

STATEMENT SHOWING THE REQUIREMENT FOR H.V. INSTALLATION

1. Name of the owner
2. Official designation or professional address
3. Site of Installation
4. Site of Installation
5. S.C. No.

Sl. No.	Rule No.	Particulars	Owners reply and Signature	Remarks by D.E.S. or his representatives
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A-GENERAL SAFETY PRECAUTIONS

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| 1. | 3 | Give name of the person authorized for the purpose of- <ul style="list-style-type: none"> (a) Rule 36(2) (b) Rule 51(1)(a) (c) Rule 64(1)(a) | | |
| 2. | 7(2) | Has the prescribed fee for inspection been deposited Quote T.C. no., date and amount | | |
| 3. | 9 | Have record of tests, viz, High voltage test, insulation test and earth test been kept | | |
| 4. | 29 | Are electric supply lines and apparatus sufficient in power and size and sufficient mechanical strength? | | |
| 5. | 30 | Are electric supply lines, wires and apparatus belonging to the supplier in safe condition? | | |
| 6. | 31 | Has the supplier provided a cut out? | | |
| 7. | 33 | Has the supplier provided an earthed terminal? | | |
| 8. | 34 | Where bare Conductors have been used- <ul style="list-style-type: none"> (a) Are they inaccessible? (b) Have switches for rending them dead provided? (c) Have other proper safety measures been taken? | | |

9. 35 Have a Danger Notice in Hindi of the type approved by The Director Electrical Safety or as per Bureau of Indian standard.
10. 41 Have circuit or apparatus intended for operation at different voltage been provided with distinguishing marks?
11. 42 Have suitable precautions been taken to avoid accidental charging of an apparatus beyond the intended voltage?
12. 43(1) Have electric fire extinguishers and fire buckets been provided?
13. 43(2) Have first-aid boxes equipped with contents as specified by the Government been provided? Give names of persons qualified for first-aid?
14. 44(1) Have shock restoration charts been provided?
15. 44(3) Give names of authorized persons who are acquainted with and are competent to apply these instructions.

B- GENERAL CONDITIONS RELATING TO SUPPLY AND USE OF ENERGY

16. 50(1) (a) Has linked switch or circuit breaker of requisite capacity been provided after but near the point of commencement of supply to completely isolate the supply?
17. 50(1) (b) Has a linked switch or a circuit breaker of requisite capacity to carry and break the full load current inserted on the secondary side of a transformers of any owner (excluding transformer of less than 100KVA capacity belonging to the supplier) linked switch on the primary side being suitable to carry the full load current and for breaking only the magnetizing current of the transformer?
18. 50(1) (c) Has every distinct circuit been protected against excess energy by a suitable cut out or circuit breaker?
19. 50(1) (d) Has a suitable linked switch or C.B. been provided at appropriate place for controlling supply to each motor or apparatus?
20. 50(1) (f) Have adequate precaution being taken to ensure that no live parts are so exposed as to cause danger.
- 51(1) (a) Have all the conductors (other than overhead lines) been completely enclosed in

mechanically strong metal covering which is electrically and mechanically continuous and adequately protected against mechanical damage? If unprotected are they access able only to authorized persons, or are installed and protected to the satisfaction of the inspector so as to prevent danger?

22. 51(1) (b) Have all the metal works enclosing, supporting or associated with the installation been connected with earth.
23. 51(1) (c) Have the following precautions been taken in respect of main switch board-
- (i) Has a clear space of not less than 1m width been provided in front of the main switch board? If so, is the space behind, less than 20 cm. more than 75 cm. in width.
- (ii) Are there bare connections at the back of the main switch board? If so, is the space behind less than 20 cm. or more than 75 cm. in width.
- (iii) Has a passage-way from either end of the switch-board clear to a height of 18 cm. been provided, if the space behind the switch board exceeds 75 cm. in width?

C- ELECTRIC SUPPLY LINES, SYSTEM AND APPARATUS FOR HIGH AND EXTRA-HIGH VOLTAGE

24. 61(1)(a) and 67(1): Has the neutral conductor of three phase four-wire system and the middle conductor of two-phase three-wire system been connected with two separate and distinct connections with earth both at the generating station an at the sub-station and also at one or more points along with distribution system?
25. 61(2) Has the frame of every generator, stationary motor, transformer etc. and the metallic parts (not intended as conductors) of all transformers and other apparatus earth by two separate and distinct connections with earth?
26. 64(1) (a) Are all conductors and apparatus inaccessible except to authorized persons and, are all operations in connection with the said apparatus and conductor carried out only by an authorized person?

27. 64(1) (b) Has the consumer provided a separate building or a locked weather proof and fire-proof enclosure for housing license's high voltage apparatus and metering equipment of impracticable, as the consumer segregated his apparatus from that of the supplier?
28. 64(2) (a) Are all conductors or live parts of any apparatus ordinarily inaccessible?
29. 64(2) (b) Have the windings of H.V. Motors or other apparatus, where within easy reach, been suitably protected so as to prevent danger?
30. 64(2) (c) Have suitable precautions been taken either by connecting with earth a point of the circuit at the lower voltage or otherwise to guard against danger by reason of the said circuit getting charged above its normal voltage by leakage from or contact with the H.V. Circuit.
31. 64(2) (d)(i) Have oil soak pits been provided where more than 2000 liters of oil is load in transformers and switchgears installed in one chamber?
- Has provision been made for draining away the leaked or escaped oil if more than 9,000 liters of oil is used in one chamber?
- Its provision been made for extinguishing any fire?
- Has any spare oil been stored in the sub-station or switch station?
32. 64(2) (d)(ii) Have cable trenches inside sub-station etc. containing cables been filled with sand and pebbles etc. or completely covered with non-inflamable slabs?
33. 64(2) (h) Where it is not possible to disconnect the entire installation for cleaning or other purpose, have the conductors and apparatus been so arranged that they may be made dead in sections to enable work on any dead section to be carried out by an authorized person without danger?
34. 64(2) (f) Have adequate precaution been taken to prevent unauthorized access in any part of the installation designed to be electrically charged at high or extra high voltage?
35. 65(2) Has the insulation of the H.V. electric supply

- lines or apparatus withstood the routine tests as per relevant Indian Standards?
36. 65(3) If above tests have been carried out before installing the electric supply lines and apparatus in position have these tests also been applied after their installation or if impracticable, has the insulation of the entire installation withstood a pressure of not less than 1,000 volts, applied between the conductors and also between conductors and earth for a period of not less than one minute?
37. 65(4) Has the test prescribed above been applied to the electric supply or apparatus after alterations or repairs?
38. 65(5) Have the results of above tests been recorded?
39. 65(6) In case the above tests have been carried out, has a copy of the manufactures certified tests been supplied? Quote reference and attach a copy.
40. 66(1) Have the following provisions been complied with by the supplier-
- (a) Have the conductors been enclosed in a metallic sheathing electrically continuous and efficiently earthed?
- (b) In the event of failure of installation between one conductor and sheathing at any point is the impedance of the circuit such that with the full voltage maintained at the source of supply, the current resulting from such failure is not less than twice the value of the current for which a suitable cutout of adequate rupturing capacity or suitable overload protective device has been set to operate suitable discriminative fault current relay?
41. 68(1)(a) and (c):Is the sub-station erected under ground? If so have the controlling switch-gears and cutout etc. fixed is separate receptacle above ground?
42. 68(1) (b) Has an efficient fencing 1.8m. Height been provided to prevent access to electric supply lines and apparatus installed in an outdoor plinth type sub-station.
43. 69 Have substantial hand rails been built around the platform provided for a person to stand on a pole-type sub-station? Have the hand rails and platforms if of metal been efficiently earthed?
44. 70 Have suitable provisions been made for

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immediate and automatic discharge of every static condenser on disconnection of supply?

Description of Installation:

- (i) Manufactures Name
- (ii) Serial Number
- (iii) Voltage, Amp and frequency
- (iv) Capacity

6. Name of Electrical Contractor

I certify that the wiring of the above installation was carried out by Sri Wireman (Permit no.) under the supervision of Sri Supervisor (Certificate no.) And it complies with the required standards and provisions of Indian Electricity Rules, 1956.

**Electrical Contractor/Department of
Factory exempted from rule 45
(Give designation)**

The earthing shall be carried out in accordance with the standard prescribed under I.S. 732-1958 and the minimum size of earth conductor and earth electrode in case of plate earthing, shall be specified below:-

Capacity of appartus	Size in earth conductor in S.W.G.			Size of each electrode		
	Copper	G.I.	Aluminium in Sq. in.	Copper	G.I.	Aluminium
1	2	3	4	5	6	7
Upto 10 hp	No. 8	No. 8	.02	60cm x 60cm x 3.18 mm (1' x 1' x 1/11")	60cm x 60cm x 6.30 mm (1' x 1' x 1/11")	2' x 2' x 1/4"
Above 10 hp and upto 15 hp	No. 8	No. 8	.032	Ditto	Ditto	Ditto
Above 15 hp and upto 30 hp	No. 6	No. 2	.48	Ditto	90cm x 90cm x 6.30 mm (3' x 3' x 1/8")	3' x 3' x 1/4"
Above 30 hp and upto 50 hp	No. 4	--	.06	90cm x 90cm x 3.18 mm (3' x 3' x 1/8")		Ditto
Above 50 hp and upto 100 hp	Strips 1/2" x 1/10"			90cm x 90cm x 6.30 mm (3' x 3' x 1/4")		3' x 3' x 3/8"
Above 100 hp	Strips 1" x 1/10"			Ditto		Ditto