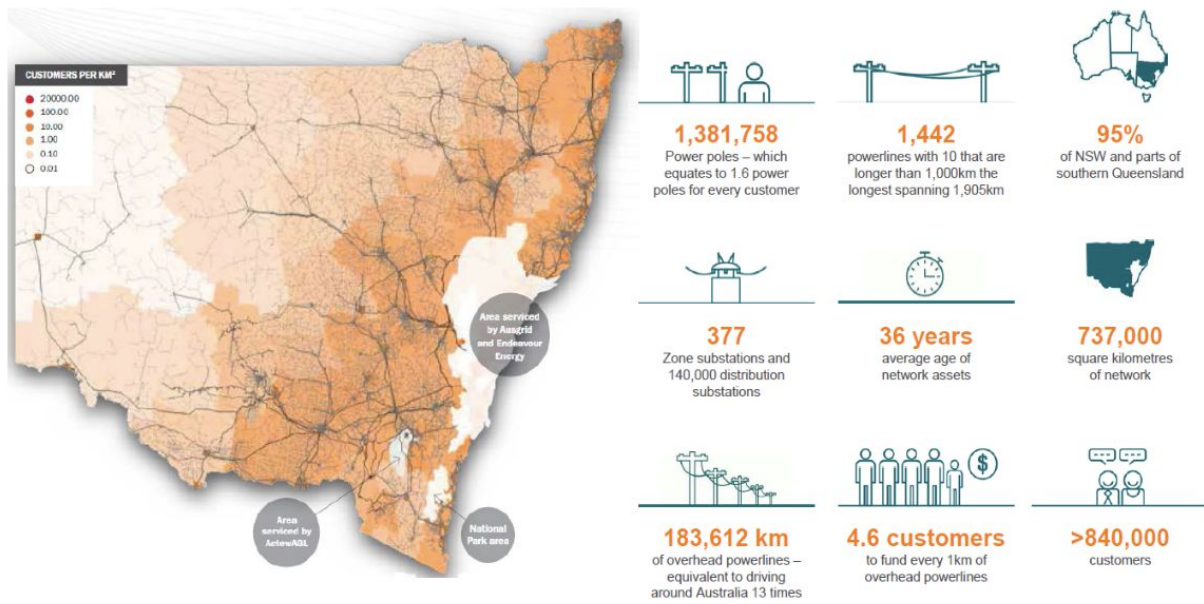


White Paper on use of Power Line Markers for Civil/Construction Project Near Casino, NSW, Australia

Essential Energy is one of Australia's largest electricity distribution networks.



<<Essential Energy footprint>>

Essential Energy are constantly advocating safety and awareness programs, to support a reduction of incidents on their network.



<<Example of an Essential Energy public awareness campaign>>

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Essential Energy were consulted to discuss site safety for a civil and construction project which was to be undertaken along the section of the Bruxner Highway, at Tabulam (located between Casino and Tenterfield in NSW Australia). The Project was to replace the existing wooden bridge with a new concrete construction. Essential Energy was approached by the project sub-contractors, as they identified concerns with the existing overhead power lines which are in very close proximity to the entire worksite. The installation of ROTAMARKA™s was one of the primary controls identified in discussions and once fitted, provided an immediate visual awareness of the present dangers, caused by the power lines at the site.

A separate scope of works including the widening of an adjacent section of highway was also earmarked within the vicinity of the bridge project. The Transport NSW project supervisor responsible for the site had seen the effectiveness of the existing ROTAMARKA™s installed for the bridge worksite and requested more markers to be installed along the section for the road and earthworks.

The installation of the markers for the project has been highly effective for site safety, with machinery operators being complimentary on the ability of the markers to continue to keep safety front of mind, due to the constant colour changes present when they spin. Project supervisors have been satisfied with the role the ROTAMARKA™ has played as a crucial element of site safety employed on both projects.

Tabulam Civil and Construction site



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<<Example of power line markers “ROTAMARKA™” installed prior to project commencement

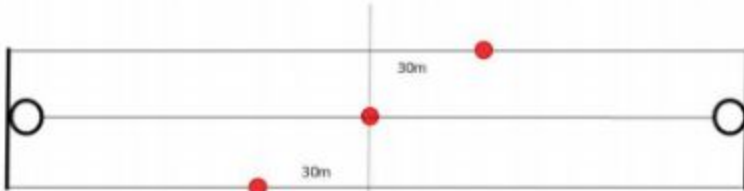
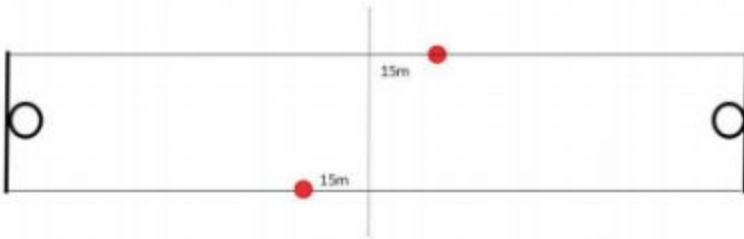
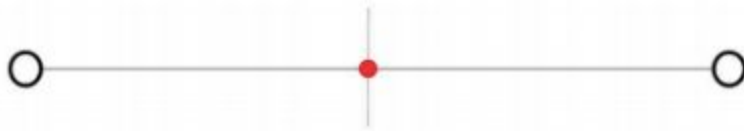


<<Markers being installed by hot stick from an EWP or bucket truck>>

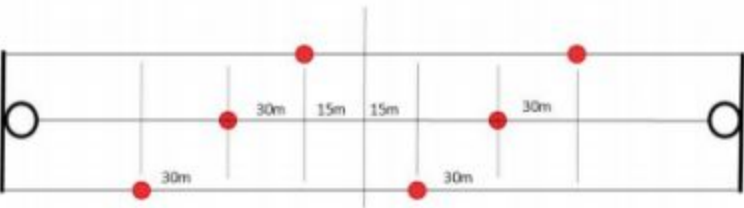
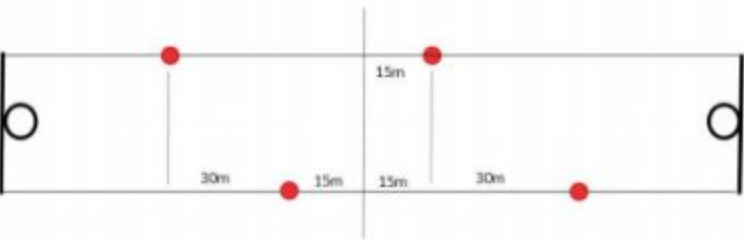


Markers in place during construction phase of the project





Diagrams for 1 Marker per wire per span



Diagrams for 2 Markers per wire per span

<<Example of installation and spacing of markers on power lines>>

Working in collaboration with industry can yield improved safety outcomes and ultimately benefit public safety and awareness.