

Network Capability Incentive Parameter Action Plan (2014-2019)

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| Project Number | 12 |
| Project Priority | 6 |
| Transmission Circuit / Injection Point | Farrell–Que–Savage River–Hampshire 110 kV transmission circuit (23 MW) Lindisfame–Sorell–Triabunna 110 kV transmission circuit (20 MW) Farrell–Rosebery–Queenstown 110 kV transmission circuit (20 MW) Norwood–Scottsdale–Derby 110 kV transmission circuit (50 MW) |
| Project | Installation of new line fault indicators |
| Scope of works | Installation of line fault indicators, with remote communications to Transend’s control room, on selected radial transmission lines. |
| Reasons to undertake the project | Sustained fault outages on radial transmission circuits will result in outages to all connected customers. The circuits listed above are all radial in nature and have experienced 38 sustained fault outages in the last 10 years, causing the loss of approximately 1100 MWhrs of energy and of which 20 fault outages caused a loss of supply greater than 0.1 system minutes. The installation of line fault indicators with remote communication capabilities will facilitate the transmission of fault data to the control room, significantly reducing fault patrol times and the commencement of fault restoration activities. |
| Current value of the limit | No remote fault location capability is currently provided on these radial transmission circuits. |
| Target limit | Line fault indicators installed on the transmission circuits listed above. Transend’s Network Operations Centre to display immediate status indication of line fault indicators following a line fault on one of the 110 kV circuits referred to above |
| Priority project improvement target | Reduced fault outage restoration times for customers supplied from the 110 kV transmission circuits listed above. |
| Completion date | June 2017 |
| Capital cost | \$230K |
| Operational cost | \$19K |
| Market benefit | Provides fault location assistance, reducing fault outage restoration times. In the event of a sustained fault on any one of these transmission circuits, the supply restoration time for affected customers could be reduced by between 15 and 90 minutes The performance history of this transmission line suggests that it is likely that at least one fault event will occur within the next regulatory control period. It is estimated that this project will result in the following annual market benefits: <ul style="list-style-type: none"> - FA-QU-SR-HA: Between \$166k and \$250k; - LF-SO-TB: Between \$164k and \$245k; - FA-RB-QT: Between \$204k and \$306k; and, - NW-SD-DE: Between \$54k and \$82k. |