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Ministry for the Environment
By email: etsconsultation@mfe.govt.nz

A Better ETS for Forestry: Proposed amendments to the Climate Change Response Act 2002

Transpower welcomes the opportunity to submit to the discussion paper *A Better ETS for Forestry*, being jointly consulted by Ministry for the Environment and Te Uru Rākau.

Transpower and the National Grid and key submission points

Transpower is the State-Owned Enterprise that plans, builds, maintains, owns and operates New Zealand's National Grid, the high voltage transmission network. The network transports electricity from generators to distribution companies and industrial consumers, supplying electricity 24/7 throughout New Zealand.

The *National Policy Statement on Electricity Transmission* and the *Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009* confirm the national significance and critical importance of the National Grid.

Our submission requests that there is a mechanism in the ETS to ensure safe separation distances between National Grid transmission lines and existing and future ETS forests, particularly permanent forests. In summary:

- Trees too close to transmission lines create risks to safety, supply reliability, and assets; we would like to engage with landowners/forest owners on appropriate setback distances before new planting (or before replanting following harvest)
- Tree felling to manage the risks above can create a liability under the ETS; we would like tree felling near transmission lines to be considered "best practice forest management" (BPFM),[1] not deforestation, to remove the ETS liability
- We support the proposal for developing Crown-funded maps of ETS forest.

Trees and transmission lines: future and existing forest placement

Planting and growing trees near transmission lines creates risks to:

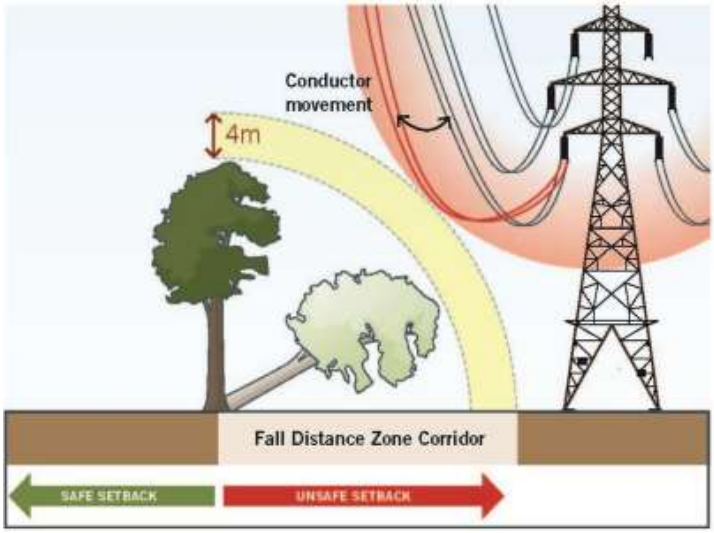
- public (and worker) safety, through exposure to hazardous voltages created around trees that contact or are in close proximity to lines
- reliability of supply (loss of supply through trees falling on lines, or flashover),[2] and
- assets, trees, private property, and human and animal life caused by vegetation creating flashovers and subsequently catching fire.

Before a forest is planted near a transmission lines we consider it essential that Transpower is able to advise on a *safe setback* of the trees from the transmission line. A safe setback is

[1] Section 179A of the Climate Change Response Act 2002
[2] Flashover: if trees touch high voltage conductors (or wires), or electricity "jumps" the gap to a tree, then a major electrical discharge may occur to the tree.

the distance from a transmission line that trees can grow without any risk of coming into contact with, or getting too close to, the transmission line. The area where trees could fall onto or too close to the lines is the Fall Distance Zone (FDZ). Figure 1 below shows safe and unsafe setback distances[3].

Figure 1 Safe and unsafe setback areas from transmission lines and the Fall Distance Corridor Zone



Tree management is governed by the *Electricity (Hazards from Trees) Regulations 2003* (Tree Regulations). However, the Tree Regulations do not control where trees are planted and only apply when trees create a risk of electrical contact by growing into the 4m zone shown in Figure 1.[4] As the Tree Regulations do not prevent trees from being planted in the FDZ, they do not provide for safe separation distances between mature trees and transmission lines.

Because there is no regulation of where trees are planted, we must constantly monitor all transmission lines to check whether there are trees that will encroach the electrically safe separation distance. When, through monitoring, we consider trees need to be felled to manage the risk of electrical contact, those clearances can trigger an ETS liability.

In our view, there needs to be a mechanism to require landowners/forest owners to consult with Transpower before trees are planted in areas with transmission assets, so that we can advise on appropriate setbacks. We are committed to working openly and honestly with landowners and occupiers. Our Landowner Relations team is dedicated to understanding concerns and seeking solutions for issues arising from our assets on others' land.

For existing forests, we have already raised with the Ministry for Primary Industries that we consider tree clearances (or increasing setbacks following harvesting) for safe separation distances should be considered BPFM, not deforestation, so they do not trigger an ETS liability. The risk of liability can be a barrier to landowners/forest owners agreeing to clearances when we need to increase the distance between the trees and our lines for risk management. We look forward to continuing dialogue with the Ministry on this issue.

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[3] The 4m in Figure 1 is the "Growth Limit Zone" from the Tree Regulations, and prevents flashovers.

[4] Apart from trees identified as an imminent hazard, which can include trees in the Fall Distance Zone. Electrical contact includes trees touching wires and flashovers, where there is no physical contact.

Publicly available maps of ETS land classification

We support Crown investment to develop publicly available maps of existing and future ETS forest. Maps would enable us to see where current and future ETS forest is in relation to our assets and support discussions with landowners/forest owners on safe separation distances.

If you would like to discuss any points in our submission, please contact Sarah McLean 04 590 7062.[5]

Yours sincerely

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