

## Stage Two Commences For the Oreti Valley Project



*Two of the communication towers for the Oreti Valley Project*

Stage two of the Oreti Valley Project (OVP) is underway; with the substation and line upgrade work now targeted around the Centre Bush, Dipton and Lumsden areas.

The OVP is a major long-term plan to upgrade and extend the 66kV network to include Centre Bush, Dipton, Lumsden and Mossburn Substations. PowerNet Project Manager, Roger Scott said the OVP will help ensure network supply reliability, future proof the area for potential growth and also increase generation capability into the network.

The first stage of the project was carried out in 2015, with a new 66kV line installed out of the Winton Substation to the west across the Oreti River and north to the Centre Bush Substation; 132 poles installed across 12km. Stage two is another labour intensive stage, encompassing the Centre Bush Substation upgrade and feeder cable installation, Centre Bush to Dipton line design, Dipton Substation detailed design and Lumsden Substation upgrade detailed design. The first four of nine new microwave communication sites in the area will also be completed as part of stage two.

“Upgrading the existing line from Centre Bush Substation to Dipton Substation will involve rolling outages along the line to raise the existing 33kV line voltage by installing 66kV insulators along the line and also re-insulate the 11kV line with 22kV insulators for a future 22kV conversion project. The sections that have 400V under-build will be removed and installed on the opposite side of the road or installed underground,” Roger says.

According to Roger, staff and contractors are making great progress to date, with the design of the Centre Bush Substation and feeder cable already complete and the microwave installations underway. “The design of the Winton and Winton Hill microwave installations are complete, the Lumsden microwave design is currently being modified and the Elbow microwave installation is still under negotiations for access to the Elbow tower which is five kilometres north of Lumsden,” he says.

The Centre Bush to Dipton line legacy pole testing and foundations work has been completed and is currently awaiting a report to confirm the proposed upgrade will conform to AS/NZS7000. The Dipton Substation detailed design has been reviewed and the Lumsden conceptual design has been completed and the soil contamination and site geotechnical reporting is underway.

Along with PowerNet line mechanics, the work of many consultants and contractors, namely Mitton Electronet, Protection Consulting, Beca Consulting, Linetech Consulting, Edison Consulting, Decom Electrical, Donaldson Contractors, Wilson Contractors, and Traffic Management NZ will help see stage two of the OVP completed by March 2017.

With astute planning in place, outages will be minimised by back feeding supply from alternative sources. The project is divided into five stages, the last of which is expected to be completed before the end of the 2020 financial year.