

Table 5-3a Distribution network supply Security Standard

Class	Description	Size of load (MW)	Cable, line or transformer fault	Double cable, line or transformer fault	Bus or switchgear fault
Urban – Transpower GXPs					
A1	Lines, buses and supply banks	15-600	No interruption	Restore within 2 hours	No interruption for 50% and restore rest within 2 hours
Rural – Transpower GXPs					
B1	Lines, buses and supply banks	15-60	No interruption	Restore within 4 hours ^(Note 1)	No interruption for 50% and restore rest within 4 hours ^(Note 1)
B2	Supply banks	0-1	Restore in repair time	Restore in repair time	Restore in repair time
Urban – Orion network					
C1	Zone substations with CBD or special industrial load	15-40	No interruption	Restore within 1hr	No interruption for 50% and restore rest within 2 hours
C2	Zone substations and subtransmission feeders without CBD or special industrial load	15-20	No interruption	Restore within 2 hours	No interruption for 50% and restore rest within 2 hours
C3	Zone substations or 11kV ring with Christchurch CBD or inner urban load	2-15	Restore within 0.5 hour	Restore 75% within 2 hours and the rest in repair time	Restore within 2 hours
C4	Outer, mainly residential zone substations	4-15	Restore within 2 hours	Restore 75% within 2 hours and the rest in repair time	Restore within 2 hours
C5	Inner 11kV distribution feeder	0.5-2	Restore within 1 hour	Restore in repair time	Restore 90% within 1 hour and the rest in 4 hours (use generator)
C6	Outer, mainly residential 11kV distribution feeder	0.5-4	Restore within 1 hour	Restore in repair time	Restore 90% within 1 hour and the rest in 4 hours (use generator)
C7	11kV distribution spurs	0-0.5	Use generator to restore within 4 hours	Restore in repair time	Use generator to restore within 4 hours
Rural – Orion network					
D1	Zone substations and subtransmission feeders	15-200	No interruption	Restore within 4 hours ^(Note 1)	No interruption for 50% and restore rest within 4 hours ^(Note 1)
D2	Zone substations and subtransmission feeders	4-15	Restore within 4 hours ^(Note 1)	Restore 50% within 4 hours and the rest in repair time ^(Note 1)	Restore within 4 hours ^(Note 1)
D3	Small zone substations and 11kV distribution feeders	1-4	Restore within 4 hours ^(Note 1)	Restore in repair time	Restore 75% within 4 hours and the rest in repair time ^(Note 1)
D4	11kV distribution spurs	0-1	Restore in repair time	Restore in repair time	Restore in repair time
Note 1. Assumes the use of interruptible irrigation load for periods up to 48 hours.					