LOCATION	MINIMUM CLEARANCES IN ANY DIRECTION (DIMENSIONS IN METRES) NOMINAL SYSTEM VOLTAGE							
	500kV	330kV	220kV	132kV	66kV	33kV	11kV, 22kV & 12.7kV SWER (BARE OR COVERED)	LV (BARE OR INSULATED)
1. OVER THE CARRIAGEWAY OF ROADS (SEE NOTES 3 & 4)	16.0 (9.0)	14.0 (8.0)	12.0 (7.5)	7.5 (6.7)	7.5 (6.7)	7.5 (6.7)	7.5 (6.7)	6.0 (5.5)
2. OVER LAND OTHER THAN THE CARRIAGEWAY OF ROADS	11.0 (9.0)	9.0 (8.0)	8.0 (7.5)	7.5 (6.7)	7.0 (6.7)	6.0 (5.5)	6.0 (5.5)	6.0 (5.5)
3. OVER LAND WHICH, DUE TO ITS STEEPNESS OR SWAMPINESS, IS NOT TRAVERSIBLE BY VEHICLES	11.0 (7.5)	9.0 (6.7)	8.0 (6.0)	6.0 (5.5)	6.0 (5.5)	5.0 (4.5)	5.0 (4.5)	5.0 (4.5)
4. SPACING OF CONDUCTORS OF DIFFERENT CIRCUITS								
i. UNATTACHED CROSSING - NO WIND (SEE NOTE 5) - SELECT VOLTAGE OF UPPER CIRCUIT	6.0 (5.2)	5.0 (3.8)	4.0 (2.8)	3.0 (2.4)	2.5 (1.8)	2.0 (1.2)	1.5 (1.2)	1.0 (0.6)
ii. ATTACHED CROSSINGS (SAME SUPPORT STRUCTURE, SEPARATE ELECTRICAL CIRCUITS)	REFER TO NS220							
iii. SAME SUPPORT STRUCTURE, SAME ELECTRICAL CIRCUIT (REFER TO NS220 FOR ARRANGEMENT TYPES)	N/A	N/A	N/A	N/A	1.5	0.75	0.75	0.6 (BARE) 0.3 (INSULATED)
5. OVER TELECOMMUNICATIONS LINES								
i. AUSGRID-OWNED TELECOMMUNICATIONS	REFER TO NS201							
ii. THIRD-PARTY TELECOMMUNICATIONS	REFER TO NS232							
6. OVER RAILWAY TRACKS								
i. NON-ELECTRIFIED TRACKS	REFER TO THE STANDARD OF THE APPLICABLE RAIL INFRASTRUCTURE MANAGER. ALSO REFER TO NS220 (SEE NOTE 6)							
ii. ELECTRIFIED TRACKS								
7. CROSSING OF NAVIGABLE WATERWAYS	REFER TO NS268							
8. STRUCTURES, BUILDINGS & EASEMENT BOUNDARIES	REFER TO NS220							
9. STREETLIGHTS	REFER TO NS220							
10. VEGETATION	REFER TO NS179							
11. SWIMMING POOLS	REFER TO NS220							

NOTE: THE FIGURES IN BRACKETS ABOVE ARE MINIMUM CLEARANCES AS PER AS/NZS:7000 - SEE NOTE 2.

NOTES

1. THIS TABLE INDICATES THE MINIMUM CLEARANCES REQUIRED IN THE DESIGN OF OVERHEAD LINES (OTHER THAN INSULATED SERVICE LINES)^ UNDER THE ORDINARILY EXPECTED WORST COMBINATION OF WEATHER CONDITIONS AND CURRENT LOADINGS.
   ^ FOR OVERHEAD SERVICE LINE CLEARANCES, REFER TO THE *'SERVICE AND INSTALLATION RULES OF NEW SOUTH WALES'*.

2. MINIMUM CLEARANCES SHOWN IN THE TABLE SHALL BE ACHIEVED IN ALL NEW DESIGNS AND MAJOR RECONSTRUCTIONS. IN SPECIAL CIRCUMSTANCES, A LESSER CLEARANCE MAY BE ACCEPTABLE, SUBJECT TO APPROVAL BY AUSGRID'S NS181 PROCESS. UNDER NO CIRCUMSTANCES CAN THE CLEARANCE BE REDUCED BELOW THE AS/NZS:7000 VALUE SHOWN IN BRACKETS IN THE TABLE. FOR EXAMPLE, IN LINE 2 OF THE TABLE, FOR "*OVER LAND OTHER THAN THE CARRIAGEWAY OF ROADS*", THE MINIMUM LV CLEARANCE FOR AUSGRID IS 6.0m, WHILE FOR AS/NZS:7000 IT IS 5.5m.

3. GREATER CLEARANCES OVER ROADS MAY BE REQUIRED WHERE HIGH LOADS ARE LIKELY. SOME EXAMPLES ARE MOTORWAYS, NEW ENGLAND HWY, GOLDEN HWY, ETC.

4. ADDITIONAL CLEARANCE SHOULD BE ALLOWED IF THERE IS LIKELY TO BE A FUTURE CIRCUIT BUILT ALONG THE ROAD. FOR EXAMPLE, AN UNDERCROSSING OR UNDERBUILT CIRCUIT.

5. WHERE IT IS NECESSARY TO CROSS ANOTHER POWER LINE UNATTACHED, CLEARANCE BETWEEN CIRCUITS SHALL BE CALCULATED WITH THE UPPER CIRCUIT AT MAXIMUM OPERATING TEMPERATURE, AND THE UNDERBUILT CIRCUIT AT AMBIENT TEMPERATURE (15°C), WITH NO WIND. REFER TO NS220 FOR CLEARANCE REQUIREMENTS WITH WIND.

6. REFER TO THE RAIL INFRASTRUCTURE MANAGER (R.I.M.) FOR THE LATEST VERSION OF THEIR RELEVANT STANDARD. THE TWO COMMON R.I.M.'S FOR AUSGRID'S NETWORK AREA, AND THEIR RELEVANT STANDARDS ARE:
   i) **ARTC -** STANDARD "EEG-00-01" (SUPERSEDES "PYS 02");
   ii) **TRANSPORT FOR NSW -** STANDARD "TS 03773:1.0" (SUPERSEDES TfNSW STANDARD "T HR EL 10005 ST");
   DESIGNERS SHALL ADHERE TO ANY NS220 RAILWAY CLEARANCE REQUIREMENTS THAT ARE OVER AND ABOVE THE R.I.M. CLEARANCE REQUIREMENTS. IN SPECIAL CIRCUMSTANCES, A LESSER CLEARANCE MAY BE ACCEPTABLE, SUBJECT TO APPROVAL BY AUSGRID'S NS181 PROCESS. UNDER NO CIRCUMSTANCES CAN THE CLEARANCE BE REDUCED BELOW THE R.I.M. REQUIREMENTS.

CAD DRAWING DO NOT MANUALLY AMEND

AMENDMENTS

DWN: P.R.
CHKD: J.M
APP'D: G.F.
DATE: 06/02/2025
TABLE & NOTES AMENDED.
7

NETWORK STANDARD
Ausgrid
145 NEWCASTLE RD WALLSEND, NSW 2287

SCALE	NTS
DESIGNED	-
DRAWN	PETER SAUNDERS
CHECKED	I.NICHOLS
APPROVED	I.NICHOLS
DATE	12/09/1991
PROJECT NUMBER	STD
PROJTRAK NUMBER	-

STANDARD CONSTRUCTION OVERHEAD POWER LINES MINIMUM CONDUCTOR CLEARANCES

SIZE	DRAWING No	SHEET	REV
A3	515297	1	7

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