Vulnerable Transmission Lines

Updated on: 17/05/2023

Notes:
LTTW: Lightning Trip Time Window
Contact the AEMO Support Hub at supporthub@aemo.com.au or call 1300 236 600 for information on previous changes.

Region	Double Circuit Transmission Lines	LTTW — End date for Probable state	LTTW — End date for Proven state	Reason for Classification	Category (Probable or Proven)
New South Wales	Bayswater – Mt piper No.5A3 and Mt Piper – Wollar No.5A5 500 kV lines	N/A	20/10/2027	Tripped twice in past 3 years	Proven
New South Wales	Mt Piper - Bannaby 5A6 500 kV line and Mt Piper - Bannaby 5A7 500 kV line	6/04/2026	N/A	Tripped once in past 3 years	Probable
Queensland	Collinsville North – Proserpine No.7125 and No.7126 132 kV Lines	N/A	1/02/2028	Tripped in past 5 years	Proven
Queensland	Ross – Chalumbin No.857 and No.858 275 kV lines	N/A	21/11/2027	Tripped twice in past 3 years	Proven
Queensland	Collinsville – Stoney Creek No.7306 and Collinsville – Newlands No.7121 132 kV lines	N/A	15/11/2027	Tripped twice in past 3 years	Proven
Queensland	Chalumbin - Turkinjie No. 7165 and 7166 132 kV lines	25/11/2025	N/A	Tripped once in past 3 years	Probable
Tasmania	Lindisfarne - Mornington Tee - Rokeby No 1 and 2 110 kV Lines	N/A	2/01/2028	Tripped once in past 5 years	Proven
Tasmania	Farrell – Reece No.1 and No.2 220 kV lines	N/A	6/11/2024	Tripped in past 5 years	Proven
Tasmania	Farrell–John Butters 220 kV line and Farrell–Rosebery–Newton–Queenstown 110 kV line	N/A	10/04/2026	Tripped in past 5 years	Proven
Victoria	Eildon PS – Mt Beauty No.1 and No.2 220 kV lines	N/A	14/01/2028	Tripped in past 5 years	Proven

Special Reclassification of Transmission Lines during lightning

Region	Transmission Lines	Notes
Tasmania	Farrell–Rosebery–Newton–Queenstown 110 kV line	Based on advice from the TasNetworks, the Farrell-Roseberry-Newton-Queens Town 110 kV line is considered at risk of a 3 phase fault when lightning is in the vicinity. As such during periods of lightning activity, AEMO will reclassify a 3 phase fault on this line as a credible contingency.
New South Wales	Armidale - Dumaresq 8C and Armidale to Sapphire Wind Farm 8E 330kV lines	Based on the advice from Transgrid, the 8C line is considered at risk of a two-phase to earth fault and the 8E line is considered at risk of a single-phase to earth fault when lightning is in the vicinity. As such during periods of lightning activity, AEMO will reclassify a two-phase to earth fault on 8C and single-phase to earth fault on 8E as a credible contingency.
Queensland	Woree - Tumoulin No.877 275 kV and Chalumbin - Turkinje No.7166 132 kV lines	Based on the advice from Powerlink, Woree - Tumoulin No.877 275 kV and Chalumbin - Turkinje No.7166 132 kV is considered at risk of a 3 phase fault when lightning is in the vicinity. While each transmission line is on a separate tower, they have “shared” earthing (underground and aerial) at various locations in the shared easement. As such during periods of lightning activity, AEMO will reclassify a 3 phase fault on these lines as a credible contingency.

Summary of changes to the previously published version	Removed: Tarong – Chinchilla 7168 and 7183 132kV line Added: Mt Piper - Bannaby 5A6 and 5A7 500 kV line Added: Woree - Tumoulin No.877 275 kV and Chalumbin - Turkinje No.7166 132 kV to Special Reclassification of Transmission Lines during lightning