



Flying your Drone near Transpower's Network

Please read this important information about how to safely use drones around Transpower's transmission lines and substations.

If you have any questions, please contact drones@transpower.co.nz

Flying drones near power lines can be dangerous.

The electromagnetic fields around high voltage electricity can affect the drone's ability to navigate using GPS. This can cause serious issues including crashing into the transmission assets, other obstacles, the ground, or even people. The wires of transmission lines can also be hard to see and hard to judge their distance away relative to your drone.

In addition to public safety risks, your drone could also cause a flashover, destroying your drone and resulting in a power outage.

Safe flying around Transmission Lines or Substations

Always comply with CAA Rules Part 101 for any drone flights you undertake.

Flying near transmission lines

It is safest to stay well clear of all power lines, regardless of their voltage. However, if you need to fly nearby, make sure you identify them correctly.

If you need to identify Transpower's HV transmission lines, maps and GIS files of all Transpower assets are available on our website at <https://www.transpower.co.nz/our-work/maps-and-gis-data>. The Aeronautical Information Publication NZ AIP and NZ Visual Navigation Charts (VNC) also show Transpower's lines.

If the power lines you plan to fly near are not Transpower's, please contact your local electricity distribution company to discuss their requirements.

If you have identified a transmission line, where can you fly?

Distance from transmission lines	Restrictions on flying?
<4m	No drone flying
4-12m	Restricted to Transpower's service providers, who need to meet strict requirements around their drone specifications and pilot qualifications
12-25m or above the lines	Get in touch with us via drones@transpower.co.nz to discuss your planned flight. You can save time by filling out the form External Application for Drone Use Near Transpower Assets and sending this through to us. This will include a flight plan, as discussed below.
25m+ and not crossing above	You're good to go, but please get in touch if you have any questions or concerns

Flying near a substation

Please get in touch via drones@transpower.co.nz if you plan to fly within 25m horizontally of one of Transpower's substations.

Flight planning tips

- Make sure you scope out the whole area and plan your take off, landing and flight path locations prior to flying.
- Avoid flying over the top of transmission lines if possible, and if doing so, ensure you are high enough and minimise the time above. It is safest to cross the lines near to the support structures where it is easier gauge your clearance and the wires are less able to move.
- Identify all other hazards in the area.
- If your drone has a return to home function, ensure this is not configured such that it would fly into the lines on its way home.