Government of West Bengal
Department of Power,
Bidyut Unnayan Bhaban, 5th Floor
3/C, LA-Block, Sector-III,
Bidhannagar, Kokata-700 106

No: 1603- POW-13099/4/2020-SECTION(POWER) Dated, Kolkata, 03rd Oct., 2024

Notification

WHEREAS, Department for Promotion of Industry and Internal Trade (DPIIT), Government of India, in Business Reform Action Plan 2024 under 'Ease of Doing Business' has recommended that Notification is to be issued for external and internal electricity installation carried out by a licensed professional/ company/ contractor and also qualification of third party carrying out electrical wiring installation works stipulating safety of highest standards in line with Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, vide Notification No. CEA-PS-16/1/2021-CEI Division dated 8th June, 2023.

AND WHEREAS, Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, vide Notification No. CEA-PS-16/1/2021-CEI Division dated 8th June, 2023 in Regulation No. 31(1) had specified that: "No electrical installation work, including additions, alterations, repairs and adjustments to existing installations shall be carried out except by an electrical contractor licenced in this behalf by the State Government and on its behalf under the direct supervision of a person holding a certificate of competency and by a person holding a permit issued or recognised by the State Government:

AND WHEREAS, Power Department, through Directorate of Electricity, Government of West Bengal, had already notified vide Notification No. 799/PO/O/C-IV/1E-88/17 dated 30th October, 2017 "The West Bengal Electrical Licensing Rules, 2017" has specified in Rules No. 14, 15, 22, 23, 29, 30, 31 and 36 about the qualifications, experiences, other technical requirements on Certification of the Electrical Workmen, Certificate of Competency of Supervisors, National Certificate of Supervisors and Electrical Contractors in the State of West Bengal.

AND WHEREAS, Power Department, through Directorate of Electricity, Government of West Bengal, had already notified vide Notification No. 562/PO/0/C-IV/1E-06/12 dated 07.07.2017 the Notified Voltage for the purpose of self certification. **(also available on website wbpower.gov.in)**

AND WHEREAS, Power Department, Government of West Bengal, had already notified vide Notification No. 697/PO/O/C-IV/1E-45/17 dated 13.08.2018 the Procedure for test/interview (detailing the qualifications, experiences and other requirements) certification of the Chartered

Electrical Safety Engineer (CESE) (also available on website wbpower.gov.in), hereinafter referred to as Chartered Electrical Safety Engineer.

NOW THEREFORE, Power Department, Government of West Bengal, adopting the CEA Regulations, Notification No. CEA-PS-16/1/2021-CEI Division dated 8th June, 2023, - Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, and the recommendations as per BRAP 2024, hereby notifies the following:
Chartered Electrical Safety Engineer (CESE), authorised by Power department, Government of West Bengal, shall be the Third party who shall assist the owner or supplier or consumer of electrical installations for the purpose of self-certification in line with regulation 32 and regulation 45 of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, vide Notification No. CEA-PS-16/1/2021-CEI Division dated 8th June, 2023, hereinafter referred to as 'Chartered Electrical Safety Engineer' or 'Third Party' or 'a Third Party'.

It is further, also notified that:

1. All external electricity installation works should be carried out by a licensed professional/ company licensed in this behalf by the State Government.

2. (i) Every external electricity installations should be inspected by a Licensed Electrical Contractor/company that performed the external installations, on yearly basis.
(ii) Frequency of issuance of certificate of compliance by a Licensed Electrical contractor/company for an external electrical installations should be on Yearly basis.
(iii) Checking of the quality of external electrical installations by a Licensed Electrical contractor/company is to be done annually.

3. Every external Electricity Installations should be inspected by a third party (final inspection by third part), to ensure the quality and safety once in three years and the reports as per attached formats are to be submitted to the Electrical Inspector.

4. All external electricity installation works should be carried out by a licensed professional/ company licensed in this behalf by the State Government.

5. (i) Every internal electricity installations should be inspected by a Licensed Electrical Contractor/company that performed the internal installations on yearly basis.
(ii) Frequency of issuance of certificate of compliance by a Licensed Electrical Contractor/ company for an internal electrical installation should be on Yearly basis.
(iii) Checking of the quality of external electrical installations by a Licensed Electrical contractor/company is to be done annually.

6. Every internal Electricity Installation should be inspected by a third party i.e. Chartered Electrical Safety Engineer (CESE), to ensure the quality and safety once in three years and the reports as per attached formats are to be submitted to the Electrical Inspector.

7. Licensed Professional carrying out the electrical wiring works should have an Electrical Workman Permit (WP) having Electrical Workmen Permit Part-i(a)/ i(b), ii , issued by the Government of West Bengal under West Bengal Electrical Licensing Rules, 2017under the supervision of an Electrical Supervisor having S.C.C License with Part-1, 2 &11, or under a National Certificate of Supervisor License holder, issued by the Government of West Bengal under West Bengal Electrical Licensing Rules, 2017.

As per Clause No. 14, 15, 16 of the West Bengal Electrical Licensing Rules, 2017, Qualifications, experiences etc to appear into the Electrical Workman Examination for WP Part- i(a), i(b) & ii are as follows:

For Voltages not exceeding 650 Volts: WP Part (i) Wiring of buildings (for light, fans and small motors)

(a)Cleat, wood casing and capping systems, employing wires and cables other than paper insulated cables.

(b) Metal sheathed, tough rubber and conduit systems using wires and cables other than paper insulated cables.

Electrical Workman Permit (WP) Part (ii): Motor wirings (including generators), in conduit or lead sheathed, with wires and cables other than armoured cable.

Qualifications & Experience for Workman Permit – To apply for WP Part i(a), i(b) & (ii) examination working experience for a period of two years in respective field is required.

As per Clause No. 21, 22, 23 & 24 of the West Bengal Electrical Licensing Rules, 2017, Qualifications, experiences etc to appear into the examination of Certificate of Competency of Supervisors are as follows:

Qualifications & experience for Certificate of Competency of Supervisors. – (1) Candidates for the examination for Certificates of Competency of Supervisors shall have–

(a) passed *Madhyamik Pariksha* or its equivalent examination from any recognised board or council;

(b) passed the examination for electrical workman in the corresponding class;

(c) minimum of 8(eight) years of practical experience out of which 2 years as workmen and remaining 6 years in supervising nature of job which is regarded as satisfactory by the Board;

Provided also that every candidate who produces a full Degree or Diploma Certificate in

Electrical Engineering acceptable to the Board from a college or institution and who subsequent to the Degree or Diploma course has completed one year experience or three years of experience respectively in the field of domestic wiring upto 250 Volt and industrial wiring upto 650Volt, are exempted from appearing at Supervisor Certificate of Competency (S.C.C) in Parts 1, 2 and 11.

(2) Any candidate of advanced age not less than 40 years who has passed any one of–

(a) *Madhyamik pariksha* or its equivalent examination; or

(b) Relevant Part of Electrical Workman's Permit examination having at least 10 (ten) years of practical experience which is regarded as satisfactory by the Board,

As per Clause No. 29 & 30 of the West Bengal Electrical Licensing Rules, 2017, Qualifications, experiences etc to appear into the examination of National Certificate of Supervisors are as follows:

Qualifications & Experience for National Certificate of Supervisors.–(1) Candidates for the examination for National Certificate of Supervisors shall–

(a) Any candidate holding a Degree in Electrical Engineering from a recognised University and possessing a minimum experience of 10(ten) years or holding a Diploma in Electrical Engineering from institution recognised by the State Government and possessing a minimum experience of 15(fifteen) years in the practice of Electrical Engineering

(b) Submit testimonials relating to Higher Secondary or Diploma in Engineering Disciplines or National Council for Training in Vocational Trades (NCTVT) or its equivalent from any recognised board or council; and possess approved practical experience of not less than fifteen years in electrical installation work:

Forms of Inspection Report

FORM I

(Installations of voltage up to and including 250V)

Report _____

Date of inspection by 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 RubberSheathed 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 ofdanger. 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.	Regulation 16	Whether suitable cut-outs provided by the supplier at the consumer"s premises are within enclosed fire proof receptacle?	Yes/No
4.	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 neutral conductor from the live conductor.	Yes/No
		(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	Satisfactory/
		arrangement.	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.	

Signature of the supplier/ Owner / Consumer

Name _____

Designation _____

FORM II

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

Report / Application No. _____

Date of inspection by 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 respectof 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 proofreceptacle?	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	Yes/No

		neutral conductor from the live conductor as per IS color	
		code?	
		(iii) Whether a direct line is provided on the neutral in the case of single-phase double pole iron clad switches/Isolators/CBs instead of fuse?	Yes/No
6.	Regulation 18	(i) Whether earthed terminal is provided by the supplier?	Yes/No
		(ii) General visible condition of the earthing arrangement.	Satisfactory/ Not Satisfactory
7.	Regulation 19	(i) Are bare conductors in building inaccessible?	Yes/No
		(ii) Whether readily accessible switches have been provided for rendering them dead?	Yes/No
8.	Regulation 20	Whether "Danger Notice" in Hindi and the local language of the district and of a design as per the relevant standards is affixed permanently in conspicuous position?	Yes/No
9.	Regulation 21	(i) Whether insulating floor or mats have been provided?	Yes/No
		(ii) Whether identification of panel has been provided on the front and the rear of the panel?	Yes/No
10.	Regulation 23	Whether flexible cables used for portable or transportable equipment covered under the regulation, are heavily insulated and adequately protected from mechanical injury?	Yes/No
11.	Regulation 24	State the condition of metallic coverings provided for various conductors.	Satisfactory/ Not Satisfactory
12.	Regulation 26	Whether the circuits or apparatus intended for operating at different voltage(s) are distinguishable by means of indication(s) of permanent nature?	Yes/No
13.	Regulation 28	Whether all circuits and apparatus are so arranged that there is no danger of any part(s) becoming accidentally charged to any voltage beyond the limits of voltage for which it/they is/are intended?	Yes/No
14.	Regulation 29	(i) In the case of generating stations, whether fire-buckets filled with clean dry sand have been conspicuously marked and kept in convenient location in addition to fire- extinguishers suitable for dealing with fires ?	Yes/No
		(ii) Whether First Aid Boxes or cupboards conspicuously marked and properly equipped are provided and maintained?	Yes/No

		(iii) Is adequate staff trained in First Aid Treatment and firefighting?	Yes/No
15.	Regulation 30	(i) Whether instructions in English or Hindi and the local language of the district and where Hindi is the local language, in English and Hindi, for the resuscitation of persons suffering from electric shock have been affixed in a "conspicuous place"?	Yes/No
		(ii) Are the persons specified under this Regulation able to apply instructions for resuscitation of persons suffering from electric shock?	Yes/No
16.	Regulation 36	State insulation resistance between conductors and earth in Mega Ohms.	----- Mega Ohms
17.	Regulation 37	(i) Whether a suitable linked switch, or circuit breaker is placed near the point of commencement of supply so as to be readily accessible and capable of being easily operated	Yes/No
		to completely isolate the supply?	
		(ii) Whether every distinct circuit is protected against excess electricity by means of a suitable circuit breaker or cut-out ?	Yes/No
		(iii) Whether suitable linked switch or circuit breaker is provided near each motor or apparatus for controlling supply to the motor or apparatus?	Yes/No
		(iv) Whether adequate precautions are taken to ensure that no live parts are so exposed as to cause danger?	Yes/No
18.	Regulation 39	(i) Whether clear space of 100 cm is provided in front of the main switchboard?	Yes/No
		(ii) Whether the space behind the switchboard exceeds 75 cm in width or is less than 20 cm?	Yes/No
		(iii) In case the clear space behind the switchboard exceeds 75 cm, state whether a passage way from either end of the switchboard to a height of 1.80 metre is provided.	Yes/No
19.	Regulation 43	(i) Have the frame of every generator, stationary motor and so far as practicable, portable motor and the metallic parts (not intended as conductors) of all transformers and any other apparatus used for regulating or controlling electricity and all apparatus consuming electricity at voltage exceeding 250 V but not exceeding 650 V been earthed by two separate and distinct connections with earth?	Yes/No

		(ii) Have the metal casings or metallic coverings containing or protecting any electric supply line or apparatus been properly earthed and so joined and connected across all junction boxes as to make good mechanical and electrical connection?	Yes/No
		(iii) Whether the consumer"s earth-electrode is properly executed and has been tested. If yes, give value of earth resistance?	Yes/No Ohm
		(iv) Is the earth wire free from any mechanical damage?	Yes/No
		(v) Whether record of earth resistance value maintained?	Yes/No
		(vi) Is the protective equipotential bonding tested?	Yes/No
		(vii) Is the fault loop impedance at origin of installation tested?	Yes/No
		(viii) Is the fault loop impedance of each circuit tested?	Yes/No
		(ix) Is the fault loop impedance tested for all sources?	Yes/No
20.	Regulation 44	Whether Residual Current Device of Appropriate capacity as defined in Regulation have been provided?	Yes/No
21.	Regulation 47	Have the protections and interlocks for the generating units been provided. Details of the protections shall be given.	Yes/No
22.	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 regulations 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.	Yes/No

Signature of the supplier/ Owner / Consumer
Name__
Designation

FORM-III

(Installations of voltage exceeding 650 V)

Report / Application No. _____

Date of inspection by Electrical Inspector:

Date of last inspection_____

1. Consumer No. _____
2. Voltage and system of supply:

   (iii) 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) Transformers: (complete detail to be enclosed)

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

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

	Make	S. No.	kVA/MVA rating	Voltage rating	Type
(v)					
(vi)					

   (c) List of Motors with rating, protection, overload setting, size of earth conductor used to be furnished

	Make	S. No.	kW/MW rating	Voltage rating	Type
(iii)					
(iv)					

   (d) List of equipment with complete details of HT /LT switchgears/ apparatus with their rating to be furnished):

   (iii) _____

(iv) _____

(e) Total connected load kW / kVA --------Complete list of connected loads to be furnished.

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 5	Whether Electrical Safety Officer as required under the Regulation is designated?	Yes/No
	Regulation 14	(i) Is/Are there any visible sign(s) of overloading in respect of any apparatus?	Yes/No
		(ii) Whether any unauthorised temporary installation exist?	Yes/No
		(iii) Whether the motors and controlling equipment are being overhauled periodically and record kept of the same in a register?	Yes/No
		(iv) Whether the transformer oil samples are being tested periodically and results recorded in a register? State value of dielectric strength of oil.	Yes/No ---- kV/mm
		(v) Whether suitable lightning arresters have been provided near the transformers for protection against lightning?	Yes/No
		(vi) Whether earth resistance is being measured periodically once a year and results recorded in a register? Copy of record to be enclosed.	Yes/No
		(vii) Any other defect or condition which may be a source of danger. If yes, please explain?	Yes/No
		(viii) Whether operation and maintenance data has been clarified, categorised and computerised for prompt and easy retrieval?	Yes/No
		(ix) Whether residual life assessment and life extension programmes are being undertaken for installations or equipment of voltage exceeding 650 V (applicable for installations or equipment more than 15 years old)?	Yes/No
		(x) Whether all required type and routine tests at factory done for equipment? Deficiencies and discrepancies in above test report and results, if any, shall be reported.	Yes/No
		(xi) Are there deficiencies in construction with reference to Indian Standard requirements? Please specify.	Yes/No
4.	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
5.	Regulation 16	Whether suitable cut-outs/CBs provided by the supplier at the consumer"s premises are within enclosed fire proof receptacle?	Yes/No

6.	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?	Yes/No
		(iii) Whether a direct line is provided on the neutral in the case of single-phase double pole iron clad switches/CBs instead of fuse?	Yes/No
7.	Regulation 18	(i) Whether earthed terminal is provided by the supplier?	Yes/No
		(ii) General visible condition of the earthing arrangement.	Satisfactory/ Not Satisfactory
8.	Regulation 19	(i) Are live parts in building inaccessible?	Yes/No
		(ii) Whether readily accessible switches have been provided for rendering them dead?	Yes/No
9.	Regulation 20	Whether "Danger Notice" in Hindi and the local language of the district and of a design as per the relevant standards is affixed permanently in conspicuous position?	Yes/No
10.	Regulation 21	(i) Whether the practice of working on live lines and apparatus is adopted? If so, have the safety measure been adopted as per Schedule I?	Yes/No
		(ii) Whether insulating floor or mats conforming to the relevant standards have been provided?	Yes/No
		(iii) Whether identification of panel has been provided on the front and the rear of the panel?	Yes/No
11.	Regulation 23	Whether flexible cables used for portable or transportable equipment covered under the Regulation, are heavily insulated and adequately protected from mechanical injury?	Yes/No
12.	Regulation 24	State the condition of metallic coverings provided for various conductors.	Satisfactory/ Not Satisfactory
13.	Regulation 26	Whether the circuits or apparatus intended for operating at different voltage(s) are distinguishable by means of indication(s) of permanent nature?	Yes/No
14.	Regulation 28	Whether all circuits and apparatus are so arranged that there is no danger of any part(s) becoming accidentally charged to any voltage beyond the limits of voltage for which it/they is/are intended?	Yes/No
15.	Regulation 29	(i) In the case of generating stations and enclosed sub stations, whether fire-buckets filled with clean dry sand have been conspicuously marked and kept in convenient location in addition to fire-extinguishers suitable	Yes/No

		for dealing with electric fires?	
		(ii) Whether First Aid Boxes or cupboards conspicuously marked and properly equipped are provided and maintained?	Yes/No
		(iii) Is adequate staff trained in First Aid Treatment and firefighting?	Yes/No
16.	Regulation 30	(i) Whether instructions in English or Hindi and the local language of the district and where Hindi is the local language, in English and Hindi, for the resuscitation of persons suffering from electric shock have been affixed in a "conspicuous place"?	Yes/No
		(ii) Are the persons mentioned in this regulation able to apply instructions for resuscitation of persons suffering from electric shock?	Yes/No
17.	Regulation 36	State insulation resistance between conductors and earth in Mega Ohms.	----- Mega Ohms
18.	Regulation 37	(i) Whether a suitable linked switch, or a circuit breaker, or an emergency tripping device is placed near the point of commencement of supply so as to be readily accessible and capable of being easily operated to completely isolate the supply?	Yes/No
		(ii) Whether suitable linked switch or a circuit breaker to carry and break the full load current is provided on the secondary side of a transformer?	Yes/No
		(iii) Whether every distinct circuit is protected against excess electricity by means of a suitable circuit breaker or cut- out?	Yes/No
		(iv) Whether linked switch or circuit breaker or emergency tripping device is provided near the motor or other apparatus at voltage exceeding 650 V but not exceeding 33kV for controlling supply to the motor or apparatus?	Yes/No
		(v) Whether adequate precautions are taken to ensure that no live parts are so exposed as to cause danger?	Yes/No
19.	Regulation 39	(i) Whether clear space of 100 cm is provided in front of the main switchboard?	Yes/No
		(ii) Whether the space behind the switchboard exceeds 75 cm in width or is less than 20 cm?	Yes/No
		(iii) In case the clear space behind the switchboard exceeds 75 cm, state whether a passage way from either end of the switchboard to a height of 1.80 metre is provided.	Yes/No
20.	Regulation 46	(i) Whether all conductors and apparatus including live parts thereof are inaccessible	Yes/No
		(ii) Whether all windings of motors or other apparatus are suitably protected?	Yes/No

		(iii) Whether the separation wall or fire wall between apparatuses or consumer premises, in a substation or a switching station with apparatus having more than 2000 litres of oil are installed, have been provided as required under the regulation?	Yes/No
		(iv) Where 9000 litre or more of oil is used in any one oil tank, has provision been made for draining away or removal of oil which may leak or escape from such tank(s)?	Yes/No
		(v) Whether suitable firefighting system as per the regulation has been provided?	Yes/No
		(vi) Whether trenches inside substation containing cables are filled with non-inflammable material or completely covered with non-inflammable slabs?	Yes/No
		(vii) Are conductors and apparatus so arranged that they may be made dead in sections for carrying out work thereon?	Yes/No
21.	Regulation 47	Whether protections and interlocks have been provided? Give the details of the protection schemes and their settings.	Yes/No
22.	Regulation 50	(i) Have all non-current carrying metal parts associated with the installation been effectively earthed with the earthing system or mat by two separate and distinct connections?	Yes/No
		(ii) Is the earth wire free from any mechanical damage?	Yes/No
		(iii) Has the neutral point at the transformer and generator been earthed by two separate and distinct connections with earth?	Yes/No
		(iv) Have the metal casings or metallic coverings containing or protecting any electric supply line or apparatus been properly earthed and so joined and connected across all junction boxes as to make good mechanical and	Yes/No
		electrical connections throughout their whole length?	
		(v) Whether earthing has been properly executed and has been tested. If yes, give value of earth resistance.	Yes/No Ohm
23.	Regulation 51	(i) Is the outdoor (except pole type) substation efficiently protected by fencing not less than 1.8 metre in height?	Yes/No
		(ii) Whether the mounting of a transformer on a single pole or H pole is done as per relevant standard.	Yes/No
24	Regulation 52	(i) Where platform type construction is used for pole type substation, has sufficient space for a man to stand on the platform been provided?	Yes/No
		(ii) Has hand-rail been provided and connected with earth (if metallic and if substation has not been erected on wooden supports and wooden platform)?	Yes/No

25.	Regulation 53	Has suitable provision been made for immediate and automatic or manual discharge of every static condenser on disconnection of supply?	Yes/No
26	Overhead Lines	(i) What is the minimum size of the conductors of overhead lines used? State the type of conductors. (Regulation 57)	Minimum size of Conductor ----
		(ii) Whether clearances above ground of the lowest conductor of overhead lines are as per regulation 60? State clearance.	Yes/No --- metre
		(iii) On the basis of maximum sag, whether vertical clearances where the line of voltage exceeding 650 V passes above or adjacent to any building or part of a building as per regulation 63? State clearance.	Yes/No --- metre
		(iv) On the basis of maximum deflection due to wind pressure, whether horizontal clearances between the nearest conductor and any part of such building are as per regulation 63? State clearance.	Yes/No --- metre
		(v) Where conductors forming parts of system at different voltages are erected on the same supports, whether adequate provision has been made as per regulation 64 to guard against danger to linemen and others from the lower voltage system being charged above its normal working voltage by leakage from or contact with the higher voltage system?	Yes/No
		(vi) Where overhead lines cross or are in proximity to each other whether they have been suitably protected to guard against possibility of their coming in contact with each other as per regulation 71?	Yes/No
		(vii) Has every guard wire been properly earthed as per regulation 72 at each point at which its electrical continuity is broken?	Yes/No
		(viii) (a) Whether metal supports of overhead lines and metallic fittings attached thereto are permanently earthed as per regulation 74? (b) Has each stay-wire (except in case where an insulator has been placed in it at a height not less than 3 metre from the ground) been earthed as per regulation 74?	Yes/No Yes/No
		(ix) (a) Whether overhead line is suitably protected with a device for rendering the line electrically harmless in case	Yes/No
		it breaks as per regulation 76? (b) Whether anti-climbing devices have been provided at each support as per regulation 75?	Yes/No
		(x) (a) Has the owner of overhead lines adopted efficient means for diverting to earth any electrical surges due to lightning in every overhead line which is so exposed as to be liable to injury from lightning as per regulation 77? (b) Whether earth lead from the lightning arresters is connected to a separate earth electrode as per regulation 77?	Yes/No Yes/No

		(xi) Whether unused overhead lines are maintained in a safe mechanical condition as per regulation 78?	Yes/No
		(xii) Whether statutory clearances from Authorities i.e. Forest Department/Railways/PTCC/Defence (AHQ) /Civil Aviation have been taken as per the relevant standards. If yes, enclose copies of the same.	Yes/No
		(xiii) Any other remarks.	Yes/No

In addition to above, following electrical equipment wise test details to be given, if applicable:

Sl. No.	Equipment	Test Conducted	Test Results	Remarks
1.	Linked Switch withfuses (s)	(i) Mechanical operation	Smooth/Trouble some	
		(ii) Rating of Fuse	-------Amps	
		(iii) Contact of blades	Full/Partial	
2.	Isolator (Sl. No.--- Make: Capaci ty:	(i) Mechanical operation	Ok/Not Ok	
		(ii) Remote Operation	OK/Not OK	
		(iii) Local Operation	OK/Not OK	
		(iv) Measurement of contact resistance		
		(v) Interlocking with earth switch	OK/Not OK	
		(vi) Interlocking with Circuit Breaker	OK/Not OK	
		(vii) IR Values • Open condition • Closed condition	Phase to Phase and Phase toEarth --- M Ohm --- M Ohm --- M Ohm --- M Ohm	
3.	Circuit Breaker (Circuit breaker location and no.) Circuit breaker control circuits	(i) Rating of Circuit Breaker • Type • Voltage • Normal Current • Rupturing Current	---------- ---------- kV ---------- Amps ---------- kA	
		(ii) IR Values • Open condition • Closed Condition	Phase to Phase and Phase toEarth --- M Ohm --- M Ohm --- M Ohm --- M Ohm	

		(iii) Contact Resistance including Dynamic Contact Resistance Measurement	----------micro ohm
		(iv) Mechanical Operation	Instant smooth /time gap (Sec.)
		(v) Remote operation	OK/Not OK
		(vi) Local Operation	OK/Not OK
		(vii) Interlocking with Isolator	OK/Not OK
		(viii) Interlocking with earth switch	OK/Not OK
		(ix) Alarm and Trip for OTI/WTI/Buchholz/PRV/etc.,	OK/Not OK
		(x) Earth Fault Relay	OK/Not OK
		(xi) Over Current Relay	OK/Not OK
		(xii) Under Voltage Relay	OK/Not OK
		(xiii) other safety Alarms	OK/Not OK
		(xiv) Whether all the provisions of Regulation 37 are satisfactory?	OK/Not OK
4.	Transformer Transformer No.,Location, (Transformer Sl. No.Make, Capacity, Voltage Ratio)	(i) Insulation Resistance Values • HT to LT • HT to Earth • LT to Earth	 ----------M ohm ----------M ohm ----------M ohm
		(ii) Break down Voltage test • Oil sample I (Top) • Oil Sample II (Bottom)	 ---------- kV ---------- kV
		(iii) Vector Group Test	OK/Not OK
		(iv) Polarity Tests	OK/Not OK
		(v) Magnetic Balance	OK/Not OK
		(vi) Tan Delta Test	OK/Not OK
		(vii) Oil level in conservator tank	OK/Not OK
		(viii) Oil level in breather cup	OK/Not OK
		(ix) OTI/WTI settings	A/T--- 0C/--- 0C A/T--- 0C/--- 0C
		(x) OTI/WTI alarm and trip operation	OK/Not OK
		(xi) Operation of Buchholz relay	OK/Not OK
		(xii) Operation of PRV	OK/Not OK
		(xiii) Oil leakage	OK/Not OK
		(xiv) Interlock of door switch of dry transformer	OK/Not OK
		(xv) Clearances • Side Clearance:	 ---------cm

		• Between two Transformers:	----------Metre
		(xvi) Body Earth Resistance	---------- Ohm
		(xvii) Neutral Earth Resistance	N1---Ohm, N2---Ohm
		(xviii) Earth Flat Size Material used • Body: • Neutral:	 ---------- ----------
		(xix) Operation of ON LOAD & OFF LOAD Tap Changers	OK/Not OK
		(xx) Sweep Frequency Resonance Analysis Test (SFRA)	OK/Not OK
		(xxi) Dielectric Frequency Resonance Analysis (DFRA) Test	OK/Not OK
		(xxii) Partial Discharge Tests	OK/Not OK
5	DG Generators:	(i) Type of Generator	
	Generator No.,	(ii) Interlocking with other supply	OK/Not OK
	Location,	sources	
	(Alternator	(iii) Body earth resistance	---------- Ohm
	andEngine	(iv) Neutral earth resistance	N1---Ohm N2---Ohm
	Sl. No.	(v) Earth Flat Size, Material used (Cu/Al)	
	Make, Capacity)	• Body: • Neutral:	---------- ----------
		(vi) Generator Protection details	----------
6.	Cable	(i) Insulation Resistance Values:	
	(Details to be given:size, length, type)	• Ph - Ph: • Ph – Earth: • Ph – Earth + other Ph:	--------- M Ohm --------- M Ohm --------- M Ohm
		(ii) Cable trays	Provided/ Not provided
		(iii) Cable tray earthing	OK/Not OK
		(iv) Cables bending radius	OK/Not OK metre
7.	Panels	(i) No. of panels	Nos
		(ii) Location of panel	To be enclosed
		(iii) Rating of the panel	Amp
		(iv) Size and current rating of the main Bus bars and the distribution Bus bars of the panel	mm, Amp
		(v) Whether the Bus bar size of the panel suitable to rating of the panel	Yes/No
		(vi) IP Protection of panel	_____

		(vii) Type of cable entry	Top Entry/Bottom Entry
		(viii)No. of Incomers and Bus couplers in a Panel	Nos
		(ix) Ratings of the Circuit Breakers	Amp
		(x) No. of MCCBs of each rating in the panel	Nos
		(xi) No. of spare MCCBs of each rating	Nos
		(xii) Panel Clearance from the wall	mm
		(xiii)Clearance between two panels i.e. adjacent panels	mm
		(xiv) Whether all the provisions of Regulation 39 followed	Yes / No
		(xv) Size of the Earth strip used for earthing of the panel	sqmm
8.	Earthing	(i) Metal and size of Earth Strips	Cu/Al/GI --- Sqmm
		(ii) Type of earthing	Plate/Pipe/Counterpoise
		(iii) Location and No. of earth electrode	Nos
		(iv) Values of Earth resistance of each earth electrode and Grid	Ω
		(v) Earth mat resistance	Ω
9.	Potential Transformer	(i) Ratio test	OK/not OK
		(ii) Polarity test	OK/not OK
		(iii) BDV of oil	---------- kV
		(iv) IR test	(R) P-E M Ohm
			(Y) P-E M Ohm (B) P-E M Ohm
		(v) Tan Delta and Capacitance measurement	_____
10.	Current Transformer	(i) Ratio test	OK/not OK
		(ii) Polarity test	OK/not OK
		(iii) BDV of oil	---------- kV
		(iv) IR test	(R) P-E M Ohm (Y) P-E M Ohm (B) P-E M Ohm
		(v) Tan Delta and Capacitance measurement	_____
11.	Overhead lines andDP structure	(i) Size of the poles of DP structure	_____
		(ii) Clearance between phases to phase and phase to earth.	_____
		(iii) Ground clearance of the	

		conductors.	_____
		(iv) Check of electrical clearance along the route of overhead line, .	Ok/ Not Ok
		(v) Check of guarding and clearance at road crossings.	Ok/ Not Ok
		(vi) Check the footings of the poles.	Ok/ Not Ok
		(vii) Earthing arrangements	Ok/ Not Ok
		(viii)What is the minimum size of the conductors of overhead lines used? State the type of conductors.	_____
		(ix) Whether all the provisions of regulation 60, 62, 63, 64, 71, 72 and 74 are satisfied.	Yes / No

General Observations:		
1.	Check of phase to phase, phase to ground and sectional clearance	
2.	Check of Manufacture test reports of individual equipment (Copies to be enclosed)	
3.	General observation and views (Specific deviation from the requirements ofthe Regulations shall be clearly brought out)	

Signature of the Electrical Inspector
Name
Designation

3/10/24.

Secretary to the
Govt. of West Bengal

O.M No.- : 1603/1(6) - POW-13099/4/2020-SECTION(POWER) Dated, Kolkata, 03rd Oct., 2024

Copy forwarded for intimation and necessary actions to:

1. Joint Secretary, MSME&T Department
2. Joint Secretary, Consumer Affairs Department
3. CEI, DOE
4. State EoDB Cell, GoWB
5. PS to Hon'ble MIC, Power Department
6. PS to Secretary, Power Department

3/10/2024

Additional Secretary,
Power Department, GoWB