

Evidence in respect of Genesis Energy Limited Submission #74052

BEFORE THE INDEPENDENT HEARINGS PANEL FOR PROPOSED WAIKATO
REGIONAL PLAN CHANGE 1

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF Proposed Plan Change 1 to the Waikato Regional Plan, Part
A: Overview and Context Part B: Overall Direction, Values and
Uses, Science and Economics, Objectives, Limits and Targets

PRIMARY STATEMENT OF EVIDENCE BY RICHARD MATTHEWS

15 FEBRUARY 2019

FOR GENESIS ENERGY LIMITED SUBMITTER #74052

Evidence Summary

1. Genesis owns and operates nationally significant electricity generation facilities influencing the Waikato River Catchment and therefore has a significant interest in management of water quality in the Waikato River.
2. I support the intent of Proposed Plan Change 1 to the Waikato Regional Plan for the Waikato and Waipā Rivers and the staged approach proposed to restore and protect the Waikato and Waipā Rivers, recognising that the changes necessary to restore and protect the Waikato and Waipā Rivers will need to be intergenerational to allow for improvements in technology to enable the long-term targets to be met.
3. I support the recognition and provision for electricity generation assets such as the Huntly Power Station and Tongariro Power Scheme as recognised through Policy 6.6 of the Regional Policy Statement which requires management of the built environment to ensure that particular regard is given to:
 - Protecting the effectiveness and efficiency of existing and planned regionally significant infrastructure;
 - The benefits that can be gained from the development and use of regionally significant infrastructure and energy resources, recognising and providing for the particular benefits of renewable electricity generation, electricity transmission, and municipal water supply; and
 - The locational and technical practicalities associated with renewable electricity generation and the technical and operational requirements of the electricity transmission network.
4. I consider that point source discharges are already controlled through resource consent processes and the existing policy framework of the Waikato Regional Plan (and other statutory documents including the Vision and Strategy for the Waikato River) which requires ongoing improvements in discharge quality in order to meet higher water quality standards. The policy framework in Plan Change 1 needs to be consistent across all activities affecting water quality, building on what the Waikato Regional Plan already provides for in respect of point source discharges.

5. I do not support the Officers alternative option to delete the values and uses from Plan Change 1. The National Policy Statement for Freshwater Management requires plans to identify values for each freshwater body in New Zealand and simply recording them in the Section 32AA Report does not provide transparency as to the values for the Waikato and Waipā Rivers (and therefore as to the rationale for the inclusion of specific point source discharge policies).
6. I consider that the values provide the context for the objectives, policies and methods which reflect the respective values. In my opinion, important values of the Waikato River include its values as a water supply, for commercial, municipal and industrial use and for electricity generation which is of national significance, given the National Policy Statement for Renewable Electricity Generation and the contribution Waikato generation makes to New Zealand's electricity supply.
7. The Officers have recommended the deletion of Objective 4. I do not agree with the deletion of Objective 4 nor do I agree with the alternative amended Objective 4 suggested in the Council Section 42A report and recommendations. I consider that the amended version of Objective 4 could be refined (taking into account the inclusion of short term targets / states that are already specified in Table 3.11-1), as follows:

While considering the values and uses, enable people and communities to continue to provide for their social, economic and cultural wellbeing when taking action to achieve the attribute states for the Waikato and Waipā Rivers in Table 3.11-1.
8. Objective 4 and Objective 2 share similarities in that they both provide for social and economic wellbeing while taking action to improve water quality as required by both the Vision and Strategy and the National Policy Statement for Freshwater Management. However Objective 2 is specific to recognising that restoration and protection of the Waikato and Waipā Rivers will result in social, economic and cultural benefits for people, while Objective 4 is intended to recognise that the journey toward restoration and protection should not be at the expense of social, economic and cultural wellbeing.

9. I agree with retaining the Freshwater Management Units as notified given that the these are for monitoring and accounting purposes consistent with the scale at which Objectives and limits are set.
10. I have summarised the changes that I propose in **Appendix 1**.

Introduction

11. My name is Richard John Matthews. I hold the qualifications of Master of Science (Hons) degree specialising in Chemistry and have been working on resource consent applications (and their former descriptions under legislation prior to the commencement of the Resource Management Act 1991) since 1979 and advising on Regional and District Plan provisions since 1991.
12. I am a partner with Mitchell Daysh Limited, a specialist environmental consulting practice with offices in Auckland, Hamilton, Tauranga, Taupo, Napier, Wellington and Dunedin. Mitchell Daysh Limited was formed on 1 October 2016, as a result of merger between Mitchell Partnerships Limited and Environmental Management Services.
13. I have thirty-nine years' experience as a resource management adviser, initially in the local government sector and since 1999 in private practice with the environmental consulting practice, Mitchell Partnerships Limited. I have been involved in a large number of resource management projects within New Zealand, including several Regional and District Plan reviews. A summary of specific projects I have had a lead role in is included as **Appendix 2**.

Code of Conduct

14. While not directly applicable to this hearing, I confirm that I have read the "Code of Conduct for Expert Witnesses" contained in the Environment Court Consolidated Practice Note 2014. I agree to comply with this Code of Conduct. In particular, unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Scope of Evidence

15. My evidence discusses the Genesis Energy Limited ("**Genesis**") Submissions (submitter id 74052) and Further Submissions on Proposed Plan Change 1 to the Waikato Regional Plan for the Waikato and Waipā Rivers ("**PC1**") and the

Council Section 42A report and recommendations (“**s42A report**”) on the submissions made on PC1 with respect to the matters addressed in:

- a) Part A: Overview and Context; and
- b) Part B: Overall Direction, Values and Uses, Science and Economics, Objectives, Limits and Targets.

Genesis Energy Limited Background and Submissions

16. Section 2 of the Genesis submission sets out the background to Genesis’ interests in the Waikato River catchment. Genesis Energy owns and operates the following schemes in the Waikato Region that are reliant on freshwater resources:

- Tongariro Power Scheme (“**TPS**”) located on the North Island’s central volcanic plateau with a maximum generating capacity of 362 MW. The water diverted by the TPS generates electricity through three power stations forming part of the scheme and additional generation at power stations along the Waikato River, contributing a significant percentage of New Zealand’s annual electricity demand.
- Huntly Power Station (“**HPS**”) located on the Waikato River with a current capacity to generate up to 953 MW of electricity, and a consented capacity of 1,453.8 MW. The HPS comprises six separate generating units and collectively the HPS represents approximately 12.5% of New Zealand’s installed generation capacity. Of relevance to PC1 is that the operation of the HPS requires discharges to the Waikato River as a result of onsite processes, including those controlled by PC1 (ammonia, phosphorus and sediment).

17. The Submissions made by Genesis Energy Limited fall into two broad categories:

- (a) Support for the intent of PC1 in giving effect to Te Ture Whaimana o Te Awa o Waikato, the Vision and Strategy for the Waikato River (“**Vision and Strategy**”) and National Policy Statement for Freshwater Management 20147 (“**NPSFM**”); and

- (b) Ensuring that the operation of existing regionally significant infrastructure (as defined in the Waikato Regional Policy Statement) is recognised and provided for by way of the objectives and policies of PC1 given the existing objectives, policies and rules in the Waikato Regional Plan continue apply to point source discharges (and resource consent is required for point source discharges).

18. I have read the s42A Report. I do not propose to repeat the matters addressed in that report other than to highlight particular points and focus on the aspects where I consider further amendments need to be made to the provisions of PC1.

Overall Direction

- 19. A key tenant of the Genesis submission is the support for the Vision and Strategy for the Waikato River and the overarching intent of PC1 in terms of giving effect to the Vision and Strategy and the NPSFM (PC1-8730).
- 20. Specifically, Genesis supports the approach to PC1 in providing for the long-term restoration of water quality in the Waikato and Waipā Rivers using a staged approach (PC1-8738). The staged approach recognises that the changes necessary to restore and protect the Waikato and Waipā Rivers will be intergenerational and will allow for improvements in technology to enable the long-term targets to be met.
- 21. I support the intent of PC1, and the staged approach proposed to restore and protect the Waikato and Waipā Rivers.

Statutory Context – Waikato Regional Policy Statement

22. As well as giving effect to the Vision and Strategy and the NPSFM, PC1 is also required to give effect to the provisions of the Waikato Regional Policy Statement (“**RPS**”). Central to Genesis interests are the objectives and policies in the RPS that recognise the benefits of electricity generation infrastructure and providing for their operation, maintenance, development and upgrading. Specifically, Objective 3.5 (Energy) sets out the recognition and provision for the national significance of renewable electricity generation (clause e), recognises the technical and operational constraints of electricity generation activities (clause h) and recognises the contribution of existing

electricity generation activities to both the regional and national needs and security of supply (clause i).

23. Policy 6.6 in the RPS requires the management of the built environment to ensure that particular regard is given to:

- Protecting the effectiveness and efficiency of existing and planned regionally significant infrastructure;
- The benefits that can be gained from the development and use of regionally significant infrastructure and energy resources, recognising and providing for the particular benefits of renewable electricity generation, electricity transmission, and municipal water supply; and
- The locational and technical practicalities associated with renewable electricity generation and the technical and operational requirements of the electricity transmission network.

24. It is in this statutory context that the Genesis submission sought the recognition and provision for electricity generation assets such as the HPS and TPS, which I also support.

General Comment

25. As a general comment, I note that it has been difficult to determine the effect of the Officers recommendations as set out in the first s42A report without seeing how these changes flow through the cascade of policies and methods. This is particularly pertinent as the focus of the Genesis submission was on the policies relating to the management and consideration of point source discharges from regionally significant infrastructure such as the HPS.

26. In particular, I consider that point source discharges are already controlled through resource consent processes and the existing policy framework of the Waikato Regional Plan (and other statutory documents such as the Vision and Strategy and the NPSFM) which requires ongoing improvements in discharge quality in order to meet higher water quality standards. The policy framework in PC1 needs to be consistent across all activities affecting water quality, building on what the Waikato Regional Plan already provides for in respect of point source discharges.

Values and Uses

27. The Genesis submission supported “use” values for the Waikato and Waipā Rivers (PC1-8730), specifically the retention of the “Electricity Generation” value (PC1-8731), which specifically sets out the importance of the Waikato River for the TPS (in that the TPS contributes additional water to the catchment) and the HPS (which uses water for cooling and processes on site).

28. However, the Officers note in the S42A report¹ that:

...It may also be appropriate to consider the values as an ‘other matter’ in accordance with Section 104(1)(c) of the RMA. While not recommended, an option may be to delete the values and uses from PC1, and record them in the Section 32AA Report

29. I do not support the Officers alternative option to delete the values and uses from PC1. The NPSFM requires plans to identify values for each freshwater body in New Zealand and simply recording them in the Section 32AA Report does not provide transparency as to the values for the Waikato and Waipā Rivers (and therefore as to the rationale for the inclusion of specific point source discharge policies).

30. I consider that the values provide the context for the objectives, policies and methods which reflect the respective values. For example, in my opinion, important values of the Waikato River include its values as a water supply, for commercial, municipal and industrial use and for electricity generation. The latter is of national significance, given the National Policy Statement for Renewable Electricity Generation and the contribution Waikato generation makes to New Zealand’s electricity supply. The primary production value recognises the importance of this activity in the region and in part accounts for the need to introduce significant changes relating to land use practices in a staged manner over time.

Objectives

31. Genesis supports the intent of Objectives 1 – 3 (and therefore did not specifically submit on them in its submission), although the submission

¹ Paragraph 176.

supported retention of Objective 4 in the same or similar form. My evidence therefore focusses on the Officers recommendations in respect of Objective 4.

32. Genesis' submission point on Objective 4 (PC1-8798) supported the Objective wording as notified. The reason for this support is because Objective 4 sets out that the long-term restoration of the water quality of the Waikato and Waipā Rivers is to be achieved through a staged approach, which I agree with. This staged approach will enable people and communities for continue to provide for both their economic and social wellbeing.
33. The Officers have recommended the deletion of Objective 4. As an alternative to deleting the objective, the Officers have provided an alternative Objective for consideration. I do not agree with the deletion of Objective 4 nor do I agree with the amended Objective 4 proposed in the s42A report.
34. The rationale for the recommendation in the s42A report is that the Objective does not describe an outcome of future state – rather it sets out implementation methods (like a policy would).
35. I agree with the Officers that the wording used for Objective 4 is more consistent with that which would be used for a policy rather than an objective. However, that does not mean that the intent behind the policy should be discarded. I consider that it is important to have an objective within PC1 that is specific to ensuring that people and communities are able to continue to provide for their social, economic and cultural wellbeing while actions are being taken to achieve the attribute states sought for the Waikato and Waipā Rivers. While the objective could refer to the “short term” reflecting the lifetime of a Regional Plan made under the RMA (10 years), I consider that the principle of the objective should be enduring and does not need to refer to any specific time frame.
36. I consider that the amended version of Objective 4 could be refined further, as follows:

While considering the values and uses, enable people and communities to continue to provide for their social, economic and cultural wellbeing when taking action to achieve the attribute states for the Waikato and Waipā Rivers in Table 3.11-1.

37. The above re-wording of Objective 4 takes into account the inclusion of short term targets / states in Table 3.11-1.
38. I note that Objective 4 and Objective 2 share similarities in that they both provide for social and economic wellbeing while taking action to improve water quality as required by both the Vision and Strategy and the NPSFM. However Objective 2 is specific to recognising that restoration and protection of the Waikato and Waipā Rivers will result in social, economic and cultural benefits for people, while Objective 4 is intended to recognise that the journey toward restoration and protection should not be at the expense of social, economic and cultural wellbeing.
39. Genesis further submitted on the submission by Mercury NZ Limited (**"Mercury"**) in respect of Objective 2 (PC1-9506). Genesis supported Mercury's recommendation to amend the objective as follows (Mercury's addition shown in underline):
- Waikato and Waipā communities and their economy (as well as the regional and national communities and economies) benefit from the restoration and protection of water quality in the Waikato and Waipā River catchments, which enables the people and communities to continue to provide for their social, economic and cultural well-being.*
40. Genesis submitted in support on the basis that it was important to recognise that the benefits from the restoration and protection of water quality will accrue both regionally and nationally.
41. While an amendment is recommended by the Officers to reference Waipā alongside Waikato communities (which is supported), the full extent of the Mercury amendments was not included. The rationale for this is that there is insufficient evidence supporting the wider benefits. While I cannot accurately account for or calculate the benefit beyond Waikato and Waipā communities, in my opinion the national significance of electricity generation and rural production activities within the region cannot be denied, while the cross-boundary importance of the Waikato River (in terms of water supply to Auckland) is also undeniable.
42. I consider that there would be value in Objective 2 acknowledging that the economic benefit to the Waikato and Waipā communities extends beyond those communities and indeed, that the social and economic wellbeing

benefits accruing from the restoration and protection of the Waikato and Waipā Rivers extend well beyond the Waikato and Waipā communities.

Freshwater Management Units

43. Genesis submission (PC1-8817) supported robust monitoring and accounting systems for each Freshwater Management Unit (“**FMU**”). The Officers discuss setting FMUs at a finer scale at the sub catchment level in the s42A report but recommend retaining the FMUs as notified. I agree with retaining the FMUs as notified given that the FMU’s are for monitoring and accounting purposes consistent with the scale at which Objectives and limits are set.

Conclusions

44. I consider that:
- (a) The intent of PC1 should be retained to give effect to the direction and requirements of the Vision and Strategy and the NPSFM.
 - (b) The Electricity Generation use value should be retained within PC1.
 - (c) That Objective 4 be amended to ensure it is more of an objective than an implementation method or policy, while still focussing on economic and social wellbeing in the short term or over the life of an RMA plan; and
 - (d) The Freshwater Management Units be retained as notified.
45. I have summarised the changes that I propose in **Appendix 1**.

Richard Matthews

15 February 2019

Appendix 1: Summary of PC1 Changes

Objective 4 as notified:

Objective 4: People and community resilience/Te Whāinga 4: Te manawa piharau o te tangata me te hapori

A staged approach to change enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing in the short term while:

- a. *considering the values and uses when taking action to achieve the attribute targets for the Waikato and Waipa Rivers in Table 3.11-1; and*
- b. *recognising that further contaminant reductions will be required by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.*

Change to Objective 4:

~~Objective 4: People and community resilience/Te Whāinga 4: Te manawa piharau o te tangata me te hapori~~

~~A staged approach to change While considering the values and uses, enable~~s~~ people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing in the short term while:~~

~~a. — considering the values and uses when taking action to achieve the attribute targets~~states~~ for the Waikato and Waipa Rivers in Table 3.11-1; and~~

~~b. — recognising that further contaminant reductions will be required by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.~~

Change to Objective 4 (clean version):

While considering the values and uses, enable people and communities to continue to provide for their social, economic and cultural wellbeing while taking action to achieve the attribute states for the Waikato and Waipā Rivers in Table 3.11-1.

Appendix 2: Examples of Relevant Projects – Richard Matthews

- Ngāwhā Geothermal Power Station Expansion (regional and district resource consent applications and designation).
- Castle Hill Wind Farm (regional and district resource consent applications, covering two Regional and two District Council jurisdictions).
- Rodney Thermal Power Station regional (regional and district resource consent applications, Plan Change and designation).
- Ngatamariki Geothermal Project (regional and district resource consent applications).
- Huntly Combined Cycle Gas Turbine Power Station (regional and district resource consent applications).
- Awhitu Wind Farm Project (district resource consent applications).
- Hau Nui Wind Farm Extension Project (district resource consent applications).
- Huntly Power Station (regional resource consent applications).
- Tongariro Power Scheme (regional resource consent applications).
- Wairakei and Ohaaki Geothermal Power Stations (Council reporting officer).
- McLachlan Geothermal Power Station (Council reporting officer).
- Prefeasibility Assessments for Ranfurly, Greens Road, Turitea, Puketiro, Hawke's Bay, Puketoi, North Wairarapa, Scotts Road and Waiouru Wind Farm Prospects.
- Transpower 400 kV Transmission Corridor (Council advisor).
- Pokeno Infant Formula Plant (regional and district resource consent applications).
- Watercare Waikato River take (regional resource consent applications).

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- Tasman Pulp & Paper Mill (regional resource consent applications).
- SCA Hygiene Australasia Tissue Plant (regional resource consent applications).
- Analysis and review of Regional Plans, District Plans and Policy Statements from throughout New Zealand, and National Policy Statements and Environmental Standards.