

1.	<b>Building:</b>
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Where a high or extra high voltage over head line passes above or adjacent to any building or part of a building, it shall have on the basis of maximum sag, a vertical clearance above the highest part of the building immediately under such line, of not less than:	
(a) for high voltage line upto and including.	
33 KV	3.685 mtrs. (12 ft.)
(b) for extra high voltage lines	3.685 mtrs. (12 ft.) plus
	0.305 mtrs. (1 ft.) for every additional 33 KV or part there of
The horizontal clearance between the nearest conductor and any part of such building shall on the basis of maximum deflection due to wind pressure, be not less than:	
(a) for high voltage line upto and including 11 KV	1.219 mtrs. (4 ft.)
(b) for high voltage line above 11 KV and upto and including 33 KV	1.829 mtrs. (6 ft.)
(c) For extra high voltage line	1.829 mtrs. (6 ft.) plus
	0.305 mtrs. (1 ft;) for every additional 33 KV or part thereof.
<b>Clearance Above Grounds:</b> (Clause 77 of Indian Electricity Rules)	
	In                      m.m.
33 KV	5100
66 KV	5490
132 KV	6100

	220 KV 400 KV				7015 8840		
<b>Clearance Over Rivers :</b> (Above maximum flood level) Rivers not Navigable Rivers Navigable					3050 mm above HFL. Suitable clearance in maximum water level condition, above the tallest mast, in consultation with Navigational authorities concerned.		
<b>Clearance Over PTCC Line:</b>							
					In	m.m.	
	66 KV 132 KV 220 KV 400 KV				2440 2745 3050 4880		
<b>Minimum Clearance Between Power Lines :</b>							
Nominal System Voltage of line to be crossed:							
	KV	11	33	66	132	220	400
	11	2.44	2.44	2.4 4	3.05	4.58	6.10
5.	33		2.44	2.4 4	3.05	4.58	6.10
	66			2.4 4	3.05	4.58	6.10
	132				3.05	4.58	6.10
	220					4.58	6.10

	400					6.10
	Higher voltage line normally be kept over lower voltage line.					
6.	As per ISS 162-1961 minimum electrical clearance from live part to earth and safety clearance in case of different voltage must be kept as follows:					
	Voltage	Electrical Clearance (mm) Phase-Earth / Phase-Phase		Safety Clearance in SIS (mm)		
	KV					
	33	381	432	2740		
	66	658	786	3050		
	132	1127	1473	3810		
	220	2082	2388	4570		
	4000	3500	4000	6100		
7.	<p><b>Clearance From Railway Tracks:</b>  (As per Regulation for Electrical Crossing of Railway Tracks 1963)  The relevant provisions for the crossings of Railway Tracks by the power lines are as under:  The minimum height above rail level of the lowest portion of any conductor under conditions of maximum sag are as follows in accordance with the Regulations for Electrical Crossings of Railway Tracks, 1963:  (i) For Unelectrified Tracks or Tracks Electrified on 1500 Volts D.C.</p>					
		Broad Gauge		Meter and Narrow Gauge		
		Inside	Outside	Inside	Outside	
		station	station	station	station	

		limits	limits	limits	limits
		(mm)	(mm)	(mm)	(mm)
	66 KV	10,300	7,900	9,100	6,700
	132 KV	10,900	8,500	9,800	7,300
	220 KV	11,200	8,800	10,000	7,600
	440 KV*	13,600	11,200	12,400	10,000

(ii) Tracks Electrified on 25 KV A.C.

		For Broad, Meter and Narrow Gauges	
		Inside	Outside
		station	station
		limits	limits
		(mm)	(mm)
	66 KV	13,000	11,000
	132 KV	14,000	12,000
	220 KV	15,300	13,300
	440 KV*	16,300	14,300
* Tentatively assumed.			

No conductor of an extra high voltage overhead line crossing a tramway or trolley bus using trolley wires should have a clearance less than 3050 mm above the trolley line.

The provisions of the above Regulations must be kept in mind while carrying out the patrolling of Transmission lines. Any deviation noticed should be reported / attended on top-priority.

**8. Provisions of PTCC:**

The requisite information's as per the questionnaire of PTCC Proforma have to be taken care of during patrolling / checking of the line.