



# Television Reception

## Our commitment

Pacific Hydro understands the importance of good access to television services - particularly in regional areas and during emergencies.

As a wind farm owner committed to community investment, Pacific Hydro provides a television re-transmission service for the township of Taralga as a community enhancement.

## Background

Prior to the construction of Taralga Wind Farm, many residents in Taralga received fortuitous signal from the Knight's Hill Broadcast Site, which is located some 85kms away.

When the wind farm was commissioned in 2014, in response to community concerns about possible impacts on this weak and distant signal, the wind farm owner of the day provided residents in Taralga with access to the VAST satellite television service. Subsequently, the Taralga television re-transmitter was commissioned in early November 2015 as a more durable solution that does not require VAST boxes.

Some residents chose to keep their VAST boxes as a backup - these are no longer the responsibility of Pacific Hydro.

Since commissioning of the re-transmitter, occasional outages have occurred due to factors outside Pacific Hydro's control, such as loss of power supply, or interference to the signal coming from Knight's Hill.

Each time, Pacific Hydro has investigated these outages, and a number of changes have been made to improve the reliability of the service, including backup batteries and a generator, and a store of spare parts held onsite at the wind farm.



The Taralga wind farm re-transmitter receives a distant, fortuitous signal from Knight's Hill in the Illawarra area (85km away) for all free-to-air channels. The Taralga Wind Farm re-transmitter then re-broadcasts these channels to a small area, including most of Taralga township.

## What has Pacific Hydro done to address faults with the TV re-transmitter?

Pacific Hydro has upgraded and improved our equipment to increase its reliability; and we continue to monitor the service to ensure it is performing correctly.

In 2018 a new back-up power generator was installed, together with a back-up battery. This can provide approximately 24 hours of electricity to the re-transmitter, in the event of a power interruption. The re-transmitter is also now able to reset itself automatically when mains electricity is restored.

New cable joining equipment, duplicate antenna equipment, and a spare TV 'translator' unit have also been purchased and are kept as spares at the wind farm.

Other than faults with the equipment at the TV re-transmitter itself, outages are beyond Pacific Hydro's control.

## Why can't Pacific Hydro resolve signal issues from Knight's Hill?

The main signal from Knight's Hill was never designed to provide broadcast television services to Taralga. Our ability to receive and share this distant signal is due to 'fortuitous' reception.

Despite our best efforts to ensure our equipment is as reliable as possible, the main signal from

Knight's Hill can be affected by atmospheric conditions, electrical storms, and signals from other television broadcast locations on similar frequencies - which can occasionally travel long distances and cause interference in the local area. These are outside of Pacific Hydro's control.

## Known problems and solutions

Problem	Description	Result/what we have done
Local electricity network faults	Outages on the Essential Energy network (planned and unplanned)	Installed a back-up generator that starts automatically when power outage is detected. Installed back-up batteries that keep the re-transmitter online between loss of mains power and start of generator.
Weather between Wollongong and Taralga	When weather conditions affect TV signal	No signal available or received by our equipment due to weather and distance from main signal. Outside of Pacific Hydro's control.
Failure of TV re-transmitter equipment	When some or all of our equipment stops working	Additional spare parts for all key components have been purchased and are now kept at the wind farm site office to enable prompt repair.
No notice when there is an outage, issue, or failure	Previously no way for Pacific Hydro staff to instantly know there is a fault or an issue	A computer alert system has been fitted and tested. When outages or issues are detected on the equipment, the system automatically alerts Pacific Hydro staff with an alert email instantly cueing a prompt repair.

## In the event of an outage to TV signal

- Re-scan your television (setting available through the television's menu)
- Contact Pacific Hydro on 1800 730 734 (call back service) or email [enquiries@pacifichydro.com.au](mailto:enquiries@pacifichydro.com.au) for assistance or more information.