WATCH your power lines for vegetation encroachment using satellites

Vegetation encroachment on power lines leads to numerous line outages and wildfires every year. Utilities have developed a variety of ways to identify potential problem spots, including ground surveys, aerial reconnaissance in fixed-wing aircraft and helicopters, reports from customers, and databases of past clearing activities. These methods are labor intensive and come at a high cost.

What is the benefit?
By harnessing the power of geographic information systems and state-of-the-science satellite imagery, we can quickly and effectively evaluate thousands of miles of power lines. Armed with this system-wide information, utilities can prioritize locations for field surveys and corrective actions. Our targeted approach allows frequent audits, and provides you with another tool to focus efforts and subsequently document the effectiveness of clearance activities. This is WireWATCH™.

How does it work?
We use vegetative indices derived from satellite images to identify areas of heavy vegetation biomass within utility corridors. Our team of specialists has developed the tools to efficiently process vast quantities of this information and display it in an easy-to-use web portal for our clients to access at any time. The best part about WireWATCH™ is that it is dynamic—the data updates as frequently as every few days depending on the priorities of the user.
In 2018, Stantec was hired by Aurora Energy in Dunedin, New Zealand to evaluate over 2500 miles of powerlines throughout their territory. Not only did our team quickly complete the work, but the final deliverable included an interface that allows the client to adaptively prioritize field work on the areas that need it most.

The value of WireWATCH™

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Benefits of WireWATCH™

- Single portal that provides access to the entire system in an easy to use dashboard
- Guides field deployment to highest priority locations
- Allows regular updates to the data so vegetation managers can audit and report on field activities
- Reduces time in the field, thus lowering cost and safety risk

When can WireWATCH™ be used?

- Transmission Line Network Evaluations
- Distribution Line Network Evaluations
- Annual Planning
- Auditing of Work Areas