a non-compliance with a limit set in or resulting from a policy or method in the pORPS where the activity provides an enduring climate change mitigation and the potential adverse effects are avoided, remediated, mitigated, offset or compensated for. With this, the s42A Report recommends inserting a definition for *climate change mitigation* which *means a human intervention to reduce the sources of, or enhance the sinks of, greenhouse gases*.
- [34] The section 42A Report's IM-P12 reflects clause 3.31 of the NPSFM which allows a freshwater target attribute state to be set below the relevant national bottom line in circumstances where achieving the national bottom line for the attribute would have a significant adverse effect on one of the five hydro-electricity generation schemes identified in clause 3.31, and this includes the Clutha Scheme. The section 42A Report's IM-P12 also goes beyond the minimum requirements of the NPSFM and applies a similar priority to all climate change mitigation activities (i.e., beyond the five large schemes).
- [35] The words "*Despite other provisions in the RPS...*" places IM-P12 above the requirements of IM-P1, thereby providing a strategic position on the priority given to reducing greenhouse gas emissions provided that the potential adverse effects of the activity are avoided, remediated, mitigated, offset or compensated for. However, IM-P12 then gives broad discretion (within the bounds of the rest of the objectives and policies in the pORPS and higher order documents) to allow non-compliance (provided conditions 1 to 3 of IM-P12 inclusive are met) to the decision maker. In my opinion, the strength of the strategic policy is thereby unravelled.
- [36] In summary, I consider that the SRMR and IM chapters could be considerably strengthened by:
- a) Better tailoring them to the particular opportunities and constraints concerning resource use in the Otago region;

- b) More clearly articulating the relationship between greenhouse emissions and the effects of climate change and the critical role that REG activities play in reducing greenhouse gases;
- c) The SRMR chapter going beyond considering the effects of climate change as an issue, to also address the importance of reducing greenhouse gas emissions and what is needed to achieve this - including how to protect existing REG activities and provide for the development of new REG activities while at the same time meeting environmental expectations in the region; and
- d) Providing greater certainty on how tensions between related provisions are to be resolved.

EN-Energy

- [37] Key to the relief sought in Meridian's submissions on the EN chapter is ensuring that the provisions relating to REG activities fully give effect to the NPSREG (as required by s62(3) of the Act), are readily locatable in the pORPS, and their relationship to other provisions in the plan is clear.
- [38] The objective of the NPSREG is to (in brief) provide for the development, operation, maintenance and upgrading of new and existing REG activities, so that the government's REG targets are met or exceeded. Mr Feierabend's evidence sets out the current government REG targets.
- [39] The NPSREG requires that certain matters be recognised and provided for (Policy A) and given particular regard to (Policies B and C) in order to give effect to the objective of the NPSFM. The NPSREG sets requirements for how potential effects of REG activities are to managed (Policy C2) and requires that reverse sensitivity effects on consented and existing REG activities are avoided (Policy D).
- [40] Policies E1 to E4 (inclusive) of the NPSREG require that objectives and policies be included in regional policy statements that provide for the

development, operation, maintenance, and upgrading of new and existing electricity generation activities from solar, biomass, tidal, wave, ocean current, hydro-electricity, wind and geothermal sources, where those sources apply to the region.

- [41] Policy G of the NPSREG requires that regional policy statements include objectives and policies that provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation.
- [42] Further to the requirements of the NPSREG, Policy 4 of the NPSFM requires that freshwater is managed as part of New Zealand's integrated response to climate change, and (as previously discussed) clause 3.31 of the NPSFM allows a freshwater target attribute state to be set below the relevant national bottom line where achieving the national bottom line for the attribute would have a significant adverse effect on one of the five large hydro-electricity generation schemes identified in clause 3.31, and this includes the Clutha Scheme.
- [43] The national significance of REG activities that is formalised in the NPSREG and NPSFM, and the framework set in the NPSREG (and supported by the NPSFM) that requires regional policy statements to provide for the development, operation, maintenance and upgrading of REG activities, places REG activities at a level of strategic importance that differs from other infrastructure (except electricity transmission infrastructure which is also recognised as being of national significance in the NPSET). These national policy statements also provide direction to managing the potential environmental effects in a manner that reflects the national significance of REG activities and the need to provide for them.
- [44] Based on the preceding framework, I understand Meridian's submission sought provisions that protect existing REG activities and provide a route, subject to the management of potential environmental effects in line with Policy C2 of the NPSREG, for developing new REG activities.

- [45] Mr Langman (in paragraphs 24 and 25 of his supplementary evidence⁷) states that, in his opinion there needs to be a clear justification for treating REG activities differently from other regionally and nationally significant infrastructure and that he considers that the NPSREG is not enough of a reason. As part of his reasoning, Mr Langman states that the NPSREG does not manage the effects of REG activities, for example, effects on indigenous biodiversity. Mr Langman expresses a concern that a package of objectives, policies and methods that address Energy provisions could undermine the protection of significant indigenous biodiversity and other s6 (of the Act) matters not being achieved and the pORPS conflicting with the NPSFM. Instead, Mr Langman recommends a ‘framework’ that addresses all infrastructure together and properly recognises matters within s6 of the Act.
- [46] I do not agree with Mr Langman’s concerns or recommendation. It lacks, in my opinion, sensitivity to scale and context.
- [47] The NPSREG at Policy C1 recognises that a characteristic of REG infrastructure is that it is locationally constrained, so a preference for the avoidance of effects on indigenous biodiversity cannot always be achieved.
- [48] Policy C2 does not require that a hierarchy be applied between avoiding, remedying, or mitigating environmental effects, nor does it require that a hierarchy be applied between offsetting and compensation. This allows councils to tailor an effects management pathway for REG activities that gives effect to the national significance of REG activities while also meeting the requirements of s6, the NPSFM, and other statutory obligations, in a manner that is fitting to the circumstances of the region.
- [49] It is also, in my opinion, fanciful to propose that a well-crafted policy on the pathways for managing the potential effects of specific activities with

⁷ Supplementary Evidence 11, Brief of Evidence of Marcus Hayden Langman Energy Infrastructure and Transport

powerful countervailing environmental benefits (with a mix of off-setting and compensation) could:

- a) Undermine the general direction to protect indigenous biodiversity at the regional scale; or
- b) Disincentivise an avoidance approach where practicable.

[50] In summary, I consider that the NPSREG does identify the need to provide for REG activities in a manner that differs from other infrastructure. With this, I consider that the EN chapter must be advanced to meet the requirements of the NPSREG and to provide greater certainty on how tensions between the EN provisions and other parts of the pORPS are to be resolved. I also see merit in the EN chapter being somewhat self-contained to avoid overlap, gaps, or tension with other provisions in the plan.

[51] To assist the Commissioners, Manawa Energy Limited, Contact Energy Limited and Meridian (hereafter referred to as *the Renewable Electricity Generators*) have worked together to recommend new Energy provisions to address their concerns collectively. These are set out in Annexure 1 of this evidence, along with the relevant scope for the new provisions.

[52] In the following sections of this evidence, I provide an assessment of the replacement energy provisions recommended by the *Renewable Electricity Generators* and other key provisions that Meridian submitted on; and I provide my recommendations accordingly.

SRMR – SIGNIFICANT RESOURCE MANAGEMENT ISSUES FOR THE REGION

SRMR-I1-Natural hazards pose a risk to many Otago communities

[53] Meridian's submission sought that the Economic and Social Impact Snapshots for SRMR-I1 be amended as follows:

- a) Inserting the following statement at the end of the Economic Impact paragraphs on page 66, or words of the same effect:

The economic impacts of natural hazards within the Otago region can extend beyond the region's boundary, particularly if renewable electricity generation activities are disrupted

- b) Inserting the following statement at the end of the Social Impact on page 66, or words of the same effect:

The social impacts of natural hazards within the Otago region can extend beyond the region's boundary, particularly if renewable electricity generation activities are disrupted.

[54] Meridian considers that the notified version of the economic and social impacts paragraphs of SRMR-I1 fails to recognise that if renewable electricity generation activities within the Otago region are disrupted, then it is also likely that the supply of electricity to areas beyond Otago will be disrupted. On this basis and given the national significance of REG activities, Meridian considered that the Impact Snapshot for SRMR-I1 should identify not only the potential regional effects of disrupted renewable electricity generation activities in Otago, but also the potential national effects if such disruptions were to occur.

[55] Concerning the Economic Impact Snapshot, the s42A Report⁸ (at paragraph 110) did not support adoption of Meridian's relief on the basis that 'the notified version of the last sentence in the first paragraph acknowledges the subsequent impacts on electricity generation capacity'. In my opinion this is not the case. The sentence referred to by the s42A Report reads "*Natural hazards could also impact on renewable electricity generation in the region with subsequent impact on electricity generation capacity*" and this makes no reference to the potential impacts beyond Otago should REG activities be disrupted because of natural hazard events.

⁸ Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)

[56] Notwithstanding this, the Supplementary Evidence 05A of Ms Todd, in response to submissions made by other submitters, recommends the following change to the last sentence in the first paragraph of the Economic Impact Snapshot⁹:

Natural hazards could also impact on renewable electricity generation ~~in~~ and its transmission and distribution ~~the region~~ with ~~subsequent impact on electricity generation capacity~~. ~~the potential for significant national and regional consequences.~~ ~~Where possible new infrastructure should be located in areas where it is less vulnerable to natural hazards.~~

[57] Given the significance of REG nationally, and that one of New Zealand's largest hydroelectricity generation schemes, the Clutha Scheme, is located in Otago, I support the preceding recommendations of Ms Todd.

[58] Concerning the last sentence of Ms Todd's recommended changes, I recommend that this be amended as follows:

~~Where possible new~~ New infrastructure should be encouraged to ~~located~~ in areas where it is less vulnerable to natural hazards.

[59] In my opinion, this better reflects that REG activities have a functional need to traverse, locate or operate in a particular environment because the activity can only occur in that environment, and that some natural hazard risks can be readily managed to the point where they can be considered to be acceptable.

[60] Concerning the Social Impact Snapshot, the s42A Report⁹ (in paragraph 113) did not support Meridian's relief because 'it is covered more generally by the existing text'. In my opinion, this is not the case, rather no part of the Social Impact Snapshot for SRMR-I1 refers, even in a general sense,

⁹ Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)

to the potential impacts of natural hazard events extending beyond the region.

[61] I also consider that there is merit in recognising in SRMR-I1 that the social impacts of natural hazards within the Otago region can extend beyond the region's boundary, particularly if renewable electricity generation activities are disrupted. This reflects the national significance of Otago's REG activities and gives better effect to the NPSREG.

[62] Based on the preceding assessment, I recommend the changes to the Economic and Social Impact Snapshots in SRMR-I1 that are set out in Annexure 2 of this evidence.

SRMR-I2-Climate change is likely to impact our economy and environment

[63] Meridian's submission sought the following change to the SRMR-I2 Statement:

“...This will be compounded by stronger winds, increased temperatures and longer dry periods, which may affect the number and types of crops and animals that the land can sustain, and the potential for renewable electricity generation...”

[64] This relief was sought on the basis that changes in climate can pose both a threat and an opportunity to REG activities and that, given the national significance of REG, the potential effects of climate change on REG activities in the Otago region should be identified.

[65] The s42A Report¹⁰ recommends adopting the relief sought by Meridian and I concur with this recommendation for the same reason as provided by Meridian.

¹⁰ Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)

SRMR-I3-Pest species pose an ongoing threat to indigenous biodiversity, economic activities and landscapes

[66] Meridian’s submission generally supported the reference in the Economic Impact Snapshot to the potential for weeds to adversely affect ‘power systems’. However, their submission considered that the words used in the notified version of the pORPS to achieve this were not clear. On this basis, Meridian recommended, in the body of their submission, that the words used become “*electricity generation infrastructure and activities*”. Their ‘relief sought’ table has omitted the words “*infrastructure and*”. Based on the body of the submission, it appears that this omission was not intended but rather was an error.

[67] The s42A Report¹¹ (at paragraph 201) agreed that the notified version of “*...power systems (e.g. generation penstock, gates, valves, surge tanks, transmission lines...)*” was not clear and recommended that these words be replaced with “*electricity generation infrastructure*”. The s42A Report considered that referencing infrastructure rather than activities was more consistent with the remaining parts of the sentence.

[68] Meridian’s submission indicated that weeds can adversely affect both the REG infrastructure and REG activities more broadly. On this basis, I consider that the following amendments provide for this while at the same time resolve the s42A Report’s concerns with respect to ‘fit’ within the sentence.

Weeds, for example, are conservatively estimated to cost the New Zealand economy \$1.6 billion per annum in terms of loss of economic production, management and control costs. They also affect landscape amenity value and tourism experiences relied upon by the tourism sector. Weeds can also adversely impact infrastructure, ~~for example such as~~ water systems including irrigation, dams, and levies; ~~power systems (e.g. generation penstock, gates, valves, surge tanks,~~

¹¹ Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)

transmission lines) renewable electricity generation infrastructure and activities; and transportation systems (e.g. road beds, lake and river transportation, airstrips).”

[69] Based on the preceding assessment, I recommend adopting the amendments set out in Annexure 2 of this evidence.

SRMR-I11-Cumulative impacts and resilience – the environmental costs of our activities in Otago are adding up with tipping points potentially being reached

[70] A key part of Meridian’s submissions on the SRMR chapter was the need to ensure that the relationship between greenhouse gas emissions, climate change, and the potential effects of climate change in the Otago region and beyond are fully recognised in the pORPS as a significant resource management issue for the region; and that REG activities play a key role in reducing greenhouse gas emissions.

[71] On this basis Meridian sought the following changes to SRMR-I11:

“Impact snapshot, Environmental

While many ecosystems have a degree of resilience, increasing pressures on the environment, typically as a result of human activities (for example economic development), can have an adverse cumulative effect.

A key tipping point is the pending effects of climate change that are resulting from greenhouse gas emissions. Some of these effects Climate change also has are already being experienced in the Otago region, and further climate change has the potential to seriously challenge ecosystem adaptive capacity and the location and functioning of business and communities in the region. Decarbonising our economy is a priority for mitigating the scale of climate change and the associated economic and social disruption that can result. Key to reducing greenhouse gas emissions is increasing renewable electricity generation.

~~Much work is being undertaken to address this challenge, but it is still possible that permanent changes may occur (tipping point).~~

The first and best response to possible tipping points is to ensure sustainable management of our natural resources and avoid immediate and long-term cumulative effects that degrade the environment. ...”

[72] The s42A Report¹² (at paragraph 525) considers that the changes sought by Meridian “*are too specific for a statement of the issue and stray into solutions to the issue*” and, on that basis, does not recommend adopting Meridian’s relief.

[73] I disagree with the s42A Report’s position and recommendations on this matter. In my opinion, the specific nature of the content is not a reason to exclude it. Rather, the test for inclusion is whether the content addresses a resource management issue of particular significance to the region.

[74] Given the scale of effects (environmental, economic and social) resulting from climate change to date (locally and nationally); the scale of effects that are yet to occur as a result of greenhouse emissions that have already been emitted; the likelihood that some of the effects on the environment will be irreversible; and the national and international focus on increasing awareness of the risks of greenhouse gas emissions and the need to reduce them, I consider that the SRMR chapter would be appropriately strengthened by the adoption of the relief sought by Meridian (or words of similar effect).

[75] Further to this, I consider that the relief sought by Meridian better reflects the national significance of REG activities that is established in the NPSREG and NPSFM.

[76] Concerning the s42A Report’s contention that Meridian’s relief ‘strays into solutions to the issue’, in my opinion, that is also not a reason to

¹² Section 42A Hearing Report, Proposed Otago Regional Policy Statement 2021, Chapter 5: Submissions on Part 2 – Resource management overview, Jacqui Todd and James Adams, 4 May 2022, (Updated 7 October 2022)

refuse Meridian's relief. The need to reduce greenhouse gas emissions and the role that REG activities play in achieving this, is a significant resource management issue. The relief sought is to the *Environmental Impact Snapshot* and indicates (together with the paragraphs that follow it) the challenges of providing for REG activities to reduce greenhouse gas emissions (and associated climate change) while acknowledging that REG activities are not without their own effects on the environment.

[77] I also consider that creating pathways for activities known to achieve solutions to climate change falls comfortably within the concept of sustainable management.

[78] Based on the preceding assessment, I recommend adopting the relief sought by Meridian as set out in Annexure 2 of this evidence.

IM – INTEGRATED MANAGEMENT

New objective and policy on REG activities

[79] Meridian's submissions sought the inclusion of a new IM objective and policy as follows:

IM-O4 – Renewable electricity generation

The management of natural and physical resources in Otago recognises and provides for the national significance of renewable electricity generation activities, including their contribution to displacing greenhouse gas emissions and associated climate change, and increasing electricity generation capacity and security of supply.

IM-P8 - Renewable electricity generation

Recognise and provide for the national significance of renewable electricity generation activities, including their contribution to displacing greenhouse gas emissions and associated climate change, and increasing electricity generation capacity and security of supply.

[80] The s42A Report recommends declining Meridian's relief because the EN chapter is a more appropriate location for such policy direction and not

the IM chapter. For the reasons set out in the Overview section of this evidence, I do not agree with the s42A Report's position and recommendation in this regard.

[81] Rather, I consider that the national and regional significance of REG activities are of a sufficiently strategic nature to warrant addressing in the IM chapter, as is the need for the IM chapter to provide direction on resolving the tensions between REG activities and meeting the requirements of s6 of the Act and the NPSFM (and potentially other higher order documents). Given the focus provided to managing the effects of, and adapting to, climate change that resides in the s42A Reports IM chapter, I consider that preventing further climate change is a particularly significant strategic matter with many overlapping challenges for resource management decision making. Further to this, in my opinion, the reference to *identify and implement climate change mitigation methods* that is included in the s42A Report's IM-P10 fails to recognise, or at the very least diminishes recognition of, the role of the existing nationally significant REG activities in the Otago region and the potential for new development of REG activities in minimising further climate change. On this basis, I recommend clear recognition of the significance of REG activities and the need to provide for such activities in the IM chapter.

[82] At the same time, I agree with the comments in the s42A Report that there is repetition between Meridian's proposed objective and policy.

[83] Based on the preceding assessment, I recommend inserting the following into the IM chapter (rather than adopting Meridian's relief):

IM-O5 – Nationally significant renewable electricity generation

The national significance of renewable electricity generation activities in Otago is recognised and provided for so that local and national electricity needs are met while avoiding, reducing or displacing greenhouse gas emissions.

IM-P11 – Providing for renewable electricity generation

Provide for the national significance of renewable electricity generation activities while the potential effects of such activities on other environmental values of national or regional significance are appropriately managed.

IM-P12-Contravening environmental bottom lines

[84] Meridian made several submissions on IM-P12. Key components of these submissions were:

- a) Adding the words *Despite other policies in this RPS*;
- b) Recognition that climate change mitigations may require falling below environmental limits (in addition to environmental bottom lines);
- c) Removing the broad discretion provided to decision makers on whether or not to allow non-compliance with an environmental bottom line; and
- d) Narrowing the requirements concerning offsetting and compensation.

[85] The s42A Report recommended adoption of the words *Despite other provisions in this RPS*. As previously discussed, I consider that this places IM-P12 above the requirements of IM-P1, thereby providing a strategic position on the priority given to reducing greenhouse gas emissions provided that the potential adverse effects of the activity are avoided, remediated, mitigated, offset or compensated for, and I support this approach. For completeness, I also consider that the s42A Reports use of the term *provisions* is more appropriate than the term *policies* (which was used in Meridian's relief).

[86] However, IM-P12 places full discretion (within the bounds of rest of the objectives and policies in the pORPS and higher order documents) of allowing a non-compliance of an environmental bottom line (provided

conditions 1 to 3 of IM-P12 inclusive are met) in the hands of the decision maker.

[87] The s42A report states that “*The interpretation and application of policies is always, to some degree, at the discretion of the decision-maker. I do not consider that it is unusual to include discretion as set out in IM-P12 and am unsure how compliance with the requirements of the policy would be determined if not by a decision-maker.*” On this basis the s42A Report recommends not adopting Meridian’s relief.

[88] It is not the use of a decision-maker that Meridian is questioning; rather it is the breadth of discretion that rests with the decision maker due to the drafting of IM-P12. In my opinion, where an activity can be shown to result in enduring regionally or nationally significant climate change mitigation, and that the adverse effects resulting from the activity are avoided, remedied, mitigated, offset or compensated for, then there should be little (if any) discretion available to a decision maker to not allow the non-compliance. On this basis, I recommend amendments to the chapeaux of IM-P12 as shown in Annexure 2 of this evidence.

EIT-EN – ENERGY

[89] Having considered the s42A Report’s EN provisions and the replacement energy provisions recommended by the *Renewable Electricity Generators* and reproduced in Annexure 1, I prefer the later for the following reasons.

A single package of REG provisions

[90] The provisions recommended by the *Renewable Electricity Generators* are a self-contained package that avoids the need to cross reference the general infrastructure provisions. Reflecting this, the new note that is recommended for insertion at the beginning of the EN chapter provides certainty of the relationship between the EN provisions and the INF provisions. In my opinion, a standalone package is better able to distinguish the national significance of REG activities and more fully give

effect to the NPSREG, and on this basis I support a self-contained approach as proposed by the *Renewable Electricity Generators*.

Objectives

- [91] EN-O1, as recommended by the *Renewable Electricity Generators*, goes beyond REG ‘supporting Otago’s communities and economy’ (as provided for in the s42A Report’s version of EN-O1) to seeking that REG activities enable people and communities to provide for their environmental, social and cultural well-being, their health and safety, and sustainable economic growth and development. In my opinion, this more fully reflects the national significance of REG activities and is a more direction setting objective than the s42A Report’s version of EN-O1. The aspects of safety, security and resilience of REG is, in my opinion, wrapped into REG enabling community well-being and economic growth, and focusing on such matters in EN-O1 diminishes recognition of the importance of REG activities in Otago. On this basis, I support the *Renewable Electricity Generators*’ version of EN-O1.
- [92] Concerning the *Renewable Electricity Generators*’ EN-O3, I consider that this provision resolves the duplication that resides in the s42A Report’s EN-O2A and EN-O2(2), and for this reason I support it.
- [93] After resolving the duplication referred to in the preceding paragraph, the *Renewable Electricity Generators*’ EN-O2 addresses the remaining part of the s42A Report’s EN-O2, that is *protecting the existing renewable electricity generation capacity and enhancing it where appropriate*. In my opinion the *Renewable Electricity Generators*’ version of EN-O2 more succinctly addresses this matter.
- [94] The *Renewable Electricity Generators*’ EN-O4 makes no change to the s42A Report’s EN-O3, rather, the *Renewable Electricity Generators* have relocated EN-O3 so that the generation objectives are together, and the energy use objective follows. While the ordering could put energy use ahead of energy generation, the key advantage of the *Renewable Electricity Generators*’

ordering is improved readability (and therefore the efficiency of implementation) by grouping related provisions.

Recognising and providing for REG activities

[95] Concerning the s42A Report's EN-P2, I consider that this policy does not fully give effect to the requirements of Policy A of the NPSREG. The s42A Report's EN-P2(1) is limited to *recognising* the national significance of REG activities including their national, regional and local benefits. Policy A of the NPSREG requires that these matters be both recognised and provided for. This, in my opinion, is a substantive omission that is resolved by adopting the *Renewable Electricity Generators'* version of EN-P1.

[96] The s42A Report's EN-P2(2) requires that decisions on the allocation and use of natural and physical resources have particular regard to the *maintenance* of current REG activities, but no other context is given as to 'why or how' such regard is to be given. This leaves considerable uncertainty of the regard that must be given to maintenance. Policy B(a) and (b) of the NPSREG together require that particular regard is given to:

- a) The importance of maintaining existing REG activities, since even minor reductions in generation output can cumulatively have significant adverse effects on national, regional and local output; and
- b) That maintenance of the generation output of existing REG activities "*can require protection of the assets, operational capacity and continued availability of the renewable energy resource*".

[97] The *Renewable Electricity Generators'* version of EN-P1 more appropriately refers to particular regard to *the importance of the generational output* and the protection of existing assets is addressed in their EN-P2. In my opinion, this gives better effect to Policy B of the NPSREG.

[98] The *Renewable Electricity Generators'* version of EN-P1 also includes the requirement that decisions on the allocation and use of natural and physical resources have particular regard to the functional needs and

operational needs of existing and new REG activities. While the s42A Report's version of EN-P6 (Managing effects) includes the requirement that such regard is had, I consider that it is more appropriate to locate this requirement in the policy that refers to decisions on allocation and use of natural (and physical) resources (i.e., EN-P2 of the s42A Report and EN-P1 of the *Renewable Electricity Generators'* version).

- [99] The *Renewable Electricity Generators'* version of EN-P1 also includes a requirement to have particular regard to the *continued availability of the renewable energy resource*. In my opinion, this is a fundamental component of maintaining existing generation capacity and warrants addressing in the policies in the pORPS. This matter is not addressed in the s42A Report's EN provisions, and on this basis, I support its inclusion in the *Renewable Electricity Generators'* version of EN-P1.

Managing existing REG activities, investigation of new REG opportunities, and upgrading and new development of REG activities

- [100] The *Renewable Electricity Generators'* versions of EN-P2, EN-P3 and EN-P4 provide clear direction on how existing REG activities, investigation of new REG opportunities, and upgrading and new development of REG activities is to be provided for.
- [101] The s42A Report's policy addressing existing REG activities is EN-P1, and this is limited to requiring that the operation and maintenance of such activities are *provided for while minimising adverse effects*. The *Renewable Electricity Generators'* policy addressing existing REG activities (i.e., EN-P2) goes beyond this to require that existing REG activities are protected (reflecting Policy B(a) of the NPSREG) and enabled.
- [102] The s42A Report¹³ (at paragraph 142), considers that replacing the reference to *provided for* with *enabled* would suggest the use of permitted

¹³ Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021, Chapter 11: Energy, Infrastructure and Transport, Peter Stafford, 4 May 2022, (Para/Heading numbers rectified 18 May)

status for existing REG activities while it may be appropriate to consider re-consenting of REG activities as a controlled activity (or other more restrictive consent status). On this basis, the s42A Report rejected references to *enabling* REG activities.

[103] I do not support the s42A Report's position and recommendation on this matter. I consider that use of the terms *enable* and *provide for* give greater effect to the NPSREG in that they recognise the national significance of maintaining existing REG activities and their associated generation output, and the need to provide for new generation activities so that further reductions in greenhouse gas emissions can be achieved and growing demand for renewable electricity can be met. The term *enable*, in my opinion, can lead to both a permitted or a controlled activity status. Enabling an activity can be subject to certain conditions being met as can be set out in a permitted or controlled activity rule. If the conditions are met, the activity is enabled. The term *provide for*, in my opinion, leads to a consenting pathway for new activities (the effects of which are less well known than the effects of existing activities) that involves some discretion by the decision maker and requires that the conditions of the relevant rules are met and that the activity is consistent with the objectives and policies of the relevant plan.

[104] If this distinction between *enabling* and *providing for* is considered to not be sufficiently clear in the *Renewable Electricity Generators'* EN-P2, then I recommend that the *Renewable Electricity Generators'* version be amended as follows:

Protect and enable, through permitted or controlled activity rules with appropriate standards where required, the operation, maintenance, refurbishment and minor upgrading of existing renewable electricity generation activities.

[105] Concerning the s42A Report's EN-P4 (Identifying new sites or resources), it is not clear to me how sites for new REG activities are to be *prioritised*. Where a resource consent application is made for activities associated with the investigation, identification and assessment of potential sites, the

activity needs to be assessed based on the rules in the plan, the associated objectives and policies in the plan and the higher order documents. On this basis, it is not clear how *prioritisation* would be achieved. If EN-P4 is intended to direct differing activity status for activities associated with the investigation, identification and assessment of potential sites in different parts of the region, then in my opinion this relates to managing the potential adverse effects of activities on particular values in the region, and this is better addressed in the policy that directs how potential adverse effects of activities are to be managed. On this basis, I consider that the *Renewable Electricity Generators'* EN-P3 (Identifying new sites or resources) is clearer and more directive than the s42A Report's EN-P4.

- [106] Concerning the s42A Report's EN-P3 (Development and upgrade of renewable electricity generation activities) I consider that use of the term *through appropriate provision* is ambiguous and that the *Renewable Electricity Generators'* EN-P4 is clearer and more directive.

Management of potential environmental effects of REG activities

- [107] EN-P5 of the *Renewable Electricity Generators'* provisions and EN-P6 of the s42A Report address the management of potential effects that may result from REG activities. The s42A Report's EN-P6 directs that INF-P13 be applied, while also requiring that particular regard be given to the functional need and operational need to locate the REG activity where resources are available and to connect to the national grid or sub-transmission infrastructure, and to the degree to which unavoidable effects can be remedied or mitigated, or residual effects can be offset or compensated for. EN-P6 also includes requiring consideration of alternative sites, methods, and design.

- [108] The *Renewable Electricity Generators'* EN-P5 adopts the foundations of INF-P13, while amending them to better give effect to the NPSREG. A key difference is that the *Renewable Electricity Generators'* EN-P5 constrains the areas in which REG activities are to be avoided (where practicable) to those that are specifically identified in Schedules in the appropriate planning documents as being outstanding or of particular significance

(and natural wetlands as defined in the NPSFM). This approach recognises that it is unnecessarily restrictive to require REG activities to be avoided, from the outset, in areas that have not been assessed and determined through a public process as being special or holding particular values. Rather, where an area is identified as being of particular value through a consent process, the potential effects of the REG activity would be considered under the effects management hierarchy set out in the *Renewable Electricity Generators'* EN-P5 (3).

[109] The *Renewable Electricity Generators'* EN-P5(2) adopts an effects management hierarchy that reflects the importance of the scheduled activities identified in EN-P5(1) by referencing the relevant provisions in other chapters of the pORPS (e.g., HCV-WT-P2), and beyond those provisions requires that adverse effects first be avoided, and where this is not possible they are remedied or mitigated, and where they cannot be practicably remedied or mitigation regard is had to offsetting and compensation.

[110] For areas that have not been identified in EN-P5(1), words closer to those in Policy C2 of the NPSREG are adopted.

[111] I consider that the *Renewable Electricity Generators'* approach to effects management advances on the language in the NPSREG where it is needed to recognise and provide for the matters of national significance in s6 of the Act and to give effect to the NPSFM, and in other respects it is consistent with the NPSREG thereby reflecting the significance of REG activities. On this basis, I support adoption the *Renewable Electricity Generators'* EN-P5.

Managing potential for reverse sensitivity

[112] EN-P6 of the *Renewable Electricity Generators'* provisions and EN-P7 of the s42A Report address the management of potential reverse sensitivity effects on REG activities. The s42A Report's EN-P7 has a redundancy in that it refers to both *activities that may result in reverse sensitivity effects on REG activities* and *activities that may compromise the operation and maintenance of*

REG activities. In my opinion, they are one and same. I consider that the *Renewable Electricity Generators'* provision that addresses the potential for reverse sensitivity effects is more concise and gives full effect to Policy D of the NPSREG. Further to this, I note that the *Renewable Electricity Generators'* provision also seeks adoption of a definition for *minimise* and I support inclusion of the definition.

Other matters

- [113] The *Renewable Electricity Generators'* EM-P7, EN-P8 and EN-P9 make no change to the s42A Report's EN-P8, EN-P5 and EN-P9 respectively, rather the *Renewable Electricity Generators* have relocated the s42A Report's EN-P8, EN-P5 and EN-P9 to follow the approach of putting energy generation provisions ahead of energy use provisions (as recommended for the objectives). In my opinion, the ordering is not a critical matter, though I recommend grouping related provisions to aid efficiency of implementation, and I prefer ordering provisions that address REG activities ahead of other provisions, thereby again reinforcing the national significance of REG activities.

Summary

- [114] Based on the preceding assessment I support replacing the s42A Report's EN objectives and policies with the provisions recommended by the *Renewable Electricity Generators*. I also support adoption of EN-E1, EN-PR1, EN-AER1, EN-AER2, EN-AER3 and EN-AER4 as set out in the *Renewable Electricity Generators'* recommended provisions.

ECO – ECOSYSTEMS AND INDIGENOUS BIODIVERSITY

- [115] Meridian made several submissions on the ECO provisions. One of these related to ECO-P6 and use of the phrase *demonstrably cannot be completely avoided*. Meridian sought that this phrase (and others like it) be amended to read *cannot practicably be avoided* (or words of similar effect).
- [116] The s42A Report states that “*The term ‘demonstrably’ is used to make it clear that the applicant must show that adverse effects cannot be avoided before the applicant*

can move onto the next step in the hierarchy; therefore, to remove 'demonstrably' it would weaken the provision and the purpose and so I do not recommend accepting this submission point."¹⁴

[117] In my opinion the phrases *demonstrably cannot be completely avoided* and *demonstrably cannot be completely remedied* are unhelpful. First, an adverb of this nature is unable to provide clarity or a reliable standard as to outcome, and it or similar words are not used in national policy, some of which are highly directive. Secondly, it adds nothing to consent administration. The definition of *demonstrably* is "*in a way that can be proved*" yet compliance with a directive policy must be assessed under Act, Schedule 4 clause (2)(2).

[118] There will be instances, after the effects that can be practicably avoided have been avoided, where the residual effect can be acceptably remedied, mitigated, offset or compensated for. In my opinion, the appropriate requirement for moving between the steps of the biodiversity effects management hierarchy is whether the preceding step can be practicably achieved. This is consistent with the NPSFM's framework of:

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

¹⁴ Section 42A Hearing Report Proposed Otago Regional Policy Statement 2021 Chapter 10: ECO-Ecosystems and indigenous biodiversity Melanie Hardiman 4 May 2022, paragraph 259

[119] On this basis, I recommend adopting words of similar effect to the definition of effects management hierarchy in clause 3.21 of the NPSFM.

CONCLUSIONS

[120] Having considered the SRMR, IM and EIT-EN chapters of the pORPS, I consider that they fall substantively short of appropriately recognising and providing for the national significance of REG activities within the national policy setting established by the NPSREG and NPSFM.

[121] To appropriately give effect to the national policy statements, I recommend that the SRMR and IM chapters be amended to clearly identify, at a strategic level:

- a) The importance of reducing greenhouse gas emissions;
- b) The fundamental role that REG activities play in achieving this,
- c) How existing REG activities are to be protected in Otago and new REG activities are to be provided for; and
- d) How tensions between the EN provisions and other pORPS provisions are to be resolved.

[122] I do not agree with Mr Langman's position that there is no justification for treating REG infrastructure differently from other regionally and nationally significant infrastructure.¹⁵ The pORPS must be advanced to meet the requirements of the NPSREG and other higher order documents, and to manage tensions that may result. In my opinion, adopting REG-specific provisions is an efficient means to comply with the national policies.

[123] To assist the Commissioners, the *Renewable Electricity Generators* worked together to recommend new EN provisions to address their concerns collectively. Having assessed these against the pORPS and the

¹⁵ Supplementary Evidence 11, Brief of Evidence of Marcus Hayden Langman Energy Infrastructure and Transport, paragraphs 24 and 25

recommendations in the s42A Reports, I recommend adopting the *Renewable Electricity Generators'* provisions that are provided in Annexure 1 of this evidence. I also make recommendations on other provisions in the pORPS and these are provided in Annexure 2.



Susan Ruston

23rd of November 2022

ANNEXURE 1 – REPLACEMENT ENERGY PROVISIONS RECOMMENDED BY THE RENEWABLE ELECTRICITY GENERATORS

The following table sets out the package of Energy provisions that *the Renewable Electricity Generators* recommend to the Commissioners for adoption in the EIT-EN chapter. Scope for these provisions is also provided in the following table.

The provisions set out in the table do not show tracked changes from the notified version or the s42 versions for readability reasons. Rather the tracked changes shown are my recommended changes to the *Renewable Electricity Generators* version.

Recommended New Provisions / Text	Scope
<p>Proposed new note at beginning of chapter:</p> <p>Note: The provisions contained in EIT-EN apply to all energy activities and electricity generation activities, and the provisions contained in EIT-INF do not apply to those activities.</p>	<p>Manawa (00311.29) submission.</p> <p>Contact further submission point (FS00318.116)</p> <p>Meridian further submission point (FS00306.073)</p> <p>[and consequential amendments]</p>
Objectives	
<p>EIT-EN-01 Energy and well-being</p> <p>Renewable electricity generation activities enable people and communities to provide for their environmental, social and cultural well-being, their health and safety, and support sustainable economic growth and development.</p>	<p>Meridian submission (00306.051)</p> <p>Contact submission (00318.023)</p> <p>Manawa submission (00311.030), further submission from Contact (FS00318.121)</p>

	[and consequential amendments]
<p>EIT-EN-O2 – Existing renewable electricity generation is protected</p> <p>Existing renewable electricity generation capacity is protected, and where appropriate enhanced.</p>	<p>Contact submission (00318.024)</p> <p>Manawa submission (00311.031)</p> <p>Meridian further submission (FS00306.076)</p>
<p>EIT-EN-O3 Renewable electricity generation contributes to national targets</p> <p>Renewable electricity generation activities in Otago contribute to the achievement of New Zealand’s national target for renewable electricity generation and climate change commitments, including supporting the reduction of national greenhouse gas emissions.</p>	<p>Manawa submission (00311.031) and Meridian further submission (FS00306.076)</p> <p>Contact submission (00318.024)</p> <p>Meridian submission (00306.052)</p> <p>[and consequential amendments]</p>
<p>EIT-EN-O4 Energy use</p> <p>Development is located and designed to facilitate the efficient use of energy and to reduce demand if possible, minimising the contribution that Otago makes to total greenhouse gas emissions.</p>	<p>As per pORPS version subsequent to supplementary evidence.</p>
Policies	
<p>EIT-EN-P1 Recognising and providing for renewable electricity generation</p> <p>Ensure that decisions on the allocation and use of natural and physical resources, including the use of fresh water and development of land:</p>	<p>Manawa submission (00311.034)</p> <p>Meridian submission (00306.054)</p> <p>Contact submission (00318.026)</p>

<p>(1) recognise and provide for:</p> <ul style="list-style-type: none"> a) the national significance of renewable electricity generation activities; and b) the national, regional and local benefits of renewable electricity generation activities, <p>(2) have particular regard to:</p> <ul style="list-style-type: none"> a) the importance of maintaining the generation output of existing renewable electricity generation activities and the continued availability of the renewable energy resource for existing activities, and b) the functional needs and operational needs of existing and new renewable electricity generation activities, <p>(3) recognise that the attainment of increases in renewable electricity generation capacity will require significant development of renewable electricity generation activities.</p>	<p>Manawa submission on policy order (00311.032)</p> <p>[and consequential amendments]</p>
<p>EIT–EN–P2 Operation, maintenance, refurbishment and minor upgrading of existing facilities</p> <p>Protect and enable the operation, maintenance, refurbishment and minor upgrading of existing renewable electricity generation activities.</p> <p>Insert new definition of ‘minor upgrading’:</p> <p>Development to bring existing structures or facilities up to current standards or to improve the functional characteristics of structures or facilities, provided the upgrading itself does not give rise to any significant adverse effects on the environment and provided that the effects of the activity are the same or similar in character, intensity and scale as the existing structure and activity. In relation to renewable electricity generation activities, includes increasing the generation or transmission capacity, efficiency or security of regionally significant infrastructure and replacing support structures within the footprint of authorised activities.</p>	<p>Manawa submission (00311.033)</p> <p>Meridian submission (00306.053)</p> <p>Contact submission (00318.025)</p> <p>Manawa submission on policy order (00311.032)</p> <p>[and consequential amendments]</p>

<p>EIT–EN–P3 Identifying new sites or resources</p> <p>Provide for activities associated with the investigation, identification and assessment of potential sites for new renewable electricity generation and of new and diverse sustainable energy sources.</p>	<p>Manawa submission (00311.036)</p> <p>Meridian submission (00306.056)</p> <p>Contact submission (00318.028)</p> <p>[and consequential amendments]</p>
<p>EIT–EN–P4 Development and upgrade of renewable electricity generation</p> <p>Provide for upgrades to existing renewable electricity generation activities and the development of new renewable electricity generation activities.</p>	<p>Manawa submission (00311.035)</p> <p>Meridian submission (00306.055)</p> <p>Contact submission (00318.027)</p> <p>[and consequential amendments]</p>
<p>EIT–EN–P5 Managing effects</p> <p>When providing for new or upgraded renewable electricity generation activities:</p> <p>(1) Avoid, where practicable, locating such activities in the following areas:</p> <ul style="list-style-type: none"> a) Scheduled wāhi tupuna, and areas with protected customary rights, b) Scheduled significant natural areas, c) Natural wetlands, d) Scheduled outstanding natural features and outstanding natural landscapes, e) Scheduled outstanding water bodies, f) Scheduled areas of outstanding natural character, g) Scheduled areas or places of historic heritage value, 	<p>Manawa submission (00311.037)</p> <p>Meridian submission (00306.057)</p> <p>Contact submission (00318.029)</p> <p>[and consequential amendments]</p>

<p>(2) Where it is not practicable to avoid locating in the areas listed in (1) above, because of the functional needs or operational needs of renewable electricity generation activities, manage adverse effects as follows:</p> <ul style="list-style-type: none"> (a) In wāhi tupuna, in accordance with HCV-WT-P2, (b) In a scheduled significant natural area, where more than minor residual adverse effects on biodiversity cannot be <u>practicably</u> avoided, remedied or mitigated, offsetting and/biodiversity compensation must be considered in accordance with APP3 and/or APP4, (c) In natural wetlands, in accordance with the NESF, (d) In all other areas listed in (1) above, manage the adverse effects of the renewable electricity generation activities on the values that contribute to the area’s importance by: <ul style="list-style-type: none"> i. Avoiding adverse effects, where practicable, ii. Where adverse effects cannot be practicably avoided, they are remedied or mitigated to the extent practicable, iii. Where they cannot be practicably remedied or mitigated regard shall be had to offsetting and/or compensation of more than minor residual adverse effects. <p>(3) In areas outside (1), avoid, remedy or mitigate significant adverse effects and when considering any residual adverse effects have regard to offsetting measures and compensation.</p>	
<p>EIT-EN-P5A Managing the effects of renewable electricity generation activities within the coastal environment</p> <p>When managing the effects of renewable electricity generation activities within the coastal environment the provisions of the CE – Coastal environment chapter apply.</p>	<p>Consequential amendment to reflect other submissions and s42A / supplementary evidence.</p>
<p>EIT-EN-P6 Reverse sensitivity</p>	<p>Manawa submission (00311.038)</p>

<p>Activities that will result in reverse sensitivity effects on existing or consented renewable electricity generation activities are avoided, and only if that is not practicable, are minimised.</p> <p>Insert new definition for ‘minimise’ as “<i>means to reduce to the smallest amount practicable.</i>”</p>	<p>Meridian submission (00306.058)</p> <p>Contact submission (00318.030)</p> <p>[and consequential amendments]</p>
<p>EIT-EN-P7 Small and community scale distributed electricity generation</p> <p>Provide for small and community scale distributed electricity generation activities that increase the local community’s resilience and security of electricity supply.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>
<p>EIT-EN-P8 Non-renewable electricity generation</p> <p>Avoid the development of non-renewable electricity generation activities in Otago and facilitate the replacement of non-renewable energy sources, including the use of fossil fuels, in electricity generation.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>
<p>EIT-EN-P9 Energy conservation and efficiency</p> <p>Development supports energy conservation and efficiency by:</p> <ol style="list-style-type: none"> (1) requiring the development of new housing that is durably constructed and energy efficient, (2) designing subdivisions to maximise solar access, and (3) locating development to minimise, as far as practicable, transportation costs, car dependency and greenhouse gas emissions. 	<p>As per PORPS version subsequent to supplementary evidence.</p>
<p>Methods</p>	
<p>EIT-EN-M1 – Regional plans</p> <p>Otago Regional Council must prepare or amend and maintain its regional plans to:</p>	<p>Meridian submission (00306.061)</p> <p>Manawa submission (00311.040)</p>

<p>(1) protect and enable the ongoing operation, maintenance and minor upgrading (including identifying activities that qualify as minor upgrades) of existing renewable electricity generation activities including maintenance of generation output and protection of operational capacity,</p> <p>(2) provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation,</p> <p>(3) provide opportunities to increase the installed capacity of renewable electricity generation assets and enable development of new renewable electricity generation activities,</p> <p>(4) manage the potential effects of new or upgraded renewable electricity generation activities,</p> <p>(5) avoid the establishment or operation of activities that may result in reverse sensitivity effects or compromise the operation or maintenance of renewable electricity generation activities or adversely affect the efficient functioning of renewable electricity generation infrastructure.</p>	<p>[and consequential amendments]</p>
<p>EIT-EN-M2 – District plans</p> <p>Territorial authorities must prepare or amend and maintain their district plans to:</p> <p>(1) protect and enable the ongoing operation, maintenance and minor upgrading (including identifying activities that qualify as minor upgrades) of existing renewable electricity generation activities including maintenance of generation output and protection of operational capacity,</p> <p>(2) provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation,</p> <p>(3) provide opportunities to increase the installed capacity of renewable electricity generation assets and enable development of new renewable electricity generation activities,</p>	<p>Meridian submission (00306.062)</p> <p>Manawa submission (00311.041)</p> <p>[and consequential amendments]</p>

<p>(4) manage the potential effects of new or upgraded renewable electricity generation activities,</p> <p>(5) avoid the establishment or operation of activities that may result in reverse sensitivity effects or compromise the operation or maintenance of renewable electricity generation activities or adversely affect the efficient functioning of renewable electricity generation infrastructure,</p> <p>(6) require the design of subdivision development to optimise solar gain, including through roading, lot size, dimensions, layout and orientation, and</p> <p>(7) require the design of transport infrastructure to provide for multi-modal transport options in urban and rural lifestyle areas.</p>	
<p>EIT-EN-M3 – Education and information</p> <p>(1) Local authorities must provide education and information to improve energy efficiency and provide for the adoption of renewable energy sources, including:</p> <p>(a) ways to increase energy efficiency and energy conservation, and</p> <p>(b) opportunities for small and community scale distributed electricity generation.</p> <p>(2) Territorial authorities must provide information on design techniques to optimise solar gain, including through roading, lot size, dimensions, layout, and orientation.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>
<p>Explanation</p>	
<p>EIT-EN-E1 – Explanation</p> <p>The policies in this section are designed to set a clear preference for renewable electricity generation activities contributing to meeting New Zealand’s national target for renewable electricity generation and the decarbonisation of the economy.</p>	<p>Meridian submission (00306.063)</p> <p>Manawa submission (00311.042)</p> <p>[and consequential amendments]</p>

<p>Renewable electricity generation is a matter of national importance and a key component in responding to climate change and energy demands. Increasing renewable electricity security will assist with ensuring that communities have options for clean heat and electricity for health and wellbeing services.</p> <p>Renewable electricity generation activities are enabled by providing for the investigation, operation, maintenance, upgrading and development of existing and new assets and ensuring that decisions on allocating natural resources and the use of land, for example, recognise the benefits of renewable electricity generation activities arising from maintaining or increasing generation capacity.</p> <p>The functional needs and operational needs associated with renewable electricity generation activities are to be recognised, and the extent to which unavoidable adverse effects can be remedied or mitigated is a key consideration. Where residual adverse effects remain, consideration is to be given to proposals to offset these or compensate for them.</p> <p>To ensure the on-going functionality of renewable electricity generation assets and to maximise their benefits, reverse sensitivity effects or activities that may compromise renewable electricity generation activities are to be avoided or only if that is not reasonably practicable their impacts minimised.</p> <p>The policies also seek that energy use is efficient and energy waste is reduced, which will have consequential effects on minimising Otago's contribution to the nation's greenhouse gas emissions.</p>	
<p>Principal reasons</p>	
<p>EIT-EN-PR1 – Principal reasons</p> <p>Electricity is a basic requirement of life in Otago. It enables communities to provide for their well-being, and health and safety, and is essential to the regional economy. Everyday life is significantly affected when electricity supply is disrupted. Therefore, ensuring the security of renewable electricity resources to meet demand is crucial. The ability of existing renewable</p>	<p>Manawa submission (00311.044)</p> <p>[and consequential amendments]</p>

<p>electricity generation activities to continue operating is dependent on access to resources such as water in hydro lakes and the operator's ability to maintain existing infrastructure.</p> <p>Otago is fortunate to have several existing renewable electricity generation sites and the potential to increase renewable electricity generation. The benefits of renewable electricity generation include reducing greenhouse gas emissions, reducing dependence on imported energy and increasing supply security. These benefits are afforded to both Otago communities and nationally as exported electricity is significant for other regions. Because of this, protecting existing resources and providing for new renewable electricity generation opportunities to meet increasing electricity demand is necessary. Additionally, addressing inefficiencies in energy use can ensure that existing infrastructure is better utilised to reduce the need for new generation sites.</p> <p>Renewable electricity generation facilities may cause adverse effects on the environment because of their functional need or operational need to locate in particular areas. These areas are where resources are available, for example water for hydro-electricity generation, but they may also contain other significant values. In some situations, it may not be possible to avoid, remedy or mitigate all significant adverse effects and consideration should be given to whether those residual effects are offset or compensated.</p> <p>The provisions in this chapter assist in giving effect to the NPSREG and NPSFM and implementing sections 5 and 7(j) of the RMA. Implementation of the provisions will occur primarily through regional plans and district plan provisions but regional, city and district councils also have a role in providing education and information to the community.</p>	
<p>Anticipated environmental results</p>	
<p>EIT-EN-AER1</p> <p>The proportion of electricity generated by renewable electricity generation activities (including small and community scale distributed electricity generation) in Otago increases over time.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>

<p>EIT-EN-AER2</p> <p>Energy use in Otago becomes more efficient over time and security of supply is maintained.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>
<p>EIT-EN-AER3</p> <p>The adverse effects associated with renewable electricity generation activities are avoided, remedied or mitigated, or where appropriate, offset or compensated for.</p>	<p>Manawa submission (00311.045), further submission from Meridian (FS00306.094) [and consequential amendments]</p>
<p>EIT-EN-AER4</p> <p>The proportion of greenhouse gas emissions per capita from electricity generation reduces over time.</p>	<p>As per PORPS version subsequent to supplementary evidence.</p>

ANNEXURE 2: RECOMMENDED DRAFTING SOLUTIONS

Based on the assessment within this evidence, the following provides my recommended drafting solutions beyond those set out for the Energy provisions in Annexure 1 of this evidence.

In preparing these solutions, I have added my recommended amendments to the recommendations of the s42A Report, and where relevant the supplementary evidence to the s42A Report. Accordingly, the officers' recommended changes are shown in red and my recommended changes are shown in blue.

SRMR-I1- *Natural hazards pose a risk to many Otago communities*

...

Impact snapshot

Economic

...Natural hazards could also impact on renewable electricity generation ~~in~~ and its transmission and distribution the region with ~~subsequent impact on electricity generation capacity. The potential for significant national and regional consequences.~~ Where possible new-New infrastructure should be encouraged to locate located in areas where it is less vulnerable to natural hazards

Social

...The relationship between affected people and their cultural assets may also be affected, for example customs and traditions related to housing, health, livelihoods, and nutrition.

The social impacts of natural hazards within the Otago region can also extend beyond the region's boundary, particularly if renewable electricity generation activities are disrupted.

SRMR-I2- Climate change is likely to impact our economy and environment

Statement

Otago's climate is changing, and these changes will continue for the foreseeable future. Central Otago is likely to see more varied precipitation, leading to increased flooding and reduced water reliability. This will be compounded by stronger winds, increased

temperatures and longer dry periods, which may affect the number and types of crops and animals that the land can sustain, and the potential for renewable electricity generation.

...

SRMR-I3- Pest species pose an ongoing threat to indigenous biodiversity, economic activities and landscapes

Impact snapshot

Economic

...

Weeds, for example, are conservatively estimated to cost the New Zealand economy \$1.6 billion per annum in terms of loss of economic production, management and control costs. They also affect landscape amenity value and tourism experiences relied upon by the tourism sector. Weeds, including didymo and lake snow, can also adversely impact infrastructure, for example such as, water systems including irrigation, dams, and levies; ~~power systems (e.g. generation penstock, gates, valves, surge tanks, transmission lines);~~ renewable electricity generation infrastructure and activities; and transportation systems (e.g. road beds, lake and river transportation, airstrips).

SRMR-I11-Cumulative impacts and resilience – the environmental costs of our activities in Otago are adding up with tipping points potentially being reached

...

Impact snapshot

Environmental

While many ecosystems have a degree of resilience, increasing pressures on the environment, typically as a result of human activities (for example economic development), can have an adverse cumulative effect.

A key tipping point is the pending effects of climate change that are resulting from greenhouse gas emissions. Some of these effects Climate change also has are already being experienced in the Otago region, and further climate change has the potential to seriously challenge ecosystem adaptive capacity and the location and functioning of business and

communities in the region. Decarbonising our economy is a priority for mitigating the scale of climate change and the associated economic and social disruption that can result. Key to reducing greenhouse gas emissions is increasing renewable electricity generation.
~~Much work is being undertaken to address this challenge, but it is still possible that permanent changes may occur (tipping point).~~

The first and best response to possible tipping points is to ensure sustainable management of our natural resources and avoid immediate and long-term cumulative effects that degrade the environment. At the same time a resilience approach is needed that identifies ~~thresholds~~ and sets limits on the use of natural resources to avoid permanent and potentially catastrophic changes occurring, as would occur if a tipping point is reached.

Indicators and tools for measuring resilience and tipping points remain in the early stages of understanding and development. Even though regulatory agencies and proponents for natural resource development and environmental rehabilitation projects have difficulties interpreting and verifying the potential for environmental recovery and resilience (particularly in relation to the regulatory context of impact assessment in order to provide consenting decisions for regulated activities) that should not be taken as a reason to delay acting. ...

New IM-O5 – Nationally significant renewable electricity generation

The national significance of renewable electricity generation activities in Otago is recognised and provided for so that local and national electricity needs are met while avoiding, reducing, or displacing greenhouse gas emissions.

New IM-P11 – Providing for renewable electricity generation

Provide for the national significance of renewable electricity generation activities while the potential effects of such activities on other environmental values of national or regional significance are appropriately managed.

IM-P12-Contravening environmental ~~bottom lines~~ limits for climate change mitigation

~~Despite other provisions in this RPS, W~~where a proposed activity provides or will provide enduring regionally or nationally significant climate change mitigation ~~mitigation of climate change impacts~~, with commensurate benefits for the well-being of people and communities

and the wider environment, and the activity meets the following requirements, decision makers may, at their discretion, shall allow non-compliance with an ~~environmental bottom line limit~~ set in , or resulting from, any policy or method of this RPS only if they are satisfied that...

ECO-P6-Maintaining indigenous biodiversity

Maintain Otago's indigenous biodiversity (excluding ~~the coastal environment and~~ areas ~~managed protected~~ under ECO-P3) by applying the following biodiversity effects management hierarchy (in relation to indigenous biodiversity) in decision-making on applications for resource consent and notices of requirement:

- (1) adverse effects are avoided where practicable ~~adverse effects~~ as the first priority,
- (2) where adverse effects demonstrably cannot be completely avoided, they are remedied where practicable,
- (3) where adverse effects demonstrably cannot be completely avoided or remedied, they are mitigated where practicable,
- (4) where there are residual adverse effects after avoidance, remediation, and mitigation, then the residual adverse effects are offset in accordance with APP3, and
- (5) if biodiversity offsetting of residual adverse effects is not possible, then:
 - (a) the residual adverse effects are compensated for in accordance with APP4, and
 - (b) if the residual adverse effects cannot be compensated for in accordance with APP4, the activity is avoided.