SUBMISSION OF TRANSPower NEW ZEALAND LIMITED ON THE DRAFT NATIONAL POLICY STATEMENT ON FRESHWATER MANAGEMENT (draft NPSFM) AND PROPOSED NATIONAL ENVIRONMENTAL STANDARDS FOR FRESHWATER (pNESFW)

Transpower’s role and activities

Transpower is the state owned enterprise that plans, builds, maintains – and owns or operates, New Zealand’s high voltage electricity transmission network (the National Grid). The National Grid includes some 12,000 km of transmission lines and cables (overhead and underground), and 178 substations across the country. The National Grid is controlled by a telecommunications network with 300 telecommunication sites, which help link together the components that make up the National Grid.

The National Grid extends from Kaikohe in the North Island to Tiwai Point in the South Island, and in doing so links generators to distribution companies and major industrial users throughout New Zealand. It traverses 76 local authority regions and districts.

The assets in the National Grid are an extensive, linear, and connected system of lines and substations. Thus, activities or changes on one part of the system can affect other parts. The National Grid operates in a regional or national scale in terms of the location of assets and the distances over which electricity is transmitted.

Ultimately, the National Grid will be required for many years into the future (and is critical to enabling wider social and economic wellbeing). Transpower needs to be able to operate, maintain, upgrade and develop the National Grid in the most sustainable way for that outcome to be achieved.

Transpower is the system operator, managing the wholesale electricity market through scheduling and dispatching the electricity in real time, provision of short-to medium-term forecasting on all aspects of security of supply and managing supply emergencies\(^1\). We have an overview of the national electricity system.

We devote a significant effort to understanding the future electricity demand and supply opportunities, as well as the challenges of changing energy production and consumption patterns and technologies.

Transpower’s role in electrification and transition to a low carbon economy

New Zealand’s electricity system is unique. It relies on a mix of generation sources, has low levels of energy storage, and lacks a grid connection to another country’s energy resources.

Transpower’s *Te Mauri Hiko – Energy Futures* publication explains why transitioning to a low carbon economy (decarbonisation) depends on New Zealand’s ability to expand its renewable electricity base and to electrify new parts of the economy, such as transport and process heat.\(^2\) It is predicted that electricity demand in New Zealand will grow significantly from 2020 and may double by 2050, as consumers invest in electric vehicles and other emerging technologies.

The key *Te Mauri Hiko* messages and modelling have strong convergence with the Productivity Commissions’ *Low-emissions economy* report.\(^3\) More recently, the Interim Climate Change Committee’s (ICCC) *Electricity inquiry – Final Report* reinforced the importance of electrification to New Zealand’s climate change response.

Transpower is working to understand how it can ensure its business will keep pace with the new grid connections needed to enable electrification. There may be a need for new interconnections that relieve constraints and unlock grid capacity. Transpower’s project, “Enabling New Connections” is considering

---

\(^1\) Electricity Act 2010, section 8(2).


\(^3\) New Zealand Productivity Commission *Low-emissions economy - Final Report* dated August 2018.
what Transpower and the industry needs to do to ensure timely, efficient grid investment can support New Zealand to meet its significant decarbonisation challenge.

Transpower’s general position on the Draft NPSFM and pNESFW

Transpower understands and supports the need for a strengthened NPS on Freshwater and supports the development of a related national environmental standard (NES) (including the intent of those regulations). In Transpower’s experience, there are significant costs and uncertainty associated with implementing a national policy statement (NPS) at the regional policy statement and regional and district plan level when NPS policies are not accompanied by an NES.

The following paragraphs summarise Transpower’s key concerns with the proposed national direction, answer to specific questions raised in the Action for healthy waterways discussion document, and comment on the drafting of policies and regulations.

Recognition of nationally significant infrastructure

As a consequence of its linear nature, Transpower has a large number of assets in or near waterways, including natural wetlands. Transpower has a live project underway to map and identify all access tracks and associated infrastructure used to physically get to the National Grid assets. As at February 2019, the project has mapped 15,545km of access tracks, which include 985 bridges, 4,347 culverts, and 593 fords.

Works undertaken within or adjacent to these waterbodies includes maintenance of access tracks, vegetation clearance, and support structure foundation works, all to enable the ongoing operation, maintenance, and upgrade of the National Grid. While these works are generally of limited scale, infrequent, of short duration, and generally associated with established assets accessed via a network of established access tracks, they need to be enabled under the RMA, so the National Grid can effectively function. Similarly, new development may need to locate in or adjacent to waterbodies due to operational or locational constraints. This development also needs to be enabled.

Transpower is conscious it will need to apply the draft NPSFM and pNESFW on a regular basis. It is important that these documents are clear on their face so that they are workable, and that they allow for Transpower’s activities given the extent and national importance of Transpower’s assets across New Zealand, and Transpower’s need to be able to operate, maintain, upgrade and develop the National Grid.

With respect to the draft NPSFM, Transpower is concerned that its very directive policies have the potential to constrain the operation, maintenance, upgrade and development of nationally significant infrastructure, particularly given the Supreme Court’s decision in King Salmon, and related cases (including the recent decision of the High Court in Environmental Defence Society v Otago Regional Council).

By way of summary, in King Salmon, the Supreme Court held that policies expressed in more directive terms will carry greater weight than those expressed in less directive terms. The Court acknowledged that policies may “pull in different directions”, but “it may be that an apparent conflict between particular policies will dissolve if close attention is paid to the way in which the policies are expressed”. The objectives and policies in planning documents are “expressed in deliberately different ways” and “[t]hese differences matter”. A requirement to give effect to a policy which is framed in a specific and unqualified way may, in a practical sense, be more prescriptive than a requirement to give effect to a

---

6 King Salmon supra note 2, at [129].
7 Ibid.
8 Ibid at [127].
policy which is worded at a higher level of abstraction. In terms of the word “avoid”, this carried its ordinary meaning of “not allowing” or “preventing the occurrence of”.

Recently, in Environmental Defence Society v Otago Regional Council, the High Court was tasked with determining how to provide for ports in the proposed Otago Regional Policy Statement (ORPS) in a manner which gives effect to the New Zealand Coastal Policy Statement (the NZCPS). At issue were arguably competing policies enabling port activities, but also requiring the avoidance of adverse effects on Outstanding Coastal Sites. In summary, the Court found that the requirement to “give effect to” a specific and unqualified policy is prescriptive and binding on decision-makers, the avoidance policies in the NZCPS were prescriptive, and the enabling policy for ports was not. As a consequence, in order to give effect to the NZCPS, the proposed Otago Regional Policy Statement had to require port activities to “avoid adverse effects” on Outstanding Coastal Sites.

Following these decisions, there may not be an opportunity for a decision maker to balance competing policies (even where differences in directive language can arguably be attributed to the formation of the policy in the pre-King Salmon era), and so the unqualified use of directive language, including “avoid” and “prohibit”, should be carefully considered by policy makers so that these documents do not frustrate the development and operation of significant infrastructure (including the National Grid), particularly where that infrastructure has a functional, operational and/or locational need to be located within a particular area.

The draft NPSFM needs to ensure that there is a realistic consenting pathway for nationally significant infrastructure where consent is required under the pNESFW or National Environmental Standards for Electricity Transmission Activities (NESETA). We touch on suggested wording below.

In terms of the pNESFW, Transpower has concerns about definitions, implementation issues, and lack of certainty as to when the standards would be applied. While Transpower supports the recognition of nationally significant infrastructure, and a less restrictive activity status applied to activities associated with that infrastructure, it has concerns about the applicability of the regulations to the operation and maintenance of the National Grid.

**Relationship to other National Direction**

Transpower is concerned about the lack of clarity about the relationship between the national policy direction for freshwater and that relating to electricity transmission which is recognised as a matter of national significance within the National Policy Statement on Electricity Transmission 2008 (NPSET) and the NESETA.

The discussion document, and the draft NPSFM and pNESFW, include no specific discussion about how the proposed instruments align with the NPSET and the NESETA, or the National Policy Statement for Renewable Electricity Generation 2011 (NPSREG). Transpower is concerned that there is no direction to local authorities about how the policies and rules in these documents are to be implemented alongside each other.

Transpower assumes that the draft NPSFM and pNESFW are not intended to override the NPSET, NESETA or NPSREG, and would expect this to be explicitly stated if this were the Government’s intention. It is noted that the discussion documents states that the Government will review how the rules in the NES for Plantation Forestry (the NESPF) and the pNESFW will work together, and it is proposed that the NESPF will prevail over wetland rules pending the review. Transpower considers the same approach should be applied to the NESETA, particularly given it only relates to existing assets and it is imperative these are able to be operated, maintained, and upgraded as required.

---

9 Ibid at [26].
10 Ibid at [24]. This statement was repeated in Transpower New Zealand Ltd v Auckland Council [2017] NZHC 281 at [78].
11 Environmental Defence Society v Otago Regional Council [2019] NZHC 2278 at [103]-[104].
12 Ibid.
New Zealand’s ability to transition to a low carbon economy

As noted above, Transpower is working to understand how it can ensure its business will keep pace with the new grid connections needed to enable the electrification necessary for New Zealand to transition to a low carbon economy.

New Zealand uses the greatest amount of electricity during winter and today must call upon thermal generation, resulting in additional carbon emissions, to meet demand during dry winters. With increased electrification, Transpower anticipates that New Zealand will need to invest in adequate renewable generation or storage to compensate for the intermittency of existing hydro and new renewable (wind and solar) generation of up to 12 GWh. Closure of coal and gas-fired generation (eg Southdown and Otahuhu) will contribute to half of the growth in the seasonal supply shortage.

Relevant to this work, and the draft NPSFM and pNESFW, the ICCC recommended (among other matters) that the Government 13:

- Ensures the value of existing hydro generation to New Zealand’s climate change objectives is given sufficient weight when decisions about freshwater are made, including by strengthening and clarifying national direction on making trade-offs between hydro-generation and freshwater objectives across National Policy Statements (recommendation 1(b)); and
- Investigates the potential for pumped hydro storage to eliminate the use of fossil fuels in the electricity system (recommendation 4(a)).

Transpower has concerns that the draft NPSFM, together with the pNESFW, will not assist New Zealand to move to a low-emissions future. Key aspects of the proposal may deter or delay greenhouse gas emissions reductions by:

- Preventing new connections and capacity upgrades in certain locations;
- Curtailing existing, and new, hydro (including any future pumped storage);
- Resulting in increased gas or coal-fired peaking plants to meet peak and dry-year demand 14.

In this respect, the proposal appears to be inconsistent with New Zealand’s broader energy policy framework. Further, the proposal could impact on the ability to obtain consents for water takes for any future hydrogen plants.

While Transpower supports the apparent exceptions for hydro, the Government needs to make sure the exception mechanism works, extends to all existing hydro, and that any ancillary Grid connections and National Grid assets are also within the scope of the exemptions.

Certainty and enforceability of the proposed standards in the pNESFW

It is well established in case law that rules in planning instruments can be void for uncertainty. Similarly, to be enforceable, standards in the pNESFW should be clear and precise. Users should be able to easily determine when they breach a standard and require resource consent, and standards should be able to be consistently applied across different districts by different decision-makers. Transpower considers that many of the standards in the pNESFW are subjective, uncertain, and unable to be appropriately applied and enforced. Many require expert evidence in order to ascertain whether or not they are triggered, and/or sufficient background data about the existing state of the wetland (which is unlikely to be readily available in most circumstances). These concerns are addressed in more detail below.

---

14 Similar concerns are raised in the IRIS in relation to the status quo, Part II, at 210. These concerns remain relevant to any curtailing of hydro-generation activities.
Suggested wording to provide for Nationally Significant Infrastructure in the NPSFW

2.1A Objective

The effective operation, maintenance, upgrading and development of “existing hydro schemes” and “nationally significant infrastructure”\(^\text{15}\) are enabled to meet the needs of present and future generations, including for climate change mitigation.

2.2 Policies

Policy 10 that this National Policy Statement is intended to achieve is amended as follows, and similar wording is inserted into policies 8, 9 and 11:

Policy 10: The significant values of outstanding waterbodies are protected, except to enable the operation, maintenance, development or upgrade of nationally significant infrastructure and existing hydro schemes in appropriate circumstances, including for climate change mitigation;

Questions - Action for healthy waterways discussion document

Question 9: Do you support the Te Mana o te Wai hierarchy of obligations, that the first priority is the health of the water, the second priority is providing for essential human health needs, such as drinking water, and third is other consumption and use?

While Transpower understands the Te Mana o te Wai hierarchy, it considers there is some uncertainty about where the provision of electricity (and therefore electricity infrastructure) fits within the hierarchy.

The provision of electricity is important for heating and cooking, and the transition to a low-emissions economy, so arguably falls into the second priority. However, regardless of its place in the hierarchy, electricity clearly plays an essential role in the ensuring the wellbeing of New Zealanders and New Zealand’s economy, for example, by “keeping the lights on” in homes, schools, hospitals and businesses.

Subpart 1, 3.2(2) requires councils to give effect to Te Mana o te Wai in implementing the draft NPSFM, and Te Mana o te Wai is to inform the interpretation of its objective and policies.

The Te Mana o te Wai hierarchy follows through to proposed policies 1 to 13 of the draft NPSFM, with directive/protective policies given to the health of the water. With respect to electricity infrastructure, Policy 13 is the only policy that refers to economic wellbeing, but is particularly weak and drafted in a way that is deferential to the more directive, protective, policies. As noted above, given the Supreme Court’s decision in King Salmon, and related cases including Environmental Defence Society v Otago Regional Council, the draft NPSFM needs to ensure that there is a realistic consenting pathway for nationally significant infrastructure – this means the draft NPSFM needs to be directive about appropriate exceptions to absolute avoidance policies.

Question 17: Do you support the proposal for a faster freshwater planning process?

Transpower supports the proposal for a faster freshwater planning process, subject to the process being broad enough to resolve all issues relating to water/waterways. In Transpower’s experience, it can take many years to implement NPSs. For example, the NPSET was gazetted in 2008, but it has not yet been given effect to in all planning documents across the country\(^\text{16}\).

Water use for hydro-generation is essential for security of supply and balancing the market. That use also isn’t at the expense of other consumptive or in river uses. It is a complex process to balance uses. Acknowledging this complexity, Transpower considers it important that the faster process is capable of

\(^{15}\) Defined terms are as proposed in the pNESFW. We note that these definitions exclude new small-scale renewable technologies that do not connect to the National Grid. These technologies have a role to play in the transition to a low-carbon economy. It may be appropriate to include these technologies within the draft NPSFM.

\(^{16}\) Approximately 66% of council planning documents have fully given effect to the NPSET.
resolving plan provisions to give effect to the draft NPSFM, other NPSs (such as the NPSET and the NPSREG), and broader obligations, such as those relating to climate change. There are some aspects that Transpower considers will need to be resolved at the national level rather than through regional planning processes. These national level issues are discussed in further detail below in response to questions 19 and 37.

Transpower considers that this balance can be achieved successfully (and in a timely manner) via a nationally lead process, similar to that which occurred for the Waitaki Catchment Water Allocation Regional Plan.

Questions 19 and 37: Does the proposal to allow exceptions for the six largest hydro-electricity schemes effectively balance NZ’s freshwater health needs and climate change obligations, as well as ensuring a secure supply of affordable electricity? Is any further direction, information, or support needed for regional council management of ecological flows and levels?

Transpower is concerned that from a security of supply perspective, any constraint on generation (through increased minimum flows, and potentially other water quality objectives) from a power station (regardless of size) will need to be replaced by new generation. It is likely that the new generation would involve a mix of gas and coal fired peakers, which in turn will impact on New Zealand’s transition to a low-carbon economy.

In summary, the proposal focuses on the freshwater health needs in a significant amount of detail, but not New Zealand’s climate change obligations. The reports relied upon to address costs and impacts on security of supply are neither comprehensive nor current. Further, the generation mix has changed since the reports were written in 2013 and 2015. Hydro generation has a more important role in flexing to meet peaks – lower cost options (such as wind or solar) are intermittent. Transpower expects hydro generation will become more valuable in the future, as gas and coal-fired peaker plants close and the electricity system has a greater amount of intermittent generation sources.

Transpower also has concerns about the workability of the exception, particularly due to the proposed wording of the draft NPSFM.

We expand on these issues below.

No comprehensive discussion on NZ’s climate change obligations

The discussion document states that the proposals are “one part of the Government’s comprehensive approach to improving the state of our waterways and our environment, and moving to a sustainable, low-emissions economy.” However, there is no further discussion about the movement to a sustainable low-emissions economy. It is important that the proposals recognise that the impacts/effects of climate change (which is a focus of the discussion paper - see page 26) are different from moving to a low-emissions economy to address climate change. The only key feature to address NZ’s climate change obligations is the exception for the six largest hydro-electricity schemes, which is opposed by the various advisory groups, and is not worded in a particularly strong way (discussed further below).

In terms of setting target attributes, the draft NPSFM requires regional councils to “have regard to... the foreseeable impacts of climate change” and “consider the requirements of all other national directions”. The impacts of climate change are a separate issue to the steps which need to be taken to move to a sustainable, low-emissions economy, including recognising and providing for the benefits of hydro-electricity generation and other renewable energy infrastructure. The requirement in Policy 13 to “consider” the requirements of all other national directions is not particularly strong or directive, and arguably elevates the draft NPSFM over other instruments (which could lead to perverse or unintended outcomes).

Decisions on hydro-electricity schemes need to be made at national level

The discussion document describes the exception as covering about 90% of New Zealand’s hydro-electricity capacity. Regional councils would be required, when making plans or setting limits, to have regard to the importance of not adversely affecting the generation or storage capacity of any of the six...
largest hydro-electricity schemes, or its operational flexibility. Waterbodies containing infrastructure outside of the six largest schemes would have to meet the target attributes/objectives under the draft NPSFM. So would any future infrastructure within the six largest schemes that materially changed the nature of a scheme, or part of it, or any new schemes (including pumped storage).

Getting the balance right between New Zealand’s freshwater health needs and climate change obligations, as well as ensuring a secure supply of affordable electricity, requires consideration of matters at a national level. However, the proposal risks pushing key national-level decisions (including types of electricity generation (renewable vs non-renewable)) to regional councils who have no mandate to make them. Many of the matters that require balancing are not matters that are able to be decided at regional council level (for example implications for electricity pricing), in the context of a regional plan, or in the context of a resource consent for an individual hydro-generation plant, or a river-wide scheme.

The limits on what regional councils can consider are clear from section 3.22(2) of the draft NPSFM, which provides that regional councils “must have regard to the importance of not adversely impacting the generation capacity, storage and operational flexibility of a Scheme”. Section 3.22(2) is weakly drafted (and given King Salmon, is unlikely to be afforded much weight), and does not provide for consideration of the consequential impacts on electricity prices or the potential need for gas or coal-fired peaker plants to replace any lost hydro due to decisions made by the relevant regional council. Nor does section 3.22(2) enable the council to assess the cumulative impacts on our electricity system in relation to decisions made by other regional councils across the country.

Transpower is of the view that any change to minimum flows affecting hydro-generation needs to be considered at a national level, so that the cumulative impacts on resilience and security of electricity supply, electricity prices, and negative impacts on climate change (due to consequential need for oil or gas-fired peakers) can be appropriately evaluated.

If these key decisions are not grappled with at a national level, in reality they will not be made at the regional level either, and future legislative work will be required, and crucial time lost, to remedy the fallout.

Further analysis required

A statement is made in the Interim Regulatory Impact Analysis for Consultation: Essential Freshwater (IRIA) that providing the exception “strikes a balance between the interests of freshwater quality and ecosystem health, security of electricity supply, affordable electricity, and New Zealand’s international obligations to reduce carbon emissions (Part 1, page 32).

The IRIA identifies the “impact on affected parties” of providing the exception as (Part 1, page 32):

- Providing greater certainty to the generators who own the six largest schemes;
- Leaving the remaining 11% of generators facing a different regulatory environment and risk.
- A risk there is a competitive advantage in favour of the larger generators.

Transpower is concerned about the lack of analysis in the discussion document about the impact of the exception on a reliable and secure supply of electricity, or impacts on electricity pricing. Impacts on resilience and security of supply are not specifically addressed in the discussion document, which is also silent about New Zealand’s climate change aspirations. The limited, relatively outdated, and heavily qualified documents relied upon by the IRIA do not address climate change obligations in any detail. Transpower is concerned about the limited (and outdated) information relied upon to determine whether this approach is appropriate. Only two reports are referred to in the IRIA: a 2013 report prepared by Concept Consulting Group “Evaluation of potential electricity sector outcomes from revised minimum flow regimes on selected rivers” and a 2015 report prepared by Halliburton “Assessment of the Impact of Flow Alterations on Electricity Generation”. It should be noted that these reports explicitly note their limitations. It should further be noted that Transpower generally agrees with the approach taken in the reports and conclusions drawn. Our concerns are with the continued reliance on them.
on electricity cost impacts arising from altered hydro generation outcomes. It recognises, but did not evaluate the scale or nature of a number of potential impacts, including:18

- Adverse environmental outcomes from an increase in non-hydro generation;
- Reduced ability to meet other policy objectives such as 90% renewable electricity by 2025.

In addition, the Concept Report does not evaluate the cumulative effects of multiple rivers facing increased minimum flows, noting that altered hydro generation outcomes will affect the storage and release decisions for other hydro-generators.19

The IRIA also notes that the 2015 report was:

"based on MBIE’s 2013 mixed renewables scenario and included thermal generation that has since retired and at least 600 MW of new thermal generation by 2025. New generation investment is now more likely to be in wind and geothermal, with the latter increasing the reliance on hydro generation to cover when intermittent wind is unavailable. Consequently $15 to $31 per MWh is likely to be an underestimate of the potential cost of reduced hydro flexibility, and the risk to security of supply may be greater from reduced inflows.

In relation to hydro, the Interim Climate Change Committee in its Accelerated Electrification report noted (at page 101):

"Current national direction, such as within National Policy Statements, such as around competing uses for freshwater is incomplete, creating uncertainty for all interests, and is likely to lead to poor trade-offs being made. The current ambiguities and gaps in national policy direction must be resolved so that trade-offs are able to be weighed more explicitly and strategically, and ensure sufficient weight is given to climate change in decision-making."

It then recommended (at page 101) that the Government ensures the value of existing hydro generation to New Zealand’s climate change objectives is given sufficient weight when decisions about freshwater are made, including by “strengthening and clarifying national direction on making trade-offs between hydro generation and freshwater objectives across National Policy Statements.”

Transpower considers that further work needs to be done about the impacts of the exception not being applied to 10% of country’s hydro-generation, particularly in relation to security of supply, electricity prices and need for further gas or coal-fired peakers. The need for this work becomes even more important should the current opposition to the exception to the six-major hydro-schemes gain traction.

Any further work needs to recognise the current and future mix of generation, and the role and increased importance of hydro-generation to that mix. It also needs to recognise the current uncertainties in the electricity industry as the country transitions to a low-carbon economy.

Scope of exception

While Transpower supports an exception for hydro-electricity, it is concerned about the lack of clarity of the extent of the exception. Transmission lines connecting generation to the National Grid should clearly fall within the exception, or there is a risk that regional land use activities could be a road-block to ensuring the generation capacity, storage, and operational flexibility of the six existing hydro schemes is not adversely impacted.

Transpower supports the exception applying to the six major hydro schemes – and the certainty that an exception provides for system security and the electricity market. Transpower agrees with the ICCC that

18 Concept Consulting Group “Evaluation of potential electricity sector outcomes from revised minimum flow regimes on selected rivers” (19 July 2013) at 4 and 38.
19 Concept Consulting Group “Evaluation of potential electricity sector outcomes from revised minimum flow regimes on selected rivers” (19 July 2013) at 9-10.
the Appendix 3 of the existing NPSFM remaining empty, and therefore not providing the intended exception, is a “policy uncertainty [that] is untenable.”

As recognised by the discussion document, these six major schemes make up approximately 90% of New Zealand’s hydro generation – on a capacity, peak generation basis. Transpower considers there is an argument that all hydro generation should be covered by the exception so there is not a competitive advantage to the larger generators, and the cumulative benefits of all hydro generation are enabled. This is particularly the case given all resource consents are to be aligned to the newly established allocation limits and minimum flows. This may have significant implications for hydro generation not covered by the exception.

New Zealand has numerous small to medium scale hydro schemes. From a security of supply perspective, any constraint on generation from a big or small power station is that lost generation will need to be replaced by new generation. That new generation will place upwards pressure on electricity prices to pay for the new generation and will itself require resource consent.

In the 2018 calendar year, the total generation in New Zealand was 26,027 GWh. Any restriction on a big or small generating station that reduces annual generation by 14 GWh would require the construction of an additional wind turbine, the size of those about to be built at the Turitea wind farm (3.6MW). Transpower has assumed that impacts on lost generation will require new fossil-fuel generation – in the form of gas or coal fired peaker plants.

**Workability of exception**

Transpower has concerns about the workability of the exception, as it is not clearly carried through to the draft NPSFM in a manner that ensures it is actually a mandatory exception. Councils are only required to ‘have regard to’ the importance of not adversely impacting the generation capacity, storage and operational flexibility of a Scheme, and councils ‘may’ (as opposed to ‘must’ not adversely impact a Scheme) set target attribute states that are below national bottom lines in respect of waterbodies or freshwater ecosystems that are adversely impacted by structures that form part of any Schemes, to the extent of such an impact. There is no certainty that the exception will in fact occur for the listed hydro-electricity schemes. This could result in perverse outcomes, particularly given these schemes will be vital in transitioning New Zealand to a low-emissions economy, and enabling New Zealand to meet its climate change obligations.

Transpower is concerned about the status of the exception (this applies to all of the “provisions” in Part 3). The draft NPSFM purports to only include one objective, thirteen policies, and additional provisions in Part 3 to implement and give effect to the objectives and policies. However, a number of the “provisions” in Part 3 are expressed as objectives themselves (outcomes to be achieved), or policies (how the objectives are to be achieved). Consideration needs to be given to the status of the “provisions” in Part 3. They are not stated as being objectives and policies. Accordingly, they will not be relevant when considering non-complying activities and whether those activities are contrary to the objectives and policies of the relevant plan.

Transpower considers that the wording of the draft NPSFM needs to be amended to make the exception mandatory. In addition, given the effect of King Salmon and related case law, the exception should be supported by, or included as, a policy, to ensure that it is not constrained in practice by the application of other strict avoidance policies.

**Question 26: If this proposal was implemented, what would you have to do differently?**

Refer to the comments below regarding the pNESFW.

**Question 29: Do the ‘offsetting’ components adequately make up for habitat loss?**

Refer to the comments below regarding the pNESFW.

---

20 ICCC, at 75.
Question 79: Do you think there are potential areas of tension or confusion between the proposals in this document and other national direction? If so, how could these be addressed?

Section 2.6 of the discussion document states that:

“These national direction tools are intended to be compatible and to enable good decision-making that provides for New Zealand’s environmental, social, cultural and economic wellbeing. Throughout the development of all these national direction tools, there has been careful consideration of how they interact, and how they align with current national policy statements covering various matters of national significance (including transmission activities and renewable energy generation). See section 11 for further analysis of the interactions.”

Section 11 is silent about the NPSET and the NESETA. There is no information about how these two instruments will interact with the proposals.

Transpower considers there are potential areas of tension and confusion between the draft NPSFM and the pNESFW, and other national direction, specifically the NPSET, the NPSREG and the NESETA.

The draft NPSFM and pNESFW need to resolve this tension. Otherwise Transpower considers there is a risk for nationally significant infrastructure if policy interpretation is left to individual decision-makers on an ad-hoc basis. The NPSET and NPSREG predate the Supreme Court’s decision in King Salmon. Despite the critical importance of electricity transmission infrastructure and renewable energy generation activities, the objectives and policies in these documents risk not being as directive as they need to be in order to appropriately provide for this infrastructure where there is competing national direction, drafted in the post-King Salmon / Environmental Defence Society v Otago Regional Council world, where more attention is being paid to the meaning of words.

It is important that the draft NPSFM and pNESFW recognise the risks for consenting nationally significant infrastructure, and ensure there is a viable consenting pathway for this infrastructure where consent is required under the pNESFW or NESETA. The consenting pathway should be mindful of the locational, technical and operational constraints that require such infrastructure to be located in or adjacent to waterbodies, and the way that objectives and policies are to be interpreted post-King Salmon.

Transpower is also concerned that some of the matters addressed in the pNESFW are also addressed by the NESETA. The need to get consent under both sets of regulations would be inefficient for both Transpower and the local authority processing the applications.

The Government has stated it will review how the rules in the NES for Plantation Forestry (NESPF) and the pNESFW will work together, and it is proposed that the NESF will prevail over wetland rules pending the review. Transpower considers the same approach should be applied to the NESETA, and further work needs to be undertaken to understand how they will work together.

Transpower proposes an approach whereby the NESETA applies to Transpower’s existing assets, but the pNESFW applies to new assets. Not only is this a clear, workable solution, but this approach is supportable from an effects-based perspective. Where Transpower’s existing infrastructure is located in or adjacent to waterbodies, it is likely to be more disruptive to that waterbody to remove this infrastructure and relocate it elsewhere, than it will be to undertake largely small-scale works to maintain the infrastructure. In contrast, Transpower accepts that a higher threshold should apply to new infrastructure in or adjacent to waterbodies (noting that Transpower endeavours to avoid these, but is sometimes constrained due to the location or operational or technical reasons).

In addition, the discussion document recognises that “the relationship between the NPS-FM and the NPS-REG is not clearly articulated. The proposal in this document relating to renewable generation is expected to assist local authorities to implement both pieces of national direction consistently” (see page 100). However, there is very little direction in the discussion document or the proposed instruments to assist local authorities. In particular, subpart 4, section 3.22 of the draft NPSFM is not directive. It includes “have regard” (in 2) and “may” in (3). The status of section 3.2.2 is also not clear (and appears to be something less than an objective or policy). There is a risk that there will be a wide variety in how the content of 3.22 is incorporated into local authority plans.
Question 80: Do you think a planning standard is needed to support the consistent implementation of some proposals in this document? If so, what specific provisions do you consider would be effectively delivered through a planning standard tool?

If the relationship between the NPSET, the NPSREG and the draft NPSFM, and the NESETA and the pNESFW, are not reconciled in the proposed instruments, Transpower considers that a planning standard could potentially effectively address this issue.

Transpower’s comments on the pNESFW

Provision for upgrading and associated activities

Regulations 7, 10, 12, 13, 14, 16 and 18 of the pNESFW refer to “the purpose of building, maintaining, or operating any new or existing nationally significant infrastructure”.

The NPSET and NESETA both provide for the upgrading of Transpower’s infrastructure. To provide certainty, Transpower considers that the regulations should also provide for the upgrading of nationally significant infrastructure.

In addition, the regulations should also expressly provide for activities that are ancillary to nationally significant infrastructure, for example, access tracks, as follows:

… for the purpose of building, maintaining, upgrading or operating any new or existing nationally significant infrastructure, including associated activities and requirements for the building, maintaining, upgrading or operating of such infrastructure.

Wetlands

Regulation 4: Definitions for subpart 1

“Nationally significant infrastructure” - Transpower supports the definition of nationally significant infrastructure in so far as it includes the National Grid electricity transmission network which is recognised as being of national significance in the NPSET.

“Natural wetland” - Transpower does not have a specific position on the definition of Natural Wetland. However, it does have concerns as to the identification of the wetlands.

While Transpower understands regional councils must identify all existing natural inland wetlands (required under the draft NPSFM), Transpower appreciates this process may take some time. It is presumed the pNESFW would have effect prior to the identification of all Natural Wetlands (i.e. that not all Natural Wetlands will be identified by June 2020). Transpower has a very comprehensive programme for undertaking its maintenance and upgrade works on the National Grid. This programme includes factors such as weather conditions and identified outages (when certain lines are ‘shut down’ for a defined period of time to enable the work to occur). Transpower needs to be able to readily identify whether it requires resource consent and then apply for the necessary consents well in advance.

A significant concern for Transpower is therefore the lack of certainty as to whether its activities are within proximity of a Natural Wetland, and how the regulations will impact on its ability to operate, maintain and upgrade the National Grid.

Example

As an example of works undertaken near wetlands, Transpower undertook foundation refurbishment on a tower in the Denniston Plateau (which is a scheduled wetland in the West Coast Regional Plan). The red notations on Figure 1 below mark a new access track that was proposed. While it is clear that this activity would trigger the consent due to identification of a wetland, in other instances that clarity would not be provided and so it would not be clear to Transpower whether or not there is a consenting obligation.
Figure 1. Track access earthworks on the Denniston Plateau.

Regulation 5: Standard wetland monitoring obligation

The standard monitoring obligation is likely to apply to activities associated with the National Grid. Transpower has concerns about the lack of clarity as to how the standard monitoring condition is to be applied in practice and the enduring and resource-intensive obligations it is likely to impose on consent holders:

- Given the short duration of many of its activities, monitoring conditions are not routinely imposed on Transpower’s consents for earthworks and vegetation clearance within proximity of natural wetlands.

- There is no recognition of the scale and nature of the activity, its duration, or nature of effect. Monitoring of the condition of the wetland would be required for activities with minor or less than minor effects and of temporary duration. The standard monitoring condition is required to be imposed for all new or existing nationally significant infrastructure, without appreciation of whether it is actually required or will be of any benefit. As the monitoring requirements are prescriptive in nature, they have the potential to result in the inefficient use of resources, as consent holders expend time and money unnecessarily (but comprehensively) monitoring water bodies. These resources could be better allocated to other activities that better promote the sustainable management of natural and physical resources.

- It is not clear how the monitoring would capture and relate to other activities (not subject to the pNESFW).

- The monitoring requirement applies for the duration of the consent for nationally significant infrastructure, and applies to the whole wetland (regardless of the extent the activity affects the wetland). Transpower is concerned that small-scale maintenance works on a single transmission structure adjacent to a wetland may require Transpower to monitor the condition of the entire wetland for the duration of the consent. The standard also does not take into account any existing monitoring of the wetland, or whether there are multiple activities in proximity to the wetland.
Regulation 6: Standard conditions for nationally significant infrastructure

As outlined above, Transpower has concerns as to the prescriptive nature of the monitoring requirements for nationally significant infrastructure, which requires the standard wetland monitoring condition to be imposed regardless of the nature or scale of the activity.

Transpower is also concerned about the mandatory and onerous requirement to offset to achieve a net gain in all circumstances. This may lead to an inefficient use of resources, particularly where an activity’s residual effects on a natural wetland are minor, less than minor or transitory/negligible. The requirement will require nationally significant infrastructure providers to expend significant resources quantifying and designing offsets for routine and necessary activities that have insignificant effects. Transpower considers that effects should reach a threshold of more than minor before offsetting becomes a mandatory requirement.

Regulation 7: Vegetation destruction – discretionary activities

Transpower routinely undertakes tree trimming/modification and sometimes removal, for the purpose of providing access tracks to its assets, and more importantly, to provide clearance between conductors and vegetation to ensure operational and safety requirements are met. This work is critical to the operational security of the National Grid lines, and the health and safety of members of the public. Vegetation that grows too close to live conductors must be trimmed to prevent flashovers from the lines, and access tracks must be kept clear of vegetation, mostly re-growth, to enable contractors to access the lines to carry out routine maintenance and repair lines in emergencies.

In addition to the earlier concerns raised about the lack of certainty as to what is a natural wetland, the primary concern with regulation 7 is the lack of clarity as to what constitutes “vegetation destruction”. While the pNESFW describes vegetation destruction as “destroying any significant indigenous vegetation”, it is unclear whether this includes trimming or modification where the vegetation remains alive and able to regrow, or is reserved for complete removal of the vegetation. Further, does the removal of one tree or plant trigger the regulation, regardless of size?

It is also unclear what constitutes “significant indigenous vegetation”, and whether this is based on the significance of the vegetation itself (for example, inclusion of threatened plant species), or the significance of the vegetation in terms of its quality and extent.

Transpower seeks certainty over the terminology used so that it is able to identify when it is subject to the regulations and needs to apply for consent.

Transpower notes that trimming, felling and removal of trees and vegetation is regulated under regulations 30 to 32 of the NESETA. The NESETA provides a permitted, controlled and restricted discretionary activity status for various trees works, with consent sought from the relevant district council. Transpower considers that the existing regulations provide a robust framework for its existing transmission infrastructure. Duplication of the controls within the pNESFW would result in a duplication of consents required, to a separate authority (regional council), which is arguably inefficient and unnecessary. As discussed above, Transpower considers the pNESFW should apply to Transpower’s new infrastructure, while its existing infrastructure remains subject to the NESETA. This pragmatic approach would reflect the technical, operational and locational requirements of the National Grid while providing an appropriate consenting framework for new infrastructure that enables control and discretion to be reserved over ecological effects (i.e. effects on Natural Wetlands).

As an example, Transpower obtained consent from Ruapehu District Council for vegetation works under the National Park to Retaruke (NPK-RTR) A line. Structures 0032-0040 and the access track to them are located in a wetland just to the west of the National Park substation, in the Erua Conservation Area land. Consent was required for vegetation trimming, felling and removal under the NESETA. This is an example where consent requirements would be duplicated by the pNESFW.
Regulation 9: Earth disturbance – meaning

Transpower supports the provision of a definition for earth disturbance. However, it does have concerns as to the lack of certainty within the definition. Specifically, there is no size or area threshold within the definition and therefore any of the listed activities could trigger the rule. Given the potentially wide application of the rule, such uncertainty is problematic and should be remedied.

Regulation 10: General earth disturbance – discretionary activity

Transpower has no position on the 10m setback within regulation 10. However, it does note the 10m setback requirement will depend on clear and accurate identification of the natural wetland and its boundary, which may not be known or clear. This uncertainty has cost and process implications for Transpower and may adversely affect its ability to operate and maintain the National Grid.

Proposed regulation 10(3) requires ‘resource consent granted for general earth disturbance must include at least the condition that the disturbance is limited to the minimum necessary to do the work’. Transpower understands the intention behind this standard, but has concerns as to the workability of the standard in that it is subjective and open to interpretation as to what is the minimum necessary in any given circumstances. Given the lack of certainty, the legal validity of this standard is questionable.

It is also unclear how the monitoring obligations required under proposed regulations 5 and 6 would apply to general earth disturbance in terms of the nature and duration of the monitoring required.

Regulation 12: Earth disturbance for drainage – discretionary activities

This standard is likely to impact on Transpower’s activities in relation to access tracks for maintenance and upgrading activities on existing National Grid assets. Earthworks for the purpose of land drainage is often required to facilitate access.

Transpower considers that proposed regulation 12(3) is uncertain on its face, will require significant investment by the consent holder to determine whether it applies, and is therefore unworkable. As with regulation 10, the primary issue with regulation 12 is the lack of clarity about when the regulation is triggered. In addition to lack of certainty about whether a site is a natural wetland, and how and where the 100m is calculated from, Transpower is concerned about how the 0.1m change in depth would be determined. In particular, it requires a user to know the natural wetland’s annual median water level and seasonal water level fluctuations (which, if not previously measured, will arguably require many years’ worth of data to ascertain). It is also difficult to ascertain on its face whether a proposal will cause changes that have a detrimental effect on the extent, ecological quality (type and diversity of aquatic plant and animal communities) or functioning of the natural wetland, and how far an applicant has to go to determine this. Standards need to be sufficiently certain, and be able to be objectively applied.

Regulation 15: Water take activities – meaning

Transpower considers that the definition of “Water take activities” needs to be amended to clarify whether it includes dewatering (discussed further below).

Regulation 16: Water take activities – discretionary activity

Regulation 16 is of potential limited relevance to Transpower in that it generally does not undertake water takes. However, regulation 16 will be of relevance to Transpower if dewatering is considered to be a water take. Transpower undertakes dewatering as part of its maintenance and upgrade activities, such as support structure foundation strengthening works in areas that have high water tables.

In addition to the lack of certainty as to what is a natural wetland and how the 0.1m change in water level would be determined, Transpower has the following further concerns with the draft regulation:
As this regulation applies to all natural wetlands, and all water takes (including temporary water takes) it will introduce an element of uncertainty, cost, process and programming issues from Transpower given the breadth of Transpower's activities across New Zealand.

It is unclear whether dewatering back into a natural wetland would trigger the regulation.

**Regulation 18:** Infilling bed of river

Regulation 18 is of potential relevance to Transpower in respect of the maintenance works it undertakes within a river or stream in the form of armouring or rip rap in order to provide support for existing National Grid support structures, as well as works to provide access to assets (such as temporary filling of dry river beds).

As an example, at the Stoke Substation Transpower is to install erosion protection measures given the proximity of the stream to the access way to the 220kV switchyard (Figure 2 below).

![Figure 2. Stream works at Stoke Substation](image)

A further example of instream works involve a tower on the ISL-KIK A line in the Clarence River. Transpower holds a region-wide consent from Environment Canterbury to "undertake maintenance and protection works in or on the banks and beds of rivers within the Canterbury Region". It allows for maintenance and protection works within 7.5m of the bed and banks of lakes/rivers. There are approximately 60 structures located in waterways in the Canterbury region that are covered by this consent. The consent authorises pole replacements, condition assessment inspections (using an excavator), tower foundation replacement, pile replacement, rock protection, access maintenance, temporary diversion of water and reinstatement. However, there are in stream works not covered by the global consent (as at the time of global consent the support structure was not within 7.5m of the river but was following a storm event) and rectification works required included placement of gabion baskets around the threatened legs of the tower. Refer Figure 2. Clarence River rectification works.
Transpower's specific concerns with proposed regulation 18 are:

- The term “infilling” is not defined and is therefore open to interpretation. Does it include rip rap, reclamation, armouring, or ford crossings? Is temporary filling captured?

- There is no relationship between the activity status and the scale of the activity, or regional context (such as for braided rivers).

- It requires that the condition of the river is monitored for the duration of the consent. This raises questions as to how much of the river must be monitored, and concerns that monitoring for the duration of the consent is onerous for small scale minor activities.

- As with regulation 6 above, Transpower is also concerned about the mandatory and onerous requirement to offset to achieve a no net loss in all circumstances. This may lead to an inefficient use of resources, particularly where an activity's residual effects on a natural wetland are minor, less than minor or transitory/negligible. The standard will require the expenditure of significant resources quantifying and designing offsets for routine and necessary activities that have insignificant effects. Transpower considers that effects should reach a threshold of more than minor before offsetting becomes a mandatory requirement.

- If the regulation is to be retained, Transpower seeks a definition for the term “infilling”, a cascade of activity statuses proportionate to effects, and reduced scope and timeframe for monitoring of the condition of the river.

20-24 Definitions for subpart 3, Culverts, Weirs, Dams, fords, and non-passive flap gates

Transpower is supportive of the provision of permitted activity regulations for culverts, weirs, dams, fords and non-passive flap gates. Culverts and weirs are routinely required for access proposes associated with the operation, maintenance and upgrade of the National Grid. The access tracks to National Grid lines cross 4,347 culverts, 593 fords and 985 bridges.

Notwithstanding Transpower's support for regulations 21 and 24, clarification is sought as to whether bridges are captured by the above regulations, and whether a culvert would be a “loss of stream” and therefore be subject to Policy 9 of the draft NPSFM (which requires that there is no further net loss of streams). If culverts are considered a “loss of stream” Transpower has concerns a discretionary activity consent sought under regulation 21(2) of the pNESFW would be difficult to obtain.

Transpower also considers that reference to the relevant rules in the regional plan in regulations 21(1)(a), 22(1)(a) and 23(2)(a) may be problematic. Transpower questions whether reference to
permitted activity standards for the activity in the relevant regional plan is more appropriate and workable.