

BEFORE COMMISSIONERS FOR THE MACKENZIE DISTRICT COUNCIL

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF Proposed Plan Change 19 to the Mackenzie District Plan

STATEMENT OF EVIDENCE FOR GENESIS ENERGY LIMITED

29 NOVEMBER 2018

Introduction

1. This statement is presented on behalf of Genesis Energy Limited (“Genesis”) jointly by staff Colin Stevens, Site Manager at Tekapo and Alice Barnett, Environmental Lead – Planning and Policy.
2. Colin Stevens has been Site Manager at Tekapo for Genesis since July 2010. Prior to that he has undertaken a variety of roles in the electricity and other engineering industries since 1979, including work for both the Electricity Corporation of New Zealand and Meridian Energy related to the Waitaki Power Scheme.
3. Alice Barnett holds a Master of Science degree with first class honours in Earth Sciences from the University of Waikato. Prior to joining Genesis in 2018 Alice worked as a planning consultant with Mitchell Daysh Limited and with the Tūwharetoa Māori Trust Board. Prior to this she held various resource consenting, monitoring, investigation and scientist roles at Waikato Regional Council.

Scope of Evidence

4. This statement discusses the Genesis Submissions and Further Submissions on Proposed Plan Change 19 to the Mackenzie District Plan (“**PC19**”) and the Council Section 42A report and recommendations (“**s42A report**”) on the submissions made on PC19.

Genesis Energy Limited

5. Genesis is an electricity generator and energy retailer with approximately 1641 MW of installed generation capacity and more than half a million retail customers. The generation profile of Genesis comprises a range of energy sources.
6. Genesis owns and operates the Tekapo Power Scheme in the Mackenzie Basin. The operation and maintenance of the Tekapo Power Scheme is reliant on the provisions in the District Plan being appropriate and not unduly restrictive, and it is in this context that Genesis is affected by PC19.
7. Background information regarding Genesis and the Tekapo Power Scheme (which forms part of the wider Waitaki Power Scheme) is provided in Appendix 1.

Particular Genesis Energy Limited Activities Potentially Affected by PC19

8. Genesis routinely undertakes a variety of activities on the surface of waterbodies in relation to the Tekapo Power Scheme. These activities may include:
 - (a) Monitoring of water levels and quantity, aquatic ecology, water quality, or shoreline condition, which may involve vessel-based activities or fixed installations (such as water level recorders or monitoring sondes);
 - (b) Maintenance of infrastructure associated with the scheme, such as removal of weed and debris deposits or more extensive work on structures such as the Lake Tekapo water intake and control structure or Tekapo B power station which sit within the lake bodies; or
 - (c) Spill mitigation activities, should they be necessary.
9. These all require some activity on the surface of waterbodies and are potentially controlled by PC19.
10. In addition to the above, activities such as outflows from Tekapo B power station into Lake Pukaki, water passage at Lake George Scott near Tekapo or the taking of water at Lake Tekapo may pose health and safety risks to people and vessels venturing to close to the activity. Changes in operation can occur without warning and can result in such effects as unexpected increased or decreased flows.

Genesis Energy Limited Submissions

11. The Submissions made by Genesis fall into four broad categories:
 - (a) Matters relating to recognising and providing for the Waitaki Power Scheme;
 - (b) Matters relating to activities being undertaken on waterbodies with respect to the Tekapo Power Scheme;
 - (c) Matters relating to the protection of existing infrastructure from other activities and related health and safety matters; and
 - (d) Definitions used in PC19.

12. These categories are discussed separately below, along with the s42A report recommendations relating to them.

Genesis Energy Limited Further Submissions

13. Genesis made Further Submissions in relation to matters that may have potential implications for Tekapo Power Scheme activities. Genesis accepts the recommendations made in the s42A report in respect of these Further Submissions.

Recognising and Providing for the Waitaki Power Scheme

14. Genesis supports the amendment to Objective 8 to include the Waitaki Power Scheme in the list of values that may be affected by activities being undertaken on or within the District waterways and riverbeds. Notwithstanding this, Genesis also considers that the objective should be more enabling and the explanation for the objective should reference to the activities that can occur on or within District waterways. We understand that Meridian Energy Limited has proposed changes to Objective 8 in this regard and we support those changes.
15. The s42A report recommends a change to the Explanation and Reasons for Policy 8A that recognises that the District waterways have hydro power production values. Genesis supports that amendment.
16. Genesis is concerned that in isolation, the changes made by PC19 do not adequately provide for the activities undertaken on Lake Pukaki as part of the Tekapo Power Scheme or the Waitaki Power Scheme. In that regard, we consider that Policy 8B should explicitly recognise the importance of Lake Pukaki to the Waitaki Power Scheme.
17. Genesis therefore requests that Policy 8B be amended as follows (s42A report recommendations shown as accepted):

To protect the unique natural quiet, beauty and tranquility values and experience of Lake Pukaki by avoiding commercial motorised activities on the Lake other than for essential activities and by restricting non-commercial motorised activities, other than essential activities, to the north and eastern areas of the Lake, while ensuring that the importance

of Lake Pukaki to the Waitaki Power Scheme is recognised and provided for.

18. Genesis also requests that the Explanation and Reasons for Policy 8B be amended by adding the following:

Any limitations on activities on Lake Pukaki under Policy 8B do not apply to activities associated with the Waitaki Power Scheme. The policy is clear in that limitations on activities are to be applied in a manner that is consistent with providing for the maintenance, operation, upgrading and development of the Waitaki Power Scheme.

19. Genesis also notes that the s42A report author considers that the wider issues relating to how hydro generation activities within the Mackenzie District (including the Waitaki Power Scheme) are provided for in the District Plan are best addressed as part of the full review of the District Plan rather than being dealt with in a “piecemeal”¹ way such as through PC19, including whether a special purpose zone is appropriate or whether controls should fall within the utilities chapter or elsewhere in the Plan.
20. Genesis wishes to record that it supports addressing Waitaki Power Scheme matters in a comprehensive manner in the District Plan and looks forward to further discussion with the Council as to how this can be achieved.
21. On that basis, Genesis accepts the s42A report recommendations relating more general recognition of the Waitaki Power Scheme.

Activities Being Undertaken on Waterbodies

22. Genesis supports the recommendations in the s42A report to add a new Permitted Activity for Lakes Tekapo, Benmore and Ruataniwha and all rivers other than the Opihi and Opuha Rivers (Rule 7A.1.1) and for Lake Pukaki (Rule 7A.2.1), to provide for the use of motorised and non-motorised craft related to the operation, maintenance, upgrading and development of the Waitaki Power Scheme.
23. However, as noted in paragraph 8 of this evidence, activities on the surface of Lakes Tekapo and Pukaki associated with the operation of the Tekapo Power

¹ As discussed in Section 12 of the s42A report.

Scheme (and also the Waitaki Power Scheme) that may be covered by the rules in PC19 go beyond the use of “craft” as used in the wording proposed in the s42A report.

24. Genesis therefore requests that the proposed permitted activity rule be amended as follows:

~~The use of m~~Motorised and non-motorised activitiescraft related to the operation, maintenance, monitoring, upgrading and development of the Waitaki Power Scheme.

Reverse Sensitivity and Health and Safety Matters

25. The Genesis submission sought changes to PC19 seeking to restrict activities within 500 metres of any tailrace structure or 200 metres from any intake, spillway or other structure associated with the Waitaki Power Scheme. The primary reason for seeking such a restriction is for health and safety purposes.
26. Genesis accepts that navigation and boating activities are controlled through the Canterbury Regional Council Navigation Safety Bylaw 2016 and Controls (the “Bylaw”). In part the Genesis submission seeks to align the PC19 provisions with those in the Bylaw.
27. The Bylaw imposes “no boating, swimming or diving” restrictions around the Tekapo Power Scheme intake, the Lake Tekapo lake control structure, Lake George Scott and around the Tekapo B power station. It does not restrict activities downstream of Lake George Scott, where similar health and safety issues can arise.
28. Genesis requests amendments to PC19 to make it consistent with the Bylaw and to restrict activities associated with the Tekapo Power Scheme that are not addressed under the Bylaw.

Definitions Used in PC19

29. The Genesis submission proposed a definition for the Waitaki Power Scheme as it was also seeking reference to the scheme in other submission points. As discussed in paragraph 16 and 17, Genesis records that it supports addressing Waitaki Power Scheme matters in a comprehensive manner in the

District Plan and anticipates that a scheme definition would form part of that discussion.

30. There has also been some uncertainty as to whether the Waitaki Power Scheme activities fall within the definition of “commercial” activities. While the operation of the scheme is undoubtedly a “commercial” undertaking, Genesis accepts the interpretation given in the s42A report that it does not directly fall within the District Plan definition of “commercial activities” but considers that the matter could be clarified by adding the words “***This Policy does not apply to activities associated with the Waitaki Power Scheme***” to the end of Policy 8C.

Conclusions

31. Genesis owns and operates the Tekapo Power Scheme which forms part of the Waitaki Power Scheme. Given the national importance of the Tekapo Power Scheme, Genesis has significant interest in any proposal that may result in changes to the way in which the Tekapo Power Scheme is operated, including controls on activities on the surface of waterbodies that may be necessary for the continued operation, maintenance, monitoring and refurbishment of the Scheme.
32. Genesis undertakes a range of activities on and within lakes and rivers in Mackenzie District and some aspects of the scheme operation can have health and safety implications for people in the vicinity of the scheme structures and activities. Genesis therefore sought changes to PC19 to:
 - (a) Recognise and provide for the national significance of the Waitaki Power Scheme;
 - (b) Provide for activities undertaken on and within lakes and rivers in Mackenzie District associated with the operation of the Waitaki Power Scheme; and
 - (c) Impose restrictions on activities in the vicinity of Waitaki Power Scheme infrastructure.
33. While the changes recommended in the Officer’s s42A reports do not go as far (in some cases) as the changes Genesis sought, Genesis:

- (a) Supports the s42A recommendation to amend Objective 8 to include reference to the Waitaki Power Scheme;
- (b) Supports changes to Objective 8 and Policies 8A, 8B and 8C to more directly provide for the Waitaki Power Scheme.
- (c) Supports addressing the wider issues relating to how hydro generation activities within the Mackenzie District (including the Waitaki Power Scheme) are provided for in the District Plan are best addressed as part of the full review of the District Plan;
- (d) Supports the s42A recommendation to include a permitted activity rule in PC19 providing for motorised and non-motorised activities related to the Waitaki Power Scheme, subject to the recommended wording being amended to “*Motorised and non-motorised activities related to the operation, maintenance, monitoring, upgrading and development of the Waitaki Power Scheme*”; and
- (e) Generally supports the s42A report recommendations in relation to restrictions around Waitaki Power Scheme infrastructure; but considers that the rules should not only be consistent with the Canterbury Regional Council Bylaw provisions but should also apply to infrastructure not addressed in the Bylaw.

Colin Stevens and Alice Barnett

Genesis Energy Limited

29 November 2018

Appendix 1: Background to Genesis Energy Limited

Genesis is New Zealand's largest electricity and gas retailer, supplying energy to more than 500,000 customer connections nationwide. Genesis also generates and trades electricity and natural gas through a diverse range of assets across the country. It has a diverse portfolio of generation assets including the Tekapo power stations which form part of the Waitaki Power Scheme.

Tekapo Power Scheme sits at the head of the Waitaki Valley and comprises the Tekapo A (30MW) and Tekapo B (160MW) power stations, Lake Tekapo and its associated inflows, and the Tekapo Canal. The Tekapo Power Scheme generates approximately 980GWh per annum of renewable electricity (equivalent to the amount of electricity used annually by approximately 120,000 households). In generating this electricity, the Tekapo Power Scheme makes an important contribution to New Zealand's security of electricity supply, particularly in the South Island and in Canterbury which are dependent on hydro-electric generation. Furthermore, the water used for generation through the Tekapo Power Scheme is subsequently utilised to generate electricity through six downstream power stations operated by Meridian Energy. Together, the Tekapo Power Scheme and the stations operated by Meridian Energy comprise the Waitaki Power Scheme.

The Tekapo Power Scheme has been part of the existing environment of the Waitaki Catchment for many decades, with Tekapo A Power Station being commissioned in 1951 and Tekapo B Power Station in 1977.

The continued operation of the Tekapo Power Scheme is totally reliant on being able to store water in, and manage the levels of Lake Tekapo, and on being able to reticulate water from Lake Tekapo through two power stations and the Tekapo Canal to Lake Pukaki. Having passed through the Tekapo Power Scheme, water is then used for electricity generation in power stations operated by Meridian Energy.