

Appendix J Indicative short circuit currents

Tables J.1 to J.3 show indicative maximum and minimum short circuit currents at Powerlink Queensland's substations. This appendix also shows the indicative System Strength Locational Factor (SSLF) calculated as per the Australian Energy Market Operator's (AEMO) System Strength Impact Assessment Guidelines (Version 2.2). An overview of system strength pricing can be found on Powerlink's website.

J.1 Indicative maximum short circuit currents

Tables J.1 to J.3 show indicative maximum symmetrical three phase and single phase to ground short circuit currents in Powerlink's transmission network for summer 2026/27, 2027/28 and 2028/29.

These results include the short circuit contribution of some of the more significant embedded non-scheduled generators, however smaller embedded non-scheduled generators may have been excluded. As a result, short circuit currents may be higher than shown at some locations. Therefore, this information should be considered as an indicative guide to short circuit currents at each location and interested parties should consult Powerlink and/or the relevant Distribution Network Service Provider (DNSP) for more detailed information.

Powerlink calculated the maximum short circuit currents using a system model:

- in which all generators were represented as a voltage source of 110% of nominal voltage behind sub-transient reactance
- with all model shunt elements removed.

The short circuit currents shown in tables J.1 to J.3 are based on generation shown in the 'Generation Commitments' sheet of the Chapter 9 Network Capability and Performance Data Workbook (together with the more significant embedded non-scheduled generators) on the committed network development as forecast at the end of each calendar year. The tables also show the design rating of the Powerlink substation at each location. Design ratings shown in this appendix are based on Powerlink's current planning and equipment rating policies. Actual equipment ratings may differ due to site-specific conditions, operational constraints, asset configuration, maintenance status, or subsequent rating updates.

No assessment has been provided of the short circuit currents within networks owned by DNSPs or directly connected customers, nor has an assessment been made of the ability of their plant to withstand and/or interrupt the short circuit current.

The maximum short circuit currents presented in this appendix are based on all generating units online and an 'intact' network; that is, all network elements are assumed to be in-service. This assumption can result in short circuit currents appearing to be above plant rating at some locations. Where this is found, detailed assessments are made to determine if the contribution to the total short circuit current that flows through the plant exceeds its rating. If so, the network may be split to create 'normally-open' points as an operational measure to ensure that short circuit currents remain within the plant rating, until longer-term solutions can be justified.

J.2 Indicative minimum short circuit currents

Minimum short circuit currents are used to inform the capacity of the system to accommodate fluctuating loads and power electronic connected systems (including non-synchronous generators and static VAR compensators (SVC)). Minimum short circuit currents are also important in ensuring power quality and system stability standards are met and for ensuring the proper operation of protection systems.

Tables J.1 to J.3 show indicative minimum system normal and post-contingent symmetrical three phase short circuit currents at Powerlink's substations. These were calculated by taking the existing intact network and setting the synchronous generator dispatch to align with AEMO's assumptions for minimum three phase fault level as described in AEMO's 2025 Transition Plan for System Security - Appendix A2. The short circuit current is calculated, using the sub-transient machine impedances, with the system intact and with individual outages of each significant network element.

The minimum short circuit current which results from these outages is reported.

The short circuit currents are calculated using the same methodology as AEMO's assumptions.

These minimum short circuit currents are indicative only. The system strength available to new non-synchronous generators can only be assessed by a Full Impact Assessment using electromagnetic transient (EMT) modelling techniques.

Additional short-circuit information, including detailed fault-level and impedance data, is available through Powerlink's TAPR Portal.

Table J.1 Indicative short circuit currents – Northern Queensland

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents						SSLF	Ref Node
				2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2027/28	2027/28	2028/29		
Alan Sherriff	132	31.5	4.2	3.8	4.9	14.0	14.2	14.9	15.0	15.4	15.3	1.0322	Ross 275kV	
Alligator Creek	132	31.5	3.2	1.8	2.6	4.5	5.9	4.5	5.9	4.5	6.0	1.1300	Ross 275kV	
Aurumfield	275	40	1.2	1.1	1.0	4.1	4.6	4.1	4.6	4.3	4.7	1.1060	Ross 275kV	
Bolingbroke	132	31.5	2.0	1.9	1.6	2.5	1.9	2.5	1.9	2.5	1.9	1.2135	Ross 275kV	
Bowen North	132	31.5	2.0	0.7	0.9	2.8	3.1	2.8	3.1	2.8	3.1	1.1771	Ross 275kV	
Cairns (2T)	132	31.5	3.1	0.6	0.7	6.8	8.9	6.8	8.9	7.1	9.2	1.0760	Ross 275kV	
Cairns (3T)	132	31.5	3.1	0.6	0.7	6.8	8.9	6.8	9.0	7.1	9.3	1.0760	Ross 275kV	
Cardwell	132	31.5	2.0	0.9	1.2	3.3	3.6	3.4	3.6	3.4	3.6	1.1439	Ross 275kV	
Chalumbin	132	40	3.4	2.7	3.5	7.4	8.5	7.5	8.5	7.8	8.9	1.0790	Ross 275kV	
Chalumbin	275	40	2.0	1.6	2.1	5.4	5.5	5.4	5.6	5.9	6.1	1.0453	Ross 275kV	
Clare South	132	31.5	3.4	2.8	3.5	8.2	8.2	8.3	8.2	8.4	8.3	1.0719	Ross 275kV	
Collinsville North	132	31.5	4.5	2.3	2.9	9.4	9.9	9.5	9.9	9.6	10.0	1.0561	Ross 275kV	
Coppabella	132	31.5	2.2	1.5	1.8	3.0	3.4	3.0	3.4	3.0	3.4	1.1884	Ross 275kV	
Crush Creek	275	40	3.5	3.0	4.0	10.8	11.8	11.0	12.0	11.7	12.5	1.0201	Ross 275kV	
Dan Gleeson (1T)	132	31.5	4.2	3.8	4.9	13.4	13.6	14.1	14.2	14.5	14.5	1.0326	Ross 275kV	
Dan Gleeson (2T)	132	31.5	4.2	3.8	5.0	13.4	13.7	14.1	14.3	14.5	14.6	1.0326	Ross 275kV	
Eagle Downs	132	31.5	2.9	1.5	1.7	4.6	4.4	4.6	4.4	4.6	4.4	1.1302	Lilyvale 132kV	
Edmonton	132	31.5	2.9	0.9	1.1	6.1	7.3	6.1	7.3	6.3	7.5	1.0835	Ross 275kV	
El Arish	132	31.5	2.3	1.0	1.4	3.8	4.6	3.8	4.6	3.9	4.7	1.1213	Ross 275kV	
Garbutt	132	31.5	3.9	1.7	2.0	11.4	11.2	12.0	11.7	12.3	11.8	1.0403	Ross 275kV	
Goonyella Riverside	132	31.5	3.4	3.0	3.2	6.0	5.5	6.1	5.5	6.1	5.5	1.1109	Ross 275kV	
Greenland	132	31.5	3.4	2.1	2.1	5.5	5.1	5.5	5.1	5.5	5.1	1.1168	Ross 275kV	

Table J.1 Indicative short circuit currents – Northern Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents						SSLF	Ref Node																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27			2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27

Table J.1 Indicative short circuit currents – Northern Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum		Indicative minimum N-1		Indicative maximum short circuit currents						SSLF	Ref Node
			3 phase fault level (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	2026/27	2026/27	2026/27	2027/28	2027/28	2028/29		
Peak Downs	132	31.5	2.8	2.1	2.2	4.2	3.7	4.2	3.7	4.2	3.7	4.3	3.7	Lilyvale 132kV
Pioneer Valley	132	31.5	4.1	3.6	4.5	6.7	7.6	6.7	7.6	6.7	7.6	6.7	7.6	Ross 275kV
Proserpine	132	31.5	2.3	1.5	2.0	3.3	3.8	3.3	3.8	3.3	3.8	3.3	3.9	Ross 275kV
Ross	132	40	4.8	4.3	5.9	19.7	22.1	20.8	23.1	21.8	24.2	21.8	1.0181	Ross 275kV
Ross	275	40	2.8	2.4	3.3	10.5	11.4	10.8	11.6	12.2	13.2	12.2	1.0000	Ross 275kV
Springlands	132	31.5	4.7	2.3	2.8	10.1	11.1	10.2	11.2	10.3	11.3	10.3	1.0519	Ross 275kV
Stony Creek	132	31.5	2.5	1.2	1.4	3.7	3.6	3.7	3.6	3.7	3.6	3.7	3.6	Ross 275kV
Strathmore	275	40	3.5	3.0	4.0	11.0	12.0	11.2	12.1	11.8	12.7	11.8	1.0198	Ross 275kV
Strathmore	132	40	4.8	2.3	2.8	10.4	11.7	10.5	11.7	10.6	11.9	10.6	1.0505	Ross 275kV
Townsville PS	132	31.5	3.5	2.4	3.2	10.2	10.7	11.0	11.8	11.2	12.0	11.2	1.0537	Ross 275kV
Townsville East	132	31.5	3.9	1.6	1.8	13.5	12.9	13.8	13.1	14.1	13.2	14.1	1.0407	Ross 275kV
Townsville South	132	31.5	4.3	3.9	5.5	18.4	21.8	19.0	22.4	19.5	22.9	19.5	1.0309	Ross 275kV
Tully	132	31.5	2.8	1.5	1.8	5.0	5.7	5.0	5.7	5.1	5.8	5.1	1.0892	Ross 275kV
Tully South	275	40	1.7	1.2	1.4	3.9	3.7	4.0	3.7	4.1	3.8	4.1	1.0506	Ross 275kV
Tumoulin	275	40	1.8	1.3	1.6	4.5	5.0	4.6	5.0	4.9	5.3	4.9	1.0540	Ross 275kV
Turkinje	132	31.5	1.8	1.2	1.6	2.8	3.2	2.8	3.2	2.9	3.3	2.9	1.1932	Ross 275kV
Walkamin	275	40	1.7	1.4	1.8	4.3	4.9	4.4	4.9	4.6	5.1	4.6	1.0575	Ross 275kV
Wandoo	132	31.5	3.3	3.1	2.6	4.6	3.3	4.6	3.3	4.6	3.3	4.6	1.1241	Ross 275kV
Woree	132	40	3.2	2.7	3.9	7.1	9.6	7.1	9.6	7.4	10.0	7.4	1.0730	Ross 275kV
Woree	275	40	1.8	1.5	2.0	4.6	5.4	4.6	5.4	4.9	5.7	4.9	1.0530	Ross 275kV
Wotonga	132	31.5	3.5	1.7	2.2	6.1	7.0	6.1	7.0	6.1	7.1	6.1	1.1138	Ross 275kV
Yabulu South	132	31.5	3.8	3.2	3.9	11.5	10.8	13.0	14.2	13.3	14.4	13.3	1.0425	Ross 275kV

Table J.2 Indicative short circuit currents – Central Queensland

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents						SSLF	Ref Node																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
				2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27			2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27

Table J.2 Indicative short circuit currents – Central Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents								
				2026/27			2026/27			2027/28			2028/29		
				3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)		
Gregory	132	31.5	5.7	4.7	6.0	10.6	11.8	10.6	11.8	10.7	11.8	10.7	11.9	1.0027	Lilyvale 132kV
Larcom Creek	275	40	9.2	3.3	4.4	16.9	18.7	17.1	18.9	18.8	20.3	18.8	20.3	1.0296	Gin Gin 275kV
Larcom Creek	132	40	7.9	4.2	5.0	12.6	14.3	12.6	14.3	12.9	14.6	12.9	14.6	1.0597	Gin Gin 275kV
Lilyvale	132	40	5.9	4.8	6.3	11.2	12.9	11.3	13.0	11.3	13.0	11.3	13.0	1.0000	Lilyvale 132kV
Lilyvale	275	40	3.5	2.6	3.2	6.8	6.6	6.9	6.7	6.9	6.7	6.9	6.7	1.0216	Lilyvale 132kV
Moura	132	31.5	3.2	1.5	2.0	4.4	5.4	4.4	5.4	4.4	5.4	4.4	5.4	1.1545	Gin Gin 275kV
Muranu	275	40	-	-	-	-	-	16.0	14.9	16.3	15.1	16.3	15.1	-	-
Norwich Park	132	31.5	2.7	1.2	1.1	3.7	2.7	3.7	2.7	3.7	2.7	3.7	2.7	1.1088	Lilyvale 132kV
Pandoin	132	31.5	5.4	1.2	1.3	7.1	6.1	7.1	6.2	7.1	6.2	7.1	6.2	1.0971	Gin Gin 275kV
Raglan	275	40	7.7	4.3	3.9	12.7	11.3	12.7	11.3	13.1	11.3	13.1	11.5	1.0375	Gin Gin 275kV
Rockhampton (1T)	132	31.5	5.1	1.8	2.1	6.6	6.4	6.6	6.4	6.6	6.4	6.6	6.4	1.1022	Gin Gin 275kV
Rockhampton (5T)	132	31.5	5.0	1.8	2.1	6.4	6.2	6.4	6.2	6.4	6.2	6.4	6.2	1.1047	Gin Gin 275kV
Stanwell	132	40	4.8	3.7	4.3	6.1	6.5	6.1	6.5	6.1	6.5	6.1	6.5	1.1085	Gin Gin 275kV
Stanwell	275	40	10.8	9.0	11.3	26.3	27.7	27.3	29.1	27.6	29.3	27.6	29.3	1.0381	Gin Gin 275kV
Wurdong	275	40	9.4	6.4	6.4	17.5	17.3	17.9	17.5	19.4	18.5	19.4	18.5	1.0267	Gin Gin 275kV
Wycarbah	132	31.5	3.7	3.0	3.2	4.6	5.4	4.6	5.4	4.6	5.4	4.6	5.4	1.1346	Gin Gin 275kV
Yarwun	132	31.5	8.0	4.5	6.0	13.2	15.1	13.2	15.1	13.5	15.4	13.5	15.4	1.0617	Gin Gin 275kV

Table J.3 Indicative short circuit currents – Southern Queensland

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents						SSLF	Ref Node	
				2026/27		2026/27		2026/27		2027/28		2028/29			
				3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)		
Abermain	110	40	12.9	10.4	11.7	22.6	25.4	22.8	25.6	22.8	25.6	22.8	25.6	1.0209	Greenbank 275kV
Abermain	275	40	8.1	6.3	7.0	20.7	20.6	21.2	20.9	21.2	20.9	21.2	21.0	1.0054	Greenbank 275kV
Algester	110	31.5	12.8	11.5	12.5	22.2	21.6	22.4	21.7	22.4	21.7	22.4	21.7	1.0207	Greenbank 275kV
Ashgrove West	110	31.5	12.1	9.3	10.4	20.1	20.9	20.3	21.1	20.4	21.1	20.4	21.1	1.0258	Greenbank 275kV
Banana Bridge	275	40	6.6	5.0	6.9	28.9	30.0	29.3	30.7	31.5	34.1	31.5	34.1	1.0007	Western Downs 275kV
Belmont	275	40	7.8	7.2	8.8	19.1	19.3	19.5	19.6	19.5	19.6	19.5	19.6	1.0051	Greenbank 275kV
Belmont	110	40	15.3	14.3	18.5	29.8	36.4	30.2	36.8	30.2	36.8	30.2	36.8	1.0128	Greenbank 275kV
Blackstone	275	40	8.6	7.8	10.0	25.2	27.6	25.8	28.1	25.9	28.1	25.9	28.1	1.0017	Greenbank 275kV
Blackstone	110	40	14.5	13.3	15.2	27.1	29.3	27.4	29.6	27.4	29.6	27.4	29.6	1.0160	Greenbank 275kV
Blackwall	275	40	9.8	8.3	10.6	26.1	27.1	27.0	27.8	27.1	27.8	27.1	27.8	1.0048	Greenbank 275kV
Blythdale	132	31.5	3.1	2.2	3.0	4.4	5.4	4.4	5.4	4.4	5.4	4.4	5.4	1.1113	Western Downs 275kV
Braemar (East)	330	50	5.7	3.2	3.1	26.1	27.5	26.2	27.6	26.6	27.6	26.6	28.0	1.0272	Western Downs 275kV
Braemar (West)	330	50	5.3	3.3	3.1	26.1	27.5	26.2	27.6	26.6	27.6	26.6	28.0	1.0094	Western Downs 275kV
Braemar (East)	275	50	7.8	5.2	7.1	28.8	32.8	28.9	32.9	29.2	32.9	29.2	33.1	1.0266	Western Downs 275kV
Braemar (West)	275	50	6.5	4.5	6.1	31.2	33.3	31.4	33.6	32.5	34.4	32.5	34.4	1.0050	Western Downs 275kV
Bulli Creek	330	50	6.8	6.0	6.6	20.6	15.8	20.6	15.8	20.7	15.8	20.7	15.8	1.0204	Western Downs 275kV
Bulli Creek	132	40	3.0	2.9	3.4	4.3	4.8	4.3	4.8	4.3	4.8	4.3	4.8	1.1398	Western Downs 275kV
Bundamba	110	31.5	11.1	7.6	7.8	18.0	17.0	18.1	17.1	18.1	17.1	18.1	17.1	1.0275	Greenbank 275kV
Cameby	132	31.5	4.5	3.5	4.0	9.5	8.7	9.5	8.8	9.5	8.8	9.5	8.8	1.0659	Western Downs 275kV
Chinchilla	132	31.5	3.7	2.6	3.5	6.6	8.1	6.6	8.1	6.7	8.1	6.7	8.1	1.0873	Western Downs 275kV
Clifford Creek	132	31.5	3.9	3.2	3.3	6.1	5.4	6.1	5.4	6.1	5.4	6.1	5.4	1.0810	Western Downs 275kV
Columboola	275	40	4.8	3.7	4.7	15.1	13.9	15.2	14.0	15.5	14.0	15.5	14.2	1.0125	Western Downs 275kV
Columboola	132	40	6.4	4.7	6.4	17.8	20.9	17.9	20.9	18.0	20.9	18.0	21.0	1.0370	Western Downs 275kV

Table J.3 Indicative short circuit currents – Southern Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents									SSLF	Ref Node																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27			2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27	2026/27

Table J.3 Indicative short circuit currents – Southern Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1			Indicative maximum short circuit currents						SSLF	Ref Node
				2026/27	2026/27	2026/27	2026/27	2026/27	2027/28	2027/28	2027/28	2028/29		
				3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)	L – G (kA)	3 phase (kA)		
Middle Ridge (5T)	330	50	5.9	3.6	3.5	14.7	13.9	14.8	13.9	14.8	13.9	14.8	1.0274	Western Downs 275kV
Millmerran	330	50	6.3	5.8	7.4	21.9	23.0	21.9	23.1	21.9	23.1	22.0	1.0232	Western Downs 275kV
MISS	330	50	5.2	4.5	5.8	15.4	16.3	15.4	16.3	15.4	16.3	15.4	1.0297	Western Downs 275kV
Molendinar	110	40	11.9	10.2	13.4	20.2	25.4	20.4	25.5	20.4	25.5	20.4	1.0199	Greenbank 275kV
Molendinar (1T)	275	40	5.0	2.1	2.4	8.7	8.3	8.8	8.4	8.8	8.4	8.8	1.0175	Greenbank 275kV
Molendinar (2T)	275	40	5.0	2.1	2.4	8.7	8.3	8.8	8.4	8.8	8.4	8.8	1.0176	Greenbank 275kV
Mt England	275	40	9.6	8.1	9.9	25.9	25.1	26.8	25.7	26.8	25.7	26.8	1.0072	Greenbank 275kV
Mudgeeraba	275	40	5.4	4.3	4.7	9.9	8.9	10.0	9.0	10.0	9.0	10.0	1.0143	Greenbank 275kV
Mudgeeraba	110	40	11.0	10.0	12.6	18.1	21.8	18.2	21.8	18.2	21.8	18.2	1.0233	Greenbank 275kV
Murarrie	110	40	13.9	12.7	16.0	25.2	30.0	25.4	30.3	25.4	30.3	25.5	1.0164	Greenbank 275kV
Murarrie (1T)	275	40	6.8	2.3	2.6	14.4	13.9	14.6	14.1	14.6	14.1	14.7	1.0092	Greenbank 275kV
Murarrie (2T)	275	40	6.8	2.3	2.6	14.4	14.1	14.6	14.2	14.6	14.2	14.7	1.0092	Greenbank 275kV
Oakey	110	31.5	4.9	1.3	1.4	10.8	10.9	10.8	10.9	10.8	10.9	10.8	1.0935	Greenbank 275kV
Oakey PS	110	31.5	5.1	3.7	5.0	12.1	13.5	12.1	13.5	12.1	13.5	12.1	1.0882	Greenbank 275kV
Orana	275	40	5.4	2.9	3.7	17.6	16.7	17.7	16.8	17.7	16.8	18.3	1.0073	Western Downs 275kV
Palmwoods	275	40	5.6	3.4	4.1	9.3	9.5	9.7	9.9	9.7	9.9	9.8	1.0299	Greenbank 275kV
Palmwoods	132	40	9.2	6.8	8.7	14.0	16.7	14.4	17.1	14.4	17.1	14.5	1.0403	Greenbank 275kV
Palmwoods (7T)	110	40	5.7	2.6	2.3	7.4	7.7	7.5	7.7	7.5	7.7	7.5	1.0834	Greenbank 275kV
Palmwoods (8T)	110	40	5.7	2.6	2.3	7.4	7.7	7.5	7.7	7.5	7.7	7.5	1.0834	Greenbank 275kV
Redbank Plains	110	31.5	13.0	9.5	10.1	22.5	21.4	22.7	21.5	22.7	21.5	22.8	1.0207	Greenbank 275kV
Richlands	110	31.5	13.2	11.0	12.6	23.1	23.5	23.4	23.7	23.4	23.7	23.4	1.0202	Greenbank 275kV
Rocklea	110	40	14.6	12.9	15.6	26.6	30.3	27.1	30.7	27.1	30.7	27.1	1.0180	Greenbank 275kV
Rocklea (1T)	275	40	7.0	2.3	2.6	14.4	13.0	14.7	13.2	14.7	13.2	14.7	1.0122	Greenbank 275kV
Rocklea (2T)	275	40	5.4	2.3	2.6	9.4	8.8	9.6	9.0	9.6	9.0	9.6	1.0235	Greenbank 275kV

Table J.3 Indicative short circuit currents – Southern Queensland (continued)

Substation	Voltage (kV)	Substation Design Rating (kA)	Indicative minimum system normal 3 phase fault level (kA)	Indicative minimum N-1				Indicative maximum short circuit currents							SSLF	Ref Node
				2026/27		2026/27		2026/27		2026/27		2027/28		2028/29		
Runcorn	110	31.5	11.8	8.6	9.7	8.6	9.7	19.7	19.8	19.9	19.9	19.9	19.9	19.9	1.0237	Greenbank 275kV
South Pine	275	40	9.3	7.9	10.6	7.9	10.6	22.4	26.0	24.1	28.8	24.2	28.9	28.9	1.0099	Greenbank 275kV
South Pine (East)	110	40	13.6	11.5	15.6	11.5	15.6	24.2	31.3	24.9	32.2	25.0	32.3	32.3	1.0253	Greenbank 275kV
South Pine (West)	110	40	12.9	10.1	11.7	10.1	11.7	21.6	24.8	22.0	25.3	22.0	25.3	25.3	1.0249	Greenbank 275kV
Sumner	110	31.5	12.8	9.1	9.9	9.1	9.9	21.8	21.4	22.0	21.6	22.0	21.6	21.6	1.0226	Greenbank 275kV
Swanbank E	275	40	8.5	7.3	9.0	7.3	9.0	24.7	26.8	25.3	27.2	25.3	27.3	27.3	1.0017	Greenbank 275kV
Tangkam	110	31.5	6.0	4.2	5.6	4.2	5.6	14.8	16.0	14.8	16.0	14.8	16.0	16.0	1.0729	Greenbank 275kV
Tarong	275	50	11.8	9.5	12.6	9.5	12.6	38.6	40.5	39.2	40.8	39.5	41.0	41.0	1.0111	Greenbank 275kV
Tarong	66	31.5	12.3	7.0	7.7	7.0	7.7	15.5	16.6	13.9	23.7	13.9	23.7	23.7	1.0642	Greenbank 275kV
Teebar Creek	275	40	4.9	2.3	2.6	2.3	2.6	7.9	7.4	9.3	10.2	9.4	10.3	10.3	1.0319	Gin Gin 275kV
Teebar Creek	132	40	7.2	4.5	5.3	4.5	5.3	10.8	11.5	11.7	13.0	11.7	13.1	13.1	1.0469	Gin Gin 275kV
Tennyson	110	31.5	10.8	1.8	1.9	1.8	1.9	16.9	16.9	17.1	17.0	17.1	17.0	17.0	1.0309	Greenbank 275kV
Tummalville	330	50	6.2	5.8	7.0	5.8	7.0	20.5	19.1	20.6	19.1	20.6	19.2	19.2	1.0242	Western Downs 275kV
Upper Kedron	110	40	13.1	11.4	11.8	11.4	11.8	22.4	20.0	22.8	20.2	22.8	20.2	20.2	1.0227	Greenbank 275kV
Wandoan South	275	40	3.6	2.9	3.9	2.9	3.9	9.0	10.8	9.1	10.8	9.2	10.9	10.9	1.0272	Western Downs 275kV
Wandoan South	132	40	5.3	4.1	5.6	4.1	5.6	10.7	13.9	10.7	13.9	10.8	13.9	13.9	1.0512	Western Downs 275kV
West Darra	110	31.5	14.5	13.3	13.9	13.3	13.9	26.5	25.0	26.9	25.2	26.9	25.2	25.2	1.0173	Greenbank 275kV
Western Downs	275	50	6.8	5.1	7.1	5.1	7.1	31.6	33.7	32.0	34.6	34.3	37.6	37.6	1.0000	Western Downs 275kV
Woollooga	275	40	6.4	5.4	6.9	5.4	6.9	11.5	13.1	13.2	15.5	13.3	15.7	15.7	1.0223	Gin Gin 275kV
Woollooga	132	40	9.0	7.1	9.5	7.1	9.5	15.8	20.1	16.9	21.5	17.0	21.6	21.6	1.0394	Gin Gin 275kV
Yuleba North	275	40	3.2	2.6	3.4	2.6	3.4	7.0	7.6	7.0	7.6	7.0	7.7	7.7	1.0349	Western Downs 275kV
Yuleba North	132	40	4.8	3.8	4.8	3.8	4.8	8.6	10.3	8.6	10.3	8.6	10.4	10.4	1.0590	Western Downs 275kV