

BEFORE THE HEARING COMMISSIONERS

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

Proposed Plan Change 20 to the Mackenzie
District Plan

**STATEMENT OF EVIDENCE OF DR PHILIP HUNTER MITCHELL ON
BEHALF OF GENESIS ENERGY LIMITED**

15 November 2022

EXECUTIVE SUMMARY

1. This statement of planning evidence has been prepared at the request of Genesis Energy Limited (trading as “Genesis”) in respect of Plan Change 20 (“PC20”) to the Mackenzie District Plan.
2. As outlined in its submission, the key issue of concern to Genesis relates to ensuring that the District Plan provides for the Waitaki Catchment’s existing hydroelectricity generation (including the Tekapo Power Scheme (“TekPS”)) and opportunities to increase renewable electricity generation.
3. By way of context:
 - Genesis’ submission on PC20 is focused on the proposed ‘Part 2 – District -Wide Matters’;
 - Genesis generally supports the strategic directions and the four chapters identified for the district;
 - In Chapter ATC – A Thriving Community, Genesis supports Council in acknowledging that the value of important infrastructure located within the district extends beyond the district boundaries. In this regard, Genesis supports proposed objective ATC-O3 where the importance of infrastructure to the district and beyond is to be recognized and provided for; and
 - Genesis also supports Council’s recognition of the local, regional and national benefits of renewable electricity infrastructure in the district.
 - However, Genesis considers this recognition should be further strengthened to better reflect the direction of higher order planning documents.
4. The specific relief sought is summarized in Table 1, below, as are the recommendations from the Council’s section 42A report.

Table 1 Relief sought and section 42A report recommendations

Provision	Relief sought (Additions red underlined / deletions struck through)	Section 42A report recommendation
Chapter ATC – A Thriving Community Introduction	Amend the fourth paragraph to recognise the “contribution that existing and new renewable electricity generation and transmission assets located in the District make to the nation.”	Accepted

Chapter ATC – A Thriving Community Introduction	Add new fifth paragraph that specifically acknowledges the national significance of the Waitaki Power Scheme and its significant contribution to decarbonising New Zealand's economy, mitigating the potential effects of climate change and reducing the District's reliance on non-renewable energy sources.	Rejected as this is better left to the Energy Chapter
Strategic Objectives ATC-O4 Renewable Energy	Replace ATC-04 with provisions that strengthen the recognition to be afforded to renewable energy to better reflect the higher order planning documents.	Rejected
Strategic Objectives UFD-O1 Urban Form and Development	Amend UFD-O1 to specify that the District's townships and settlements grow and develop in a consolidated way that "protects significant infrastructure and activities in the District from reverse sensitivity effects."	Rejected

5. It is beyond debate that renewable electricity generation is an integral part of New Zealand's transition to a low carbon economy, noting that, the Government has agreed a framework that is intended to reduce greenhouse gas emissions to net zero by 2050.
6. The development, operation, maintenance and upgrading of renewable electricity generation throughout New Zealand is a matter of national significance, by virtue of the National Policy Statement for Renewable Electricity Generation 2011 ("NPSREG"). Furthermore, if New Zealand's economy is to be successfully decarbonised, it is difficult to imagine a more pressing strategic resource management imperative than to: protect the output of existing renewable electricity generation; acknowledge that additional renewable energy resources will need to be identified and brought on stream; and stipulate that growth of the District will need to be undertaken such that those resources are protected from reverse sensitivity effects.
7. Whilst the section 42A report on PC20, dated 19 October 2022 ("section 42A report") acknowledges the importance of renewable energy generation to the District, region and nation, I do not accept that the specific matters identified by Genesis are more appropriately addressed in the Energy (or other) chapters of the District Plan. That concern is heightened because those chapters of the District Plan have not yet been drafted and will be the subject of subsequent plan changes, the content of which, will, by definition, be informed by the strategic direction of PC20.
8. For all the above reasons, I consider it important that PC20 is strengthened in the manner sought by Genesis, in order to properly inform the drafting of subsequent plan changes that will follow PC20 and ensure that the outcomes required by the NPSREG and Canterbury Regional Policy Statement ("RPS") can be achieved.

INTRODUCTION

Qualifications and experience

1. I hold the degrees of Bachelor of Engineering (Hons) and Doctor of Philosophy, both from the University of Canterbury.
2. I am employed by Mitchell Daysh Limited, an environmental consulting practice with six offices around New Zealand that I co-founded in 2016. Previously I was a Director of Mitchell Partnerships Limited, an environmental consultancy I established in 1997, and which was merged with Environmental Management Services to form Mitchell Daysh Limited. Prior to that, I was the Managing Director of Kingett Mitchell & Associates Limited, a firm that I co-founded in 1987.
3. I am a past president and founding executive committee member of the Resource Management Law Association, a full member of the New Zealand Planning Institute and in 2015 was a recipient of the New Zealand Planning Institute's Distinguished Service Award.
4. I have practised in the field of resource management for the past approximately 35 years during which time I have had a lead resource management role in many significant projects throughout New Zealand. Such projects include number of hydro-electricity developments, including consent applications associated with the Waikaremoana Power Scheme, Tongariro Power Scheme and the Tekapo Power Scheme.
5. I have acted on several Ministerial advisory panels established to review aspects of the Resource Management Act 1991 ("**RMA**") and was a member of the Technical Advisory Group established to review sections 6 and 7 of the RMA.
6. My principal areas of practice are: providing resource management advice to the private and public sectors; facilitating public consultation processes; undertaking planning analyses; managing resource consent acquisition projects; and developing resource consent conditions.
7. I have acted as a Hearings Commissioner on some 100 occasions, many in the role of Hearing Chair. In that regard, I have recently acted as the chair of the hearing of submissions on the Proposed Waikato District Plan.
8. Previously, I was appointed jointly by the Minister for Canterbury Earthquake Recovery and the

Christchurch City Council as a Hearings Commissioner for the replacement of the Christchurch City District Plan (the district plan that is intended to facilitate the rebuilding of Christchurch).

9. I have prepared this statement of evidence in my capacity as an expert and acknowledge that I have read and understand the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note dated 1 December 2014. I have complied with it when preparing my statement of evidence, and I agree to comply with it when I give any oral evidence. Other than where I state that I am relying on the evidence of another person, my evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Involvement in the process

10. I was engaged in 2022 by Genesis to provide planning advice in respect of PC20 to the Mackenzie District Plan ("**MDP**").
11. I have prepared this statement of evidence at the request of Genesis.
12. In preparing this evidence I have reviewed the following documentation:
- (a) PC20, as notified;
 - (b) The Council's section 32 Evaluation Report for PC20 ("**section 32 report**"), dated July 2022;
 - (c) Genesis' Submission on PC20, dated 8 September 2022;
 - (d) Genesis' Further Submissions on PC20, dated 3 October 2022;
 - (e) The Council's section 42A report; and
 - (f) The submissions and further submissions on PC20 made by other parties.

Purpose and scope of evidence

13. In my evidence I will:
- (a) Summarise the environmental setting within which the Tekapo Power Scheme ("**TekPS**") sits;

- (b) Set out the relevant planning context;
- (c) Provide my analysis of the matters raised in Genesis' submissions; and
- (d) Provide a brief conclusion.

ENVIRONMENTAL SETTING

14. By way of context and background:

- (a) The TekPS sits at the head of the Waitaki Valley and comprises the Tekapo A (25 megawatts (“**MW**”)) and Tekapo B (160MW) power stations, Lake Tekapo and its associated inflows, and the Tekapo Canal. The TekPS forms part of the wider Waitaki Power Scheme, which includes the electricity generation activities in the Waitaki River Catchment, and which are defined in the operative Mackenzie District Plan.
- (b) The TekPS generates approximately 980 gigawatt hours per annum of renewable electricity (equivalent to the amount of electricity used annually by some 120,000 households).
- (c) The TekPS has been part of the existing environment of the Waitaki Catchment for many decades, with Tekapo A being commissioned in 1951 and Tekapo B in 1977.
- (d) The Waitaki catchment hydroelectricity power schemes (which include the TekPS and the Meridian owned power stations) form a substantial body of renewable electricity generation, contributing, on average, 25% of New Zealand’s renewable electricity generation.
- (e) The Waitaki catchment hydroelectricity power schemes are of national significance. They provide security of supply to New Zealand’s electricity network, particularly in the South Island. The Waitaki based schemes alone provide approximately 60% of New Zealand’s controllable hydro storage capacity.
- (f) The TekPS is located in the District’s Rural Zone and its operation, maintenance, refurbishment, enhancement and upgrading are permitted activities in the Operative District Plan.

PLANNING CONTEXT

15. The planning context relating to Genesis' submission are set out in Section 3 and Appendix 1 of the submission and I do not reproduce it in my evidence.
16. The important points to note, in my opinion, are:
 - (a) Sections 7(i) and 7(j) of the RMA require all persons exercising functions and powers under the RMA to have particular regard to the effects of climate change and the benefits to be derived from the use and development of renewable energy;
 - (b) Under section 75(3)(a) of the RMA, the Mackenzie District Plan and PC20 must give effect to the NPSREG, which identifies the development, operation, maintenance and upgrading of renewable electricity generation throughout New Zealand as being a matter of national significance;
 - (c) Under section 75(3)(c) of the RMA, the Mackenzie District Plan and PC20 must also give effect to the RPS. In that regard, the "Energy" chapter of the RPS states, amongst other things [**emphasis added**]:

Objective 16.2.2 - Promote a diverse and secure supply of energy

Reliable and resilient generation and supply of energy for the region, and wider contributions beyond Canterbury, with a **particular emphasis on renewable energy, which:**

- (1) **provides for the appropriate use of the region's renewable resources to generate energy;**
- (2) reduces dependency on fossil fuels;
- (3) improves the efficient end-use of energy;
- (4) minimises transmission losses;
- (5) is diverse in the location, type and scale of renewable energy development;
- (6) recognises the locational constraints in the development of renewable electricity generation activities; and
 - (a) avoids any adverse effects on significant natural and physical resources and cultural values or where this is not practicable, remedies or mitigates; and
 - (b) appropriately controls other adverse effects on the environment.

Policy 16.3.3 – Benefits of renewable energy generation facilities

To recognise and provide for the local, regional and national benefits when considering proposed or existing renewable energy generation facilities, having particular regard to the following:

- (a) **maintaining or increasing electricity generation capacity** while avoiding, reducing or displacing greenhouse gas emissions;
- (b) maintaining or increasing the security of supply at local and regional levels, and also wider contributions beyond Canterbury; by diversifying the type and/or location of electricity generation;
- (c) **using renewable natural resources rather than finite resources;**
- (d) the reversibility of the adverse effects on the environment of some renewable electricity generation facilities;
- (e) avoiding reliance on imported fuels for the purposes of generating electricity; and
- (f) assisting in meeting international climate obligations.

Methods

...

Territorial authorities:

Will:

- (2) **Set out objectives and policies, and may include methods in district plans that recognise the local, regional and national benefits of renewable energy supply, including security of supply, providing for electricity capacity, and assisting in meeting international climate obligations.**

Policy 16.3.5 - Efficient, reliable and resilient electricity generation within Canterbury

To recognise and provide for efficient, reliable and resilient electricity generation within Canterbury by:

- (1) **avoiding subdivision, use and development which limits the generation capacity from existing or consented electricity generation infrastructure** to be used, upgraded or maintained;
- (2) enabling the upgrade of existing, or development of new electricity generation infrastructure, with a particular emphasis on encouraging the operation, maintenance and upgrade of renewable electricity generation activities and associated infrastructure:
 - (a) having particular regard to the locational, functional, operational or technical constraints that result in renewable electricity generation activities being located or designed in the manner proposed;
 - (b) provided that, as a result of site, design and method selection:
 - (i) the adverse effects on significant natural and physical resources or cultural values are avoided, or where this is not practicable remedied, mitigated or offset; and
 - (ii) other adverse effects on the environment are appropriately controlled.
- (3) providing for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation;
- (4) **maintaining the generation output and enabling the maximum electricity supply benefit to be obtained from the existing electricity generation facilities within Canterbury**, where this can be achieved without resulting in additional significant adverse effects on the environment which are not fully offset or compensated.

Methods

Territorial authorities:

Will:

(3) **Set out objectives and policies, and may include methods in district plans that:**

...

- (a) **avoid land-uses that may result in adverse reverse sensitivity effects on the existing electricity generation infrastructure;**
- (b) enable the upgrade of existing and establishment of new electricity generation infrastructure, while avoiding or mitigating the adverse effects referred to in Policy 16.3.5(2)(a) - (b) above and controlling other adverse effects;
- (c) provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable energy generation.

ANALYSIS OF GENESIS' SUBMISSIONS ON PC20

17. The specific relief sought by Genesis is presented in Table 2 below, as are the recommendations from the Council's section 42A report.

Table 2 Relief sought and section 42A report recommendations

Provision	Relief sought (Additions red underlined / deletions struck through)	Section 42A report recommendation
Chapter ATC – A Thriving Community Introduction	Amend the fourth paragraph as shown: There is a range of locally, regionally and nationally important infrastructure located within the District. Infrastructure is necessary to support the functioning of the community, both within and beyond the District, but its establishment and operation can have adverse effects. While needing to appropriately manage its effects, the continued ability for this infrastructure to operate, as well as development of new infrastructure is important to the well-being of the community of Mackenzie, Canterbury and nationally. This includes the contribution that existing and new renewable electricity generation and transmission assets located in the District make to the nation.	Accepted
Chapter ATC – A Thriving Community Introduction	Add new fifth paragraph as follows: Part of the nationally significant Waitaki Power Scheme (WPS) is located within the district. The WPS is the largest hydro-electric power scheme in New Zealand and significantly contributes to decarbonising New Zealand's economy, mitigating the potential effects of climate change and reducing the District's reliance on non-renewable energy sources.	Rejected as this is better left to the Energy Chapter
Strategic Objectives ATC-O4 Renewable Energy	Replace ATC-O4 with the following:	Rejected

	<p>Renewable Electricity</p> <p>The local, regional and national benefits of the District's renewable electricity generation and electricity transmission assets are recognised and their development, operation, maintenance and upgrade are provided for.</p> <p>Renewable electricity generation activities, including the nationally significant Waitaki Power Scheme, and the electricity transmission network:</p> <ul style="list-style-type: none"> a) are recognised for their local, regional and national benefits, including reducing greenhouse gas emissions; b) are provided for, including their development, operation, maintenance and upgrade; c) are protected from reverse sensitivity effects; and d) provide for the current and future energy needs of the District's communities and economy. 	
<p>Strategic Objectives UFD-O1</p> <p>Urban Form and Development</p>	<p>Amend UFD-O1 as follows:</p> <p>Urban Form and Development</p> <p>The District's townships and settlements grow and develop in a consolidated way that:</p> <ol style="list-style-type: none"> 1. is integrated into, and respects the values of the surrounding natural and physical environment; 2. achieves good connectivity with other parts of the urban area; 3. is supported by appropriate infrastructure; 4. maintains the character of each township its attractiveness to residents, businesses and visitors; and 5. responds to the needs of the community, including diversity in housing and business opportunities.; and 6. protects significant infrastructure and activities in the District from reverse sensitivity effects." 	Rejected

17. It is beyond debate that renewable electricity generation is an integral part of New Zealand's transition to a low carbon economy, noting that, the Government has agreed a framework that anticipates reducing greenhouse gas emissions by 11% below 1990 levels by 2030, reducing them to net zero by 2050.

18. The development, operation, maintenance and upgrading of renewable electricity generation throughout New Zealand is a matter of national significance, by virtue of the NPSREG. Furthermore, If New Zealand's economy is to be successfully decarbonised, it is difficult to imagine a more pressing strategic resource management imperative than to protect the output of existing of renewable electricity generation; acknowledge that additional renewable energy resources will need to be identified and brought on stream; and stipulate that growth of the District

will need to be undertaken such that those resources are protected from reverse sensitivity effects.

19. Whilst the section 42A report acknowledges the importance of renewable energy generation to the District, region and nation, I do not accept that the specific matters identified by Genesis are either not necessary or more appropriately addressed in the Energy (or other) chapters of the District Plan. That concern is heightened because those chapters of the District Plan have not yet been drafted and will be the subject of subsequent plan changes, the content of which, will, by definition, be informed by the strategic direction of PC20.
20. Overall, there is, in my opinion, a need for PC20 to more appropriately recognize and give effect to the NPSREG and RPS, which at the present time, it fails to do. For all the above reasons, I consider it important that the PC20 is strengthened in the manner sought by Genesis, in order to properly inform the drafting of subsequent plan changes that will follow PC20 and ensure that the outcomes required by the NPSREG and RPS can be achieved.

Section 32AA

19. Section 32AA of the RMA, requires that:

Requirements for undertaking and publishing further evaluations

- (1) A further evaluation required under this Act—
 - (a) is required only for any changes that have been made to, or are proposed for, the proposal since the evaluation report for the proposal was completed (the changes); and
 - (b) must be undertaken in accordance with section 32(1) to (4); and
 - (c) must, despite paragraph (b) and section 32(1)(c), be undertaken at a level of detail that corresponds to the scale and significance of the changes; and
 - (d) must—
 - (i) be published in an evaluation report that is made available for public inspection at the same time as the approved proposal (in the case of a national policy statement or a New Zealand coastal policy statement or a national planning standard), or the decision on the proposal, is notified; or
 - (ii) be referred to in the decision-making record in sufficient detail to demonstrate that the further evaluation was undertaken in accordance with this section.
- (2) To avoid doubt, an evaluation report does not have to be prepared if a further evaluation is undertaken in accordance with subsection (1)(d)(ii).
- (3) In this section, proposal means a proposed statement, national planning standard, plan, or change for which a further evaluation must be undertaken under this Act.

20. In my opinion, the amendments I have proposed are more effective and efficient than those in the section 42A report because they are necessary to give effect to the NPSREG and RPS.

CONCLUSION

21. As outlined in its submission, the key issue of concern to Genesis in respect of PC20 relates to ensuring that the District Plan provides for the Waitaki Catchment's existing hydroelectricity generation (including the TekPS) and opportunities to increase renewable electricity generation.
22. It is beyond debate that renewable electricity generation is an integral part of New Zealand's transition to a low carbon economy, noting that, the Government has agreed a framework that is intended to reduce greenhouse gas emissions to net zero by 2050.
23. The development, operation, maintenance and upgrading of renewable electricity generation throughout New Zealand is a matter of national significance, by virtue of the NPSREG. Furthermore, If New Zealand's economy is to be successfully decarbonised, it is difficult to imagine a more pressing strategic resource management imperative than to: protect the output of existing of renewable electricity generation; acknowledge that additional renewable energy resources will need to be identified and brought on stream; and stipulate that growth of the District will need to be undertaken such that those resources are protected from reverse sensitivity effects.
24. Whilst the section 42A report acknowledges the importance of renewable energy generation to the District, region and nation, I do not accept that the specific matters identified by Genesis are either not necessary or more appropriately addressed in the Energy (or other) chapters of the District Plan. That concern is heightened because those chapters of the District Plan have not yet been drafted and will be the subject of subsequent plan changes, the content of which, will, by definition, be informed by the strategic direction of PC20.
25. For all the above reasons, I consider it important that the PC20 is strengthened in the manner sought by Genesis, in order to properly inform the drafting of subsequent plan changes that will follow PC20 and ensure that the outcomes required by the NPSREG and RPS can be achieved.

PHILIP HUNTER MITCHELL

15 November 2022