(1) The Engineer or Supervisor in-charge of the work shall obtain proper Permit-To-Work from the concerned Operation In-charge(s) and ensure that the electric supply line or apparatus or section is isolated from all sources of energy, de-energised and earthed.

(2) Operation, maintenance and repair must be carried out by trained and certified personnel only.

(3) Before commencement of any shutdown work or testing of gas insulated switchgear apparatus, the Engineer or Supervisor in-charge of the work or testing shall identify the possible hazards, such as; electrocution, flash over, fall of person from height, fall of objects from height, failure of Tools and Plants, fire, and the like, that may be encountered while carrying out the work or testing near charged area and take necessary precaution to protect the working personnel.

(4) The Engineer or Supervisor in-charge of the work shall, before commencement of any work, brief the entire working group or gang of the hazards that may be encountered and the necessary precautions to be taken by them.

(5) Wear hearing protection during operation.

(6) Take care while touching the enclosure at any time as enclosures may heat up to the temperature of 70°C.

(7) Observe the procedures for storage, transportation, and the use of filling equipment.

(8) Wear the personal protective equipment: respirator mask (self-contained breathing equipment if necessary), protective overall, protective gloves, safety shoes, safety glasses.

(9) Attach warning labels to all neighboring installation parts (to be removed after the works have been carried out).

(10) Provide proper electrical clearance as required by interlocking rules. Mark e.g. main circuits and control circuits with appropriate tags.

(11) Block off neighboring live parts with screens, insulating mats or spacer grids in order to prevent unintended contacts.

(12) While working on any compartment in gas insulated switchgear, the immediate adjacent compartment(s) must be also depressurised for safety of the working person.

(13) SF_6 gas becomes contaminated and contains poisonous substances after events such as arc faults. Hence, handling of SF_6 in such cases must be done using proper PPEs and by a trained personnel, preferably from the original equipment manufacturer.

(14) The switchgear installation shall not be operated if the density of SF_6 gas indicated at the density monitors is not in the operating range.

(15) Do not remove any protective covers if an assembly is energized.

(16) The Engineer or Supervisor in-charge of the work shall ensure that adequate and appropriate local earths are fixed at the zone of working, and the earthing rods remain connected to the isolated section of the electric supply line or apparatus or section till all men and materials have been moved away to safe zone and Permit-To-Work is returned on completion of the work.

Schedule II

Forms of Inspection Report

[See regulation (32) and (45)]

FORM I

(Installations of voltage up to and including 250V)

Report _____

Date of inspection by Electrical Inspector or self-certification by supplier/owner/consumer _____

Date of last inspection or self-certification _____

1. Consumer No. _____

2. Voltage and system of supply:

(i) Volts _____(ii) No. of Phases _____ (iii) AC/DC _____

3. Type of wiring* _____

**State type of wiring whether casing capping, lead covered of teak wood batten, concealed conduit, Tough Rubber Sheathed and any other type.*

4. Name of the consumer or owner _____

5. Address of the consumer or owner _____

6. Location of the premises _____

7. Particulars of the installations:

		Number	Connected Load in kW
(a) (i)	Light Points	_____	_____
(ii)	Fan Points	_____	_____
(iii)	Plug Points	_____	_____

(b) Other equipment (complete details to be furnished):

(i) _____

(ii) _____

Total connected load in kW _____

Maximum current demand in Amps _____

(on the basis of total connected load)

(c) Generators: (complete detail to be enclosed)

Make	S. No.	kVA rating	Voltage rating	Type
(i)				
(ii)				

8. General conditions of the installation:

Sl. No.	Regulation No.	Requirements	Report
1.	Regulation 14	(i) Is/Are there any visible sign(s) of overloading in respect of any apparatus wiring?	Yes/No
		(ii) Condition of flexible cords, sockets, switches, plug-pins, cut-outs and lamp holders and such other fittings.	Satisfactory/ Not Satisfactory
		(iii) General condition of wiring.	Satisfactory/ Not Satisfactory
		(iv) Whether any unauthorised temporary installation exist?	Yes/No
		(v) State if sockets are controlled by individual switches.	Yes/No
		(vi) Any other defect or condition which may be a source of danger. If yes, give details.	Yes/No
2.	Regulation 15	Give report on condition of service lines, cables, wires, apparatus and such other fittings placed by the supplier or owner of the premises. If not satisfactory, give details.	Satisfactory/ Not Satisfactory
3. 1	Regulation 16	Whether suitable cut-outs provided by the supplier at the consumer's premises are within enclosed fire proof receptacle?	Yes/No
4. 1	Regulation 17	(i) State if switches are provided on live conductors.	Yes/No
		(ii) State if indication of a permanent nature is provided as per regulation so as to distinguish earthed or earthed	Yes/No

		neutral conductor from the live conductor.	
		(iii) Whether a direct line is provided on the neutral in the case of single-phase double pole iron clad switches instead of fuse?	Yes/No
5.	Regulation 18	(i) State if earthed terminal is provided by the supplier.	Yes/No
		(ii) Have three pin plugs been provided for plug points?	Yes/No
		(iii) General visible condition of the earthing arrangement.	Satisfactory/ Not Satisfactory
6.	Regulation 19	Are the live parts in building inaccessible?	Yes/No
7.	Regulation 36	State insulation resistance between conductors and earth in Mega Ohms.	-------- Mega Ohms
8.	Regulation 37	(i) State if linked switches of requisite capacity are provided near the point of commencement of supply.	Yes/No
		(ii) State if the wiring is divided in suitable number of circuits and each such circuit is protected by suitable cut-out.	Yes/No
		(iii) State if supply to each motor or apparatus is controlled by suitable linked switch.	Yes/No
9.	Regulation 43	(i) Have the frames of every generator, stationary motor and so far as practicable portable motor and the metallic parts (not intended as conductors) of all other apparatus used for regulating* or controlling electricity been earthed by two separate and distinct connections with earth?	Yes/No
		(ii) Is the earth wire free from mechanical damage?	Yes/No
		(iii) In the case of conduit, or lead covered wiring, has the conduit or lead-cover been efficiently earthed?	Yes/No
		(iv) If the consumer has his own earth-electrode, state if it is properly executed and has been tested. If yes, give value of earth resistance	------- Ohms
10.	Regulation 44	Whether residual current device of appropriate capacity as defined in Regulation have been provided?	Yes/No
11.	Overhead Lines	(i) State if the consumer has any overhead lines.	Yes/No
		(ii) Does the overhead line near the premises of consumer meets the requirement of regulation 60, 61 and 62? If not, give details.	Yes/No
		(iii) Is guarding provided for overhead lines as per Regulation 76?	Yes/No
		(iv) Any other remarks.	

Date:

Signature of the supplier/ Owner / Consumer

Name _____

Designation _____

File No. _____

To: Office of Electrical Inspector for ……...

* Not applicable to isolated wall tubes or to brackets, electroliers, switches, ceiling fans and such other fittings (other than portable hand lamps and transportable apparatus) unless provided with earth terminal.

FORM II

[See Regulation (32) and (45)]

(Installations of voltage level more than 250 V up to and including 650 V)

Report / Application No. _____

Date of inspection by Electrical Inspector or self-certification by supplier/owner/consumer _____

Date of last inspection or self-certification _____

1. Consumer No. _____
2. Voltage and system of supply:
   (ii) Volts _____(ii) No. of Phases _____ (iii) AC/DC _____
3. Name of the consumer or owner _____
4. Address of the consumer or owner _____
5. Location of the premises _____
6. Particulars of the installations:
   (a) Motors:

Make	S. No.	kW/MW rating	Voltage rating	Type
(i)				
(ii)				

   (b) Other equipment (complete details to be furnished):
   (i) _____
   (ii) _____
   (c) Total connected load kW / kVA _____
   (d) Generators: (complete detail to be enclosed)

Make	S. No.	kVA rating	Voltage rating	Type
(iii)				
(iv)				

7. General condition of the installation:

Sl.No.	Regulation No.	Requirements	Report
1.	Regulation 3	Is the record of the designated persons properly made and kept up to date and duly attested?	Yes/No
2.	Regulation 14	(i) Is/Are there any visible sign(s) of overloading in respect of any apparatus wiring?	Yes/No
		(ii) Whether any unauthorised temporary installation exist?	Yes/No
		(iii) Are the electric supply lines and apparatus so installed, protected, worked and maintained as to prevent danger?	Yes/No
		(iv) Any other general remarks.	
3.	Regulation 15	Give report on condition of service lines, cables, wires, apparatus and such other fittings placed by the supplier or owner of the premises. If not satisfactory, give details.	Satisfactory/ Not Satisfactory
4.	Regulation 16	Whether suitable cut-outs/CBs provided by the supplier at the consumer's premises are within enclosed fire proof receptacle?	Yes/No
5.	Regulation 17	(i) Whether switches are provided on live conductors?	Yes/No
		(ii) Whether indication of a permanent nature is provided as per regulation so as to distinguish earthed or earthed neutral conductor from the live conductor as per IS color	Yes/No