



Submission by Genesis Energy Limited

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National Policy Statement on Freshwater Management

04 February 2014

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To: Freshwater Reform  
Ministry for the Environment  
PO Box 10362,  
Wellington

Date: 4 February 2014

Name: Genesis Energy Limited

Contact: [ withheld ]

## Submission on the National Policy Statement Freshwater Management

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Genesis Energy Limited welcomes the opportunity to submit on the Ministry's discussion document, incorporating the draft National Policy Statement for Freshwater Management ("NPS-FM").

We support the intent of the discussion document, which seeks to improve freshwater management in New Zealand. We consider that the amended NPS-FM will assist regional councils to manage water in an integrated and sustainable way, while providing for economic growth. However, we have identified some key improvements that should be made to the NPS-FM, specifically to improve its applicability to power generation activities.

The key areas that we consider the Ministry needs to address in the NPS-FM are:

- 1. Clarify the process associated with defining exceptions:** While we support the exceptions regime the uncertainty around the process raises significant concerns. The process of obtaining an exception and whether our generating assets will achieve an exception status needs to be clarified. Given the uncertainty of the process and the time delay associated with the exception process, we seek the inclusion of the Tongariro, Waikaremoana and Tekapo Power schemes in Appendix 3.
- 2. The NPS-FM should have regard to renewable electricity generation activities to avoid conflict with the National Policy Statement for Renewable Electricity Generation 2011:** The NPS-FM does not currently contain any recognition of renewable electricity generation activities. The effect of the amendments (in particular the National Objectives Framework) has the ability to constrain the on-going operation of existing renewable assets and preclude the development of new renewable infrastructure.
- 3. The values associated with Te Mana o te Wai should be refined to specifically exclude flow regimes:** We consider that reference to and provision for flow regimes within the definition of Te Mana o te Wai contradicts the intended purpose of the NPS-FM amendments.

4. **The application of the National Objectives Framework ("NOF") needs to be better defined in relation to its application to hydrologically altered catchments and management units:** While we support the NOF, we have some reservations about the application and measurability of the bottom lines in the context of a hydrologically altered water management unit.
5. **Include a definition of geothermal and thermal within the National values and uses for fresh water table, included as Appendix 1:** Geothermal and thermal generation depends on the ability to access clean water. In this regard, and given the national and regional significance of this form of generation in New Zealand, it is appropriate that a specific value is provided in the NPS-FM.
6. **Ensure proposed water accounting does not duplicate existing accounting practices:** We strongly agree that water accounting is fundamental to providing comprehensive, consistent and comparable information related to water. However, any new process should not impose additional restrictive requirements on water users. Data collected should be used in a meaningful way and commercially sensitive information should be applied with caution with a caveat on its ability to be shared.

### **About our Nationally Significant Infrastructure**

Our generating assets, having a combined installed capacity of 2,131MW<sup>1</sup>, rely on a reliable water source. In this regard, we seek to ensure that the formulation of national water quality limits are well considered and understood, specifically in their application to electricity generation assets.

All of our generation assets operate within the confines of resource consents. These consents have been robustly evaluated by the relevant District and/or Regional Council and, in the case of the Tongariro Power Scheme, the Environment Court, High Court and the Court of Appeal. Multi-stakeholder collaboration coupled with extensive scientific research and data underpins all of our resource consent conditions, which are specific to each river or catchment. Monitoring and research is on-going.

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<sup>1</sup> Huntly Power Station 1448MW (with 250MW in long-term storage and 250MW scheduled to be decommissioned early 2014), Tekapo A 25MW, Tekapo B 160MW, Kaitawa 36MW, Piripaua 42MW, Tuai 60MW, Rangipo 120MW and Tokaanu 240MW.

A range of mitigation agreements operate outside of the resource consent process and guide how we operate our assets. These mitigation agreements enable Genesis Energy and parties to deal directly with issues such as cultural matters and ecological enhancement and management. These are fundamental to the operation of our assets within their respective regions.

**Exceptions for significant existing infrastructure are supported but the process of defining exceptions is not clear**

We acknowledge that the Ministry is only consulting on the concept of an appendix of exceptions for significant existing infrastructure (i.e. no water bodies or assets have been identified in the Appendix). Further consultation<sup>2</sup> on the specifics of the Appendix will be undertaken before the NPS-FM is amended to include them. While we support the exceptions regime, we have fundamental concerns about the framework, specifically:

1. Whether it will be applied to our existing hydroelectricity schemes; and
2. The process for applying for and obtaining an exception.

As discussed with officials, it is important that the NPS-FM does not inadvertently impact on nationally significant hydroelectricity infrastructure. The NPS-FM proposes to apply exceptions in limited situations where water quality is affected by significant existing infrastructure<sup>3</sup>. However, it does not guarantee this will be established in a timely manner.

As an exception status has not been guaranteed, we are extremely concerned about the implications of the NOF on our infrastructure. The Tongariro, Waikaremoana and Tekapo Power schemes all operate within hydrologically altered catchments. Their operating parameters, specifically low or no flows, mean that they cannot comply with all of the proposed national bottom lines, even though they are continuing to operate in compliance with existing RMA consents.

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<sup>2</sup> Possibly in 2016-2017, Ministry for the Environment. 2013. Proposed amendments to the National Policy Statement for Freshwater Management 2011: A discussion document. Wellington: Ministry for the Environment, Page 28.

<sup>3</sup> Such exceptions will likely apply to river reaches that cannot meet bottom lines due to established infrastructure such as hydroelectricity generation or drinking water dams that are authorised to take most or all of the water out of a stretch of river. Ministry for the Environment. 2013. Proposed amendments to the National Policy Statement for Freshwater Management 2011: A discussion document. Wellington: Ministry for the Environment, Page 27.

The respective regions in which these assets are located have already embarked on plan reviews<sup>4</sup>. These reviews are likely to be completed before the exceptions framework is established and Appendix 3 is populated. This time lag will have the result of constraining our hydro operations, which has the potential to impact on the national economy, decreasing storage capacity and reducing hydro electricity supply.

#### The process for applying for and obtaining an exception

The process of applying for and obtaining an exception has not been detailed in the discussion document. It is noted that exceptions will be decided by the Government, rather than regional councils, and will be subject to a public submission / consultation process.

Certainty around the exceptions regime is important for the continued efficient operation of nationally significant infrastructure. Both the discussion document and the NPS-FM do not provide sufficient details about how the exceptions framework will be applied, if at all,

In this respect, we have concerns about the on-going operation of our schemes if we are not successful in obtaining an exception. We are also concerned that the exceptions framework will duplicate existing resource consent processes, adding additional costs and time delays with no certainty of outcome.

#### Recommendations:

In respect to exceptions, we suggest:

- a) Inclusion of the Tongariro, Waikaremoana and Tekapo Power schemes in Appendix 3;
- b) A specific policy within the NPS identifying the importance of existing infrastructure for renewable electricity generation and providing an exception to compliance with the national bottom lines where such infrastructure is present in a freshwater management unit. In respect of renewable electricity generation infrastructure, this would provide consistency with the National Policy Statement for Renewable Electricity Generation 2011.

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<sup>4</sup> Waikato Regional Council, Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai and Environment Canterbury Upper Waitaki Zone Committee Water Quality Review

- c) Clarity as to how the exceptions regime would work for both regional council granted exceptions and the Appendix 3 process for new infrastructure.
- d) Commitment to a timeframe on when Appendix 3 will be populated.

With respect to (b) above, we seek that Policy CA2A is included as follows (or wording to the like effect):

*Policy CA2A*

*In recognising the national significance of renewable electricity generation freshwater activities, where existing infrastructure for such activities is located in a management unit, that freshwater management unit will be exempt from achieving the national bottom lines as the environmental effects of that activity will be avoided, remedied or mitigated through the relevant environmental approvals.*

**The NPS-FM does not currently contain any recognition of renewable electricity generation activities**

The National Policy Statement for Renewable Energy Generation 2011 ("NPS-REG") has as its objective:

*To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation<sup>5</sup>.*

The NPS-REG requires decision makers to recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities.

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<sup>5</sup> National Policy Statement for Renewable Energy Generation, Policy A

The NPS-FM does not currently contain any recognition of renewable electricity generation activities and the effect of the amendments (in particular the NOF) has the ability to constrain the on-going operation of existing renewable assets and preclude the development of new renewable infrastructure. In this respect, it is considered that the NPS-FM undermines the intent of the NPS-REG.

On the basis that there is no priority given to either NPS, each will be considered and given effect to individually. This will likely lead to the inconsistent application of each NPS within regional councils, and ultimately to litigation.

#### Recommendations:

In order to avoid conflict between the two NPS<sup>1</sup>, renewable electricity generation activities should be expressly recognised in the NPS-FM. We suggest:

- Retention of the existing definition of hydroelectric power generation in Appendix 1, ensuring that it provides for both existing and new generation activities;
- Adoption of all other recommendations outlined in this submission.

#### **Implications for hydroelectricity generation as a consequence of Te Mana O Te Wai**

We support the concept of Te Mana o te Wai<sup>6</sup>. However, by way of definition, it raises concerns as to how it will be applied to hydrologically altered management units.

Appendix 1<sup>7</sup> outlines the national values and uses for fresh water and records the values applicable to Te Mana o te Wai as:

*Natural form and character – where people value particular natural qualities of the freshwater management unit*

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<sup>6</sup> Te Mana o te Wai represents the innate relationship between te hauora o te wai (the health and mauri of water) and te hauora o te taiao (the health and mauri of the environment), and their ability to support each other, whilst sustaining te hauora o te tangata (the health and mauri of the people). Ministry for the Environment. 2013. Proposed amendments to the National Policy Statement for Freshwater Management 2011: A discussion document. Wellington: Ministry for the Environment. Page 29

<sup>7</sup> Ministry for the Environment. 2013. Proposed amendments to the National Policy Statement for Freshwater Management 2011: A discussion document. Wellington: Ministry for the Environment. Page 65

*Matters contributing to the natural form and character of a freshwater management unit are its visual and physical characteristics that are valued by the community, including its flow regime, colour, clarity, morphology or location. They may be freshwater management units with exceptional, natural and iconic visual features.*

The natural form and character of a freshwater management unit is, as outlined, inextricably linked to allocation and flow regimes. In this regard, there is a disconnect between the context of the NPS-FM amendments and the aspirations sought through the concept of Te Mana o te Wai.

Existing hydroelectricity infrastructure unavoidably alters the natural form and character of a freshwater management unit. The application of the concept when setting water quality limits will ultimately constrain our current hydro electricity operations.

The disconnect is further highlighted in Objective A1 which states

*To safeguard:*

- a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water;*
- b) the health of people and communities as affected by their secondary contact with fresh water; and*
- c) [Te Mana o te Wai]*

*in sustainably managing the use and development of land, and of discharges of contaminants [emphasis added].*

For the reasons provided, it is our view that Te Mana o te Wai does not sit comfortably within Objective A1. Objective A1 seeks to manage water quality through controlling landuse and discharge consents, rather than allocation or flow limits.

#### Recommendations:

It is against the stated intent of the NPS-FM that any framework or definition within the NPS-FM provides the opportunity for priority to be given when setting allocation and flow regimes,

In this regard, we strongly suggest:

- (1) The matters contributing to the natural form and character (as defined by the concept of Te Mana o Te Wai) of a freshwater management unit exclude flow regime.
- (2) Clause (c) [Te Mana o Te Wai] is removed from Objective 1A.

**The practical application of the National Objectives Framework ("NOF") needs to be better defined by the NPS-FM.**

We consider the most significant change to the NPS-FM is the introduction of a National Objectives Framework ("NOF"). The purpose of the NOF is to support and guide the setting of objectives in regional plans. The NOF sets two compulsory values with associated "environmental bottom lines" which must be met and a set of additional national values<sup>8</sup>.

While we support the introduction of the NOF, we have some reservations about the application and measurability of the bottom lines in the context of a water management unit, and specifically a hydrologically altered management unit.

The application of the NOF also raises concerns as to how environmental bottoms lines would be practically linked to the the 'polluting party' responsible for a breach of the water quality parameters. In our view, it would be a perverse outcome if water quality parameters were enforced against those activities which utilise the water (i.e. degraded water passing through a hydroelectricity system) but do not contaminate it. An example of such outcomes would be if a hydro electricity generator was required to provide flushing flows as a means to remedy a breach created by another user.

Recommendations:

In order to implement the NOF as intended, we suggest that MfE prioritise the preparation of guidance material, specifically addressing our concerns above, to assist councils, iwi and communities in effectively implementing the amended NPS-FM. We would actively encourage MfE to work with key stakeholders to prepare this material, and provide opportunities for input into the process accordingly.

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<sup>8</sup> The bottom lines will not and cannot be considered rules that would prohibit activities that do not meet them, unless and until they have been incorporated into a regional plan. The discussion document specifies that the amendments are to be made when the regional plan is next reviewed and that the NPS-FM must be implemented in regional plans by 2030.

## **New values for geothermal and thermal power generation are required**

Appendix 1 of the NPS-FM sets out a number of relevant values that contribute to Mana Tangata Au Putea / economic or commercial development. We support the inclusion of a definition for hydroelectric generation, but note there is no similar definition for geothermal or thermal generation.

Geothermal and thermal generation depends on the ability to access clean water. In this regard, and given the national and regional significance of this form of generation, it is appropriate that a specific value is provided in Appendix 1.

### Recommendations:

We seek the following value definition is included as an 'Additional National Value' in Appendix 1: National values and uses for fresh water

***Geothermal and Thermal power generation** – The freshwater management unit has physical qualities (between and/or in combination with other Freshwater Management Units) that are suitable for power generation and provides water for significant and essential infrastructure required to provide a reliable and secure supply of electricity*

*The physical qualities, including water quality, required specifically for drilling, cooling and process water purposes associated with power generation would be retained,*

## **Unintended duplication of existing accounting practices**

The NPS-FM seeks to introduce policy which ensures regional councils account for all water takes and sources of contaminants. We agree that water accounting is fundamental to providing comprehensive, consistent and comparable relevant information related to water.

National guidance and direction on freshwater accounting will improve the robustness but we seek that the process for obtaining the necessary information does not duplicate existing accounting practices<sup>9</sup>.

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<sup>9</sup> At present, information pertaining to our schemes is provided in general accordance with the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010. Water quality information is provided as directed by our specific operational consent requirements.

However, any new process should not impose additional restrictive requirements on water users. The collection of information should have regard to specific use, acknowledging there are often operational or technical constraints associated with data collection and information provision. Data collected should be used in a meaningful way and commercially sensitive information should be applied with caution with a caveat on its ability to be shared. Any assumptions made from information sourced should be confirmed where these assumptions have the ability to compromise existing assets.

### **Concluding Remarks**

The Government has chosen to make the proposed amendments using the "alternative" process under section 46A(1)(b) of the RMA, meaning that opportunities to further engage with the Ministry on the matters raised in this submission are limited.

We would support the ability to be heard in respect of this submission. Alternatively we are happy to meet with the Minister or officials to discuss the points raised.

Should you have any questions regarding the comments made, please do not hesitate to contact me at [ withheld ]

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