
Submission by Transpower on Planning for Successful Cities – a Proposed National Policy Statement on Urban Development**1. Required information**

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Submitter type: Crown entity

Overall position: Support in Part

2. General Submission**The National Grid and Transpower's role**

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, and provides electricity to all major urban areas throughout the country. In this regard, the National Grid is not “development infrastructure,” nor does it “service” development.

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.

The National Grid provides a number of critical and essential functions across New Zealand. Society could not function, nor could we maintain or improve our standards of living, without a secure electricity system of which the National Grid is an essential part. Electricity underpins the economic growth and the economic goals of New Zealand. It enables social and community development, contributing actively to the lives of people in New Zealand. Without the National Grid, electricity that is generated at power stations throughout New Zealand could not reach distribution companies and power our homes, businesses, schools, communities or major industrial and rural users. This has been recognised by the Court:

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*"Electricity is a vital resource for New Zealand. There can be no sustainable management of natural and physical resources without energy, of which electricity is a major component."*¹

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.

Relationship between the Proposed NPS-UD and the NPSET

Transpower recognises the challenges facing urban areas throughout the country, and understands the need to provide for housing and urban development as a priority. Transpower supports the development of the Proposed National Policy Statement for Urban Development (the **NPS-UD**). Transpower's key concern relates to reconciling the Proposed NPS-UD with the National Policy Statement on Electricity Transmission 2008 (the **NPSET**).

The NPSET was developed under the Resource Management Act 1991 and recognises the importance of the National Grid, both as an asset in its own right and also in terms of the role that it plays in the functioning of the country. The NPSET, along with the Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 (**NESETA**), formalises the national significance of Transpower's infrastructure – something that is not shared by other utilities or infrastructure operators. These documents also mandate particular provisions dealing with the protection and promotion of Transpower's current and future infrastructure (as well as imposing constraints or consent requirements that do not apply to other utilities and infrastructure operators).

The NPSET recognises that the efficient transmission of electricity on the National Grid has special characteristics, including:

- technical, operational and security requirements which can limit the extent to which it is feasible to avoid or mitigate all adverse environmental effects, with some effects potentially being significant;
- the fact the operation, maintenance, upgrade and development of the National Grid can be significantly constrained by the adverse environmental impacts of third party activities and development; and
- the adverse environmental effects of the National Grid are often local – while the benefits extend beyond the local to the regional and national – making it important that those exercising powers under the Act balance local, regional and national environmental effects, including beneficial effects.

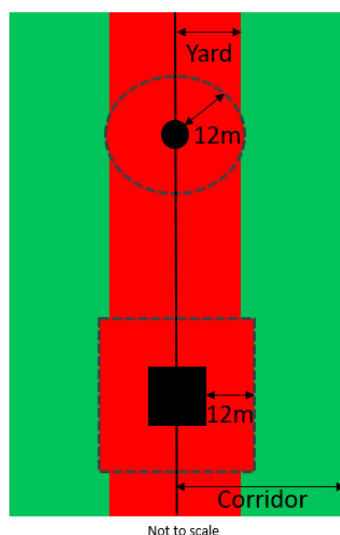
Transpower relies on the NPSET to ensure that regional policy statements and district and regional plans adequately provide for and protect the National Grid. It is crucial that the NPS-UD does not dilute the effectiveness of the NPSET and/or threaten the security of the National Grid. In particular, the NPSET requires local authorities to consult with Transpower to identify an appropriate buffer corridor within which it can be expected that sensitive activities will generally not be provided for in plans and/or given resource consent.

The buffer corridor rules that have been included in district plans restrict sensitive activities (such as dwellings, hospitals, and schools), and generally restrict industrial and commercial

¹ *Genesis Power Ltd v Franklin District Council* (2005) 12 ELRNZ 71; [2005] NZRMA 541 (ENC)

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buildings² within 12m of the centreline of a line³, and within 12m of the outer edge of the support structure. The image below depicts the area where development should be restricted. The conductors (wires) swing out beyond the 12m area, potentially out as far as 37m either side of the centreline. The district plan rules provide that development can occur in this wider area, provided maintains safe separation from the conductors, and access to the structures is not prevented.



LEGEND

- Centreline
- Pole
- Tower

The buffer corridors required by the NPSET are necessary to protect the National Grid from reverse sensitivity and direct effects, and to ensure that operation, maintenance and development of the lines is not compromised, with the consequential effect of the lines and community are not being subject to safety risks.

Before NPSET-corridors, development occurred under and around lines in an unconstrained manner (and has occurred until corridor rules have taken legal effect in district plans, a process which is about 70% complete). The photograph below shows development that has occurred under and near the line – creating issues for even the simplest maintenance activity.

² There are some exceptions for commercial and industrial activities, where a line is already compromised.

³ Many district plans refer to this area as a "Yard" or "National Grid Yard."

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Photo 1: house and garage in very close proximity to National Grid structure, and fence through the structure.

Some extremely unsafe situations have occurred – for both industrial and residential development. Crane booms have come into contact with the conductors (wires) of a line in a number of instances, as have mobile plant, which is extremely dangerous and crane. Serious injuries have been sustained by the operators of the mobile plant and cranes.

There have also been examples where Transpower has had to intervene during the building of a dwelling and stop the work. Transpower was very concerned about the construction risks associated with the property shown in photo 2 below – that scaffolding equipment and contractors could encroach into the safe separation distances from electricity lines. WorkSafe issued a construction prohibition notice. Work had to stop until design changes and construction mitigation measures were taken (for example a cover was placed above the scaffolding to reduce the risk of construction material contacting the conductors).

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Photo 2: *Reduced clearances during construction*

The scenario in photo 2, and the associated risks, would not occur now, as there are corridor rules in the relevant district plan.

The corridor rules will impact on infill-subdivision potential, and yield, particularly if development is not properly planned taking into account any National Grid lines. For example, photo 3 shows a lot with apparent infill subdivision potential. There are many lots of this kind around the country. The NPSET-corridor is shown by the red hatching - subdividing the lot at the rear to allow a second single storey dwelling should be prevented by the rules. Other options remain available – such as removing the existing dwelling and replacing it with multi-unit dwellings with the NPSET corridor remaining clear.

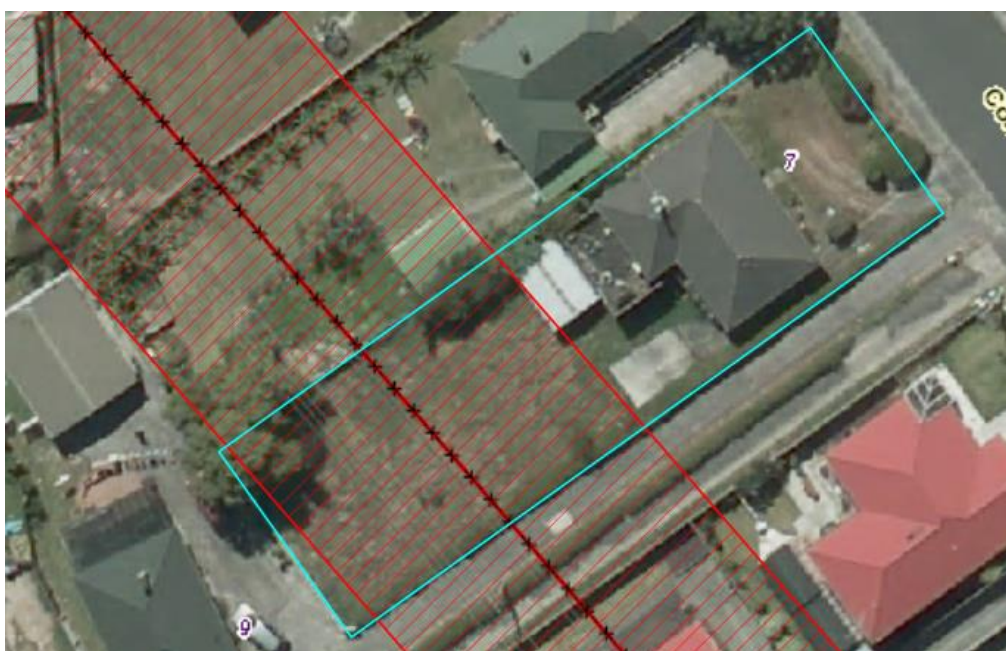


Photo 3: *infill subdivision contrary to the NPSET-corridor*

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Transpower recognises that its assets, and the NPSET mandated corridors, are a constraint on existing and future development. However, this constraint is necessary in order to protect Transpower's nationally significant infrastructure - ensuring that the lights are kept on for homes, businesses, industries, schools, hospitals, and communities. These constraints need to be recognised in any areas where urban development is proposed around the National Grid. If Transpower's buffer corridors are not recognised as a constraint then the stated "development capacity" will be inaccurate and the development potential from the relevant zones will not be able to be achieved.

Transpower considers that with minor amendments to the policies in the NPS-UD, the NPS-UD will provide enough direction to local authorities and other decision-makers under the RMA about how the NPSET and NPS-UD are to be reconciled. In particular, Transpower seeks a directive policy that National Grid corridors are to be maintained, rather than revisited, when undertaking urban development.

Structure of Transpower's submission

Transpower has provided answers to the questions in the discussion document on the basis that the questions and answers may be analysed and assessed by different members of the Ministry for the Environment team.

Therefore Transpower has repeated a number of points throughout its submission so those reading and analysing the individual questions have a good understanding of Transpower's interests in the Proposed NPS-UD and the implications for the National Grid.

Your submission to Planning for successful cities - a proposed National Policy Statement on Urban Development

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Reference no: 155

Submitter Type: Infrastructure provider

Overall Position: Support in part

Clause

Question 1. Do you support a national policy statement on urban development that aims to deliver quality urban environments and make room for growth? Why/Why not?

Position

Somewhat

Notes

Transpower supports the National Policy Statement on Urban Development (NPS-UD), subject to addressing its concerns raised in this submission. Transpower understands the need for housing and that enabling urban development is one of the Government's priorities. Transpower also understands the need for local authorities to make good planning decisions to ensure that urban growth is provided for. The NPS-UD needs to recognise that existing and proposed national significantly infrastructure is a constraint on the land available for such development. Transpower's general submission - explaining who Transpower is, issues arising from urban development occurring under transmission lines, and the protection from development afforded by the National Policy Statement on Electricity Transmission (NPSET) is attached.

Clause

Question 3. Do you support the proposed changes to FDSs overall? If not, what would you suggest doing differently?

Position

Somewhat

Notes

Transpower supports the statements recognising the importance of integration with infrastructure (as reflected in the summary of proposal and rationale and O1a)). However, the following further amendments are required to ensure this recognition is incorporated into the relevant policies:

- P1C - the proposed policy provides FDS must only "consider other national direction" (emphasis added). This is not a strong enough direction. FDSs should be required to give effect to other National Policy Statements. If FDSs do not reflect the constraints arising from other National Policy Statements then the purported development capacity will be inaccurate. For example, the National Policy Statement on Electricity Transmission 2008 (the NPSET) requires local authorities to consult with Transpower to identify an appropriate buffer corridor within which it can be expected that sensitive activities will generally not be provided for in plans and/or given resource consent. To assist local authorities to identify these corridors, they may request that Transpower provide them with its medium to long-term plans for the alteration or upgrading of each affected section of the National Grid (so as to facilitate the long-term strategic planning of the Grid). If these buffer corridors are included as part of the land available for residential development and development capacity, then there will be a disconnect between the FDS and district plans.
- P1D - this policy sets out what an FDS must identify, including future infrastructure corridors/locations. However, there is no requirement to identify existing infrastructure including associated corridors/locations. For example, the National Grid transmission lines are a physical constraint on urban development, and the associated buffer corridors protect these transmission lines. It is important that existing infrastructure including corridors/locations are also identified given they are areas where urban development must be avoided. Transpower assumes the existence of "buffer corridors" are "evidence" showing urban development must be avoided in these areas. However, it would assist if this was made clear in the NPS-UD by adding the following to P1D(a): "areas where evidence shows urban development must be avoided, including within existing infrastructure corridors."
- P1E - this policy sets out who must be consulted during the development of a FDS in major urban centres including "central government agencies". Transpower considers the list should be expanded to include nationally significant infrastructure providers so it is clear entities such as Transpower must be consulted with. This change will benefit local authorities by ensuring the FDSs reflect National Grid constraints, and also future work Transpower may be undertaking.

Clause

Question 4. Do you support the proposed approach of the NPS-UD providing national level direction about the features of a quality urban environment? Why/why not?

Position

Somewhat

Notes

Transpower supports the features listed, except suggests an additional feature should be to: "protect nationally significant infrastructure to enable it to be used efficiently." If Transpower cannot fully utilise its existing assets because they are adversely affected by new urban development (for example, not protected from new residential buildings under the transmission lines) then

Transpower will need to develop new National Grid infrastructure. This is not an efficient or cost-effective use of existing resources.

Clause

What impacts do you think the draft objectives O2-O3 and policies P2A-P2B will have on decision-making (see discussion document, page 26)?

Notes

From Transpower's perspective draft objective O3 is supported as it arguably reinforces maintaining existing buffer corridors for National Grid infrastructure. Draft policy P2B will impact decision-making by also focusing on the costs of urban development. This would include consideration of the costs of developing in close proximity to National Grid assets.

Clause

Question 7. Do you support proposals requiring objectives, policies, rules, and assessment criteria to enable the development anticipated by the zone description? Why/why not?

Position

Somewhat

Notes

Transpower supports the requirement for plan provisions to enable development anticipated by the zone description. This assumes that both the FDS and the relevant plan provisions have recognised the National Grid buffer corridors as a constraint on urban development. Transpower considers that the NPSET corridors need to be recognised in the NPS-UD as an existing constraint. Otherwise there is a risk that the rules protecting the National Grid could be changed in order to give effect to Policy P5C of the NPS-UD. This would be inappropriate, and contrary to the direction in Policies 10 and 11 of the NPSET. Transpower also considers this risk supports Transpower's submission in relation to Policy P1E above, seeking that the list in the Policy is expanded so it is clear Transpower must be consulted with when developing a FDS.

Clause

Question 8. Do you support policies to enable intensification in the locations where its benefits can best be achieved? Why/why not? (for more detail on the timing for these policies see discussion document, page 53)

Position

Somewhat

Notes

Transpower considers option 2 of draft P6C is preferable because there is an exception for "where evidence demonstrates intensification should not be enabled". This reference supports district plans recognising other constraints such as buffer corridors for the National Grid.

Clause

Are the criteria sufficiently robust to manage environmental effects to ensure a quality urban environment, while providing for this type of development? (see example policy in discussion document, page 37)

Notes

The example policy under this heading lists a number of criteria and if these apply it means urban development must be provided for. Transpower supports the inclusion of reference to "reverse sensitivities are appropriately managed" (as this phrase allows decision makers to give effect to Policy 10 of the NPSET which requires that reverse sensitivity effects on the National Grid are avoided). However, the example policy is silent in relation to existing infrastructure. An additional criterion should be added to provide that "Development enabled by the plan change is not proposed within buffer corridors for infrastructure and would not otherwise adversely affect the operation, maintenance, or upgrade of existing infrastructure, or plans for new nationally significant infrastructure". The example policy is very directive in providing that local authorities "must provide for urban development" if the criteria are satisfied. Therefore it would be prudent for the example policy to reference other national direction by stating: "Development enabled by the plan change gives effect to, and is not otherwise inconsistent with, other national policy statements". Otherwise there is a risk decision makers will consider the very directive example policy trumps other national policy directions.

Clause

Question 11. Do you think that central government should consider more directive intervention in local authority plans?

Notes

Transpower has no comments on the substance, or benefits of any more directive intervention in local authority plans. However, in the event this occurs this would need to address and/or resolve tensions in relation to existing and recognised constraints on urban development such as buffer corridors mandated by the NPSET.

Clause

Which rules (or types of rules) are unnecessarily constraining urban development?

Notes

Transpower acknowledges that rules in local authority plans relating to National Grid infrastructure have the effect of constraining urban development. These rules give effect to the NPSET. They are necessary to protect the National Grid from effects of third party activities, and to protect third parties from effects from the National Grid. These rules do not unnecessarily constrain urban development - they are essential.

Clause

Should a minimum level of development for an individual site be provided across urban areas (for example, making up to three storeys of development a permitted activity across all residential zones)?

Notes

Transpower considers a blanket rule as proposed would not give effect to the NPSET, unless this blanket rule is subject to rules protecting the National Grid. It is important that National Grid infrastructure is protected from third party activities, such as under-build (i.e. building directly under the transmission line wires). Despite the NPSET being gazetted in 2008, under-build and inappropriate development continues to occur under and around National Grid assets, where rules have not taken legal effect. This should not be encouraged by the NPS-UD - instead, the NPS-UD should include a directive policy that National Grid corridors are to be maintained, rather than revisited, when undertaking urban development.

Clause

Question 14. Do you support amendments to existing NPS-UDC 2016 policies to include working with providers of development and other infrastructure, and local authorities cooperating to work with iwi/hapū?

Notes

O10 and related policies refer to “other infrastructure”. The definition includes “energy”. Transpower considers this needs to be more specific and should include the following energy related infrastructure, as generally provided for under the RMA: • pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy; • facilities for the generation of electricity, lines (including support structures) and facilities used or intended to be used to convey electricity. Transpower considers that the focus on infrastructure “providers” in the rationale and P10B(a) may narrow the focus to infrastructure operators who are servicing or providing infrastructure directly for the growth area. Transpower considers that this term should be broadened to “infrastructure operators/owners” so as to ensure there is also integration with nationally significant infrastructure that traverses or is adjacent to the growth areas. P10B(a) should also be amended to recognise land use needs to be integrated with existing infrastructure, in addition to infrastructure planning.

Clause

Question 16. What kind of guidance or support do you think would help with the successful implementation of the proposed NPS-UD?

Notes

Transpower considers that guidance is always helpful when interpreting and implementing NPSs but acknowledges its limits, and its weight (particularly in plan making processes). Transpower prefers that the NPS-UD addresses its concerns with amendments to key policies in the NPS-UD, rather than in guidance materials. The intention of the NPS-UD, and how it should be interpreted, should be clear on its face where possible.

Clause

Question 17. Do you think there are potential areas of tension or confusion between any of these proposals and other national direction? If so, please identify these areas below and include any suggestions you have for addressing these issues.

Position

Yes

Notes

Planning and developing an enduring National Grid requires prudent investment, long term transmission planning strategies such as corridors and national policy support, and the application of new technologies. These factors, combined, ensure the most can be made out of the existing infrastructure. This, in turn, ensures long-term, durable outcomes for the National Grid for New Zealand. Transpower's asset strategy for its transmission line fleet is that all lines have a perpetual life. Some of Transpower lines are more than 85 years old. However, with ongoing repair and maintenance, it is planned that existing tower structures will have an enduring life, with future conductor replacements utilising the same structures where structurally capable. In terms of planning strategies, Transpower relies on the NPSET to ensure that regional policy statements and district and regional plans adequately provide for and protect the National Grid. It is crucial that the NPS-UD does not dilute the effectiveness of the NPSET and/or encourage activities that could threaten the security of the National Grid. Transpower's key concerns therefore relate to reconciling the NPS-UD with the NPSET. The objective of the NPSET is to recognise the national significance of the electricity transmission network by facilitating the operation, maintenance and upgrade of the existing transmission network and the establishment of new transmission resources to meet the needs of present and future generations, while: (a) managing the adverse environmental effects of the network; and (b) managing the adverse effects of other activities on the network. Policies 1 and 2 require decision-makers to recognise and provide for the national, regional and local benefits of sustainable, secure and efficient electricity transmission, and to recognise and provide for the effective operation, maintenance, upgrading and development of the electricity transmission network. The draft NPS-UD provides no recognition of the NPSET or guidance on reconciling respective NPSs. The rationale on page 21 of the discussion document refers to areas where urban development should be avoided, but there is no stated intention that existing infrastructure, particularly nationally significant infrastructure such as the National Grid, should be avoided. In fact, the NPS-UD discussion document (including section 10 which relates to alignment with other national direction under the RMA) makes no reference to the NPSET. As a result, the NPS-UD does not give any guidance on how potential tensions or conflicts between these NPSs are to be managed. While Transpower accepts that the national direction discussed in section 10 of the discussion document is not exhaustive, and the document acknowledges that “at a local level there will always be trade-offs”, Transpower is concerned that there may be conflicts that cannot be resolved between the two NPSs. Transpower considers that the NPS-UD should ensure it clearly sets out the relationship between these two higher order policy documents in order to remove the potential for confusion or tension during local level decision-making. Transpower considers that there is a real risk that there will be confusion or tension during local level decision-making as decision-makers attempt to reconcile the two NPSs. This is because of the necessary constraints National Grid infrastructure currently imposes on existing and future development. In particular, and as noted above, the NPSET requires local

authorities to consult with Transpower to identify an appropriate buffer corridor within which it can be expected that sensitive activities will generally not be provided for in plans and/or given resource consent. To assist local authorities to identify these corridors, they may request that Transpower provide them with its medium to long-term plans for the alteration or upgrading of each affected section of the National Grid (so as to facilitate the long-term strategic planning of the Grid). Transpower's assets are located in many urban areas, including Auckland, Tauranga, Hamilton, Christchurch and Queenstown. Transpower has been heavily involved in over more than 80 plan changes/reviews since its notification in the Gazette of the NPSET to ensure that there are sufficient corridors to protect its assets. Transpower recognises that its assets, and the NPSET mandated corridors, are a constraint on existing and future development. However, this constraint is necessary in order to protect Transpower's nationally significant infrastructure - ensuring that the lights are kept on for homes, businesses, industries, schools, hospitals, and communities. Transpower has expended significant resources actively participating in district and regional plan making processes (including in Environment and High Court appeals) to demonstrate the risks to and from transmission infrastructure, and why the constraints on development are justifiable. Transpower is concerned that without amendments to the NPS-UD to clarify the relationship between it and the NPSET, Transpower will have to re-litigate the extent of its corridors and restrictions to give effect to the NPSET. Transpower considers that with minor amendments to the policies in the NPS-UD, the NPS-UD will provide enough direction to local authorities and other decision-makers under the RMA about how the NPSET and NPS-UD are to be reconciled. In particular, Transpower seeks a directive policy that National Grid corridors are to be maintained, rather than revisited, when undertaking urban development. Note that Transpower's general submission, attached, provides further informaiton about resolving the relationship between the NPSET and the proposed NPS-UD.

Clause

Question 18. Do you think a national planning standard is needed to support the consistent implementation of proposals in this document? If so, please state which specific provisions you think could be delivered effectively using a national planning standard?

Position

Yes

Notes

As an alternative to the NPS-UD including a directive policy described in response to Question 17 above, Transpower would support NPSET corridors being included in the national planning standards. Transpower notes that it has taken a relatively consistent approach to National Grid corridors since 2012, seeking a 12m National Grid Yard (land use restriction) and a 37m National Grid Subdivision Corridor either side of its transmission lines, with related rules to allow compatible land use activities (e.g. roading, greenspace, and carparking) but to restrain other incompatible ones (e.g. dwellings, buildings and commercial activities). The variation in the wording of these rules by district/region is largely a result of bespoke plan making under the RMA.

Clause

Unless you select one of the options below, the Ministry will consider that you have agreed to have your submission and your name posted on its website.

Notes

Transpower is comfortable with its submission being made public.

You have elected to withhold your personal details from publication.

Supporting documents from your Submission

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