

Media Release



25 January 2018

Drones take flight to inspect power network

A growing fleet of orange drones will soar across rural and regional NSW in 2018 eyeing the tops of power poles, zone substations and other large electrical assets across Essential Energy's vast network.

General Manager Network Services, Luke Jenner, said the drones would provide a new network perspective for Essential Energy while delivering business-wide benefits.

"We are operating within a rapidly evolving energy industry and have added this new technology to our business as part of our continued focus on best practice systems," Luke said.

"The drones – or Unmanned Aerial Vehicles (UAVs) – are enabling our workforce with mobile solutions that enhance safety, drive efficiency and productivity."

Essential Energy is a licensed CASA operator with 15 drones currently in operation in Armidale, Bega, Coffs Harbour, Dubbo, the Hastings, Tamworth, Tumut, Tweed Heads and Wagga Wagga. The fleet is expected to increase to 35 by mid-2018.

"Successful trials have shown the value drones add by putting employee safety at the forefront, delivering productivity outcomes and returning vital data on the condition of network assets," Luke said.

Essential Energy undertakes both ground-based and aerial inspections of its network as part of its extensive maintenance program. The new technology will complement this program and reduce the need for inspectors to use elevated work platforms and climbing techniques to access poles or towers in areas that were often inaccessible for vehicles or equipment.

"Not only can the condition of network assets now be assessed in a safer manner, but drone technology is dramatically reducing the time needed to complete inspections of some of our critical sub transmission network," Luke said.

"For example, it would usually take inspectors around 10 hours, on foot, to complete the inspection of nine 66kV towers in a notoriously mountainous terrain in Burrinjuck yet a drone recently completed the same task within two hours without the need for great physical effort.

"The drones also provide a snapshot of the internal condition of power poles and equipment using thermal imaging."

Essential Energy is using the images and video produced by the drones, together with computer-aided design programs, to create three dimensional models of large assets.

Approximately 20 employees have been trained as drone operators to date.

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**Suggested
Caption:** An
Essential
Energy drone
hovers near
the electricity
network
capturing pole
top images.

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