

Registered Post with Acknowledgement Due

Ref: SR-II: RTI:F-1524:22-23/ 3700

Date: 24.04.2023

Shri B M Adiga
Advocate
#14/3, 3rd Floor, Shree Arvinda Bhawan
Nrupathunga Road
Bangalore 560 001.

Sir,

Sub: Information sought under RTI Act, 2005 – reg.
Ref: Your RTI Application dt.24.03.2023

This has reference to your RTI application dt.24.03.2023 received at POWERGRID, Somanahalli SS on 29.03.2023 and received in this office on 24.04.2023. The information sought in your application under RTI Act 2005, is given below.

REPLY TO QUERY: Attached at Annexure-I

As per section 19 of the Right to Information Act 2005, if required, you may file an appeal to the First Appellate Authority of the organization within 30 days of the issue of this order. The address of the First Appellate Authority is given below:

Shri Tarun Bajaj, Executive Director (SRTS-II)
Power Grid Corporation of India Ltd.,
Singanayakanahalli, Yelahanka Hobli,
Bangalore 560 064.
e-mail : sr2edo@powergrid.co.in
Tel.No.: 080-23093701

Thanking you,

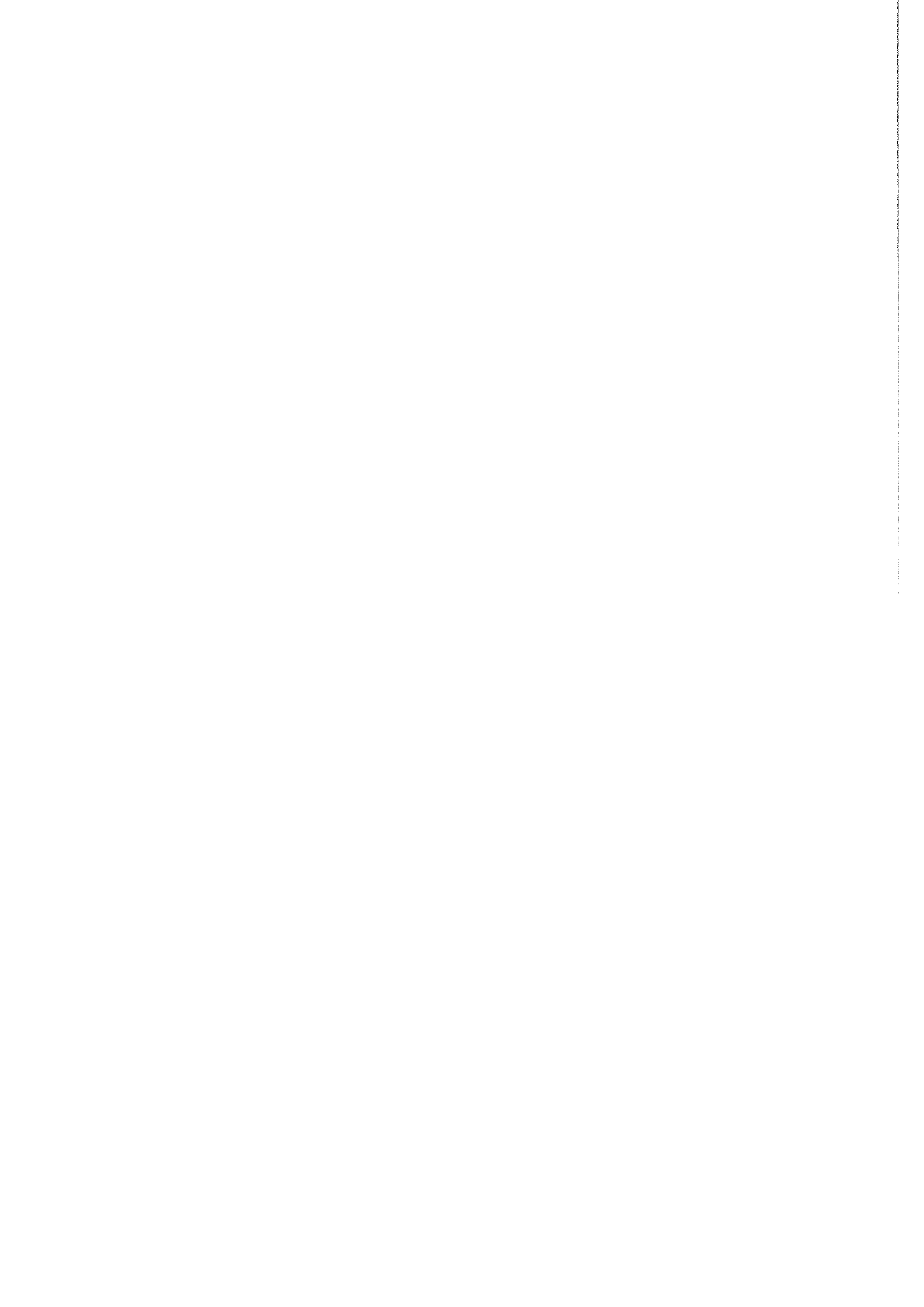
Yours faithfully,



(K V SATYANARAYANA)
Sr.General Manager & CPIO
e-mail id: sr2cpio@powergrid.co.in
Tel.No.: 080-23093711

Encl.: Annexure-I

Copy to: ED(SRTS-II), Appellate Authority, POWERGRID, SRTS-II, Bangalore - for kind information.





भारत का राजपत्र

The Gazette of India

असाधारण

EXTRAORDINARY

भाग III—खण्ड 4

PART III—Section 4

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केंद्रीय विद्युत प्राधिकरण

अधिसूचना

नई दिल्ली, 20 सितम्बर, 2010

सं. सी.ई.आई./1/59/सीईए/ई. आई.—केंद्रीय विद्युत प्राधिकरण विद्युत अधिनियम, 2003 (2003 का 36) की धारा 177 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए सुरक्षा तथा विद्युत आपूर्ति संबंधी उपाय के लिए निम्नलिखित विनियम बनाता है :—

अध्याय I

1. संक्षिप्त नाम और प्रारम्भ :— (1) इन विनियमों का संक्षिप्त नाम केंद्रीय विद्युत प्राधिकरण (सुरक्षा तथा विद्युत आपूर्ति संबंधी उपाय) विनियम, 2010 है।

(2) ये राजपत्र में इनके अंतिम प्रकाशन की तारीख से प्रवृत्त होंगे।

2. परिभाषाएं :—(1) इन विनियमों में, जब तक कि संदर्भ में, अन्यथा अपेक्षित न हो,

(क) "अधिनियम" से विद्युत अधिनियम, 2003 अभिप्रेत है;

(ख) "सुगम" से किसी उपकरण का अथवा विशेष प्रयास किए बिना शारीरिक-उपयोग पहुंच के भीतर अभिप्रेत है;

(ग) "एम्पीयर" से अभिप्रेत विद्युत धारा की एक इकाई है और यह ऐसा कॉन्स्टेंट करंट है जो निर्वात में एक मीटर की समानान्तर दूरी पर रखे नगण्य अनुप्रस्थ काट वाले अनन्त लम्बाई के दो सुचालकों से गुजरने पर इन दोनों सुचालकों के बीच प्रति मीटर लम्बाई पर 2×10^{-7} न्यूटन का बल पैदा करेगा;

(घ) "उपकरण" से विद्युत उपकरण अभिप्रेत है और इसमें सभी मशीनें, फिटिंग्स, सहायक उपकरण तथा उपकरण सम्मिलित हैं, जिनमें सुचालकों का उपयोग किया जाता है;

(ङ) "अनावृत" से अभिप्रेत है जो विद्युत-रोधी पदार्थ से आवृत न हो;

(च) "केबल" से अभिप्रेत है, ऐसा एकल सुचालक (टोस या तन्तुरूपी) अथवा दो या दो से अधिक ऐसे सुचालक जिन्हें अलग-अलग विद्युतरोधी पदार्थ से आवृत किया गया हो और साथ-साथ बिछाया गया हो। ऐसे सुचालक या सुचालकों को यांत्रिक सुरक्षा कवच उपलब्ध कराया जा सकता है, या नहीं भी कराया जा सकता है;

(छ) "परिपथ (सर्किट)" से अभिप्रेत है, विद्युत प्रवाह के लिए सुचालक अथवा सुचालकों का एक व्यवस्थित क्रम जो एक विद्युत व्यवस्था या इस व्यवस्था का एक अंग निर्मित करते हैं;

(ज) "परिपथ भंजक (सर्किट ब्रेकर)" से ऐसा उपकरण अभिप्रेत है, जो सभी परिस्थितियों में परिपथ बना सकता है या ब्रेक कर सकता है, और जब तक इसे अन्यथा विनिर्दिष्ट न किया गया हो, यह इस प्रकार डिजाइन किया गया है कि असाधारण परिस्थितियों में यह स्वतः ही विद्युत प्रवाह रोक देता है;

(1)



CENTRAL ELECTRICITY AUTHORITY
NOTIFICATION

New Delhi, the 20th September, 2010

No. CEI/1/59/CEA/EL.—In exercise of the powers conferred by section 177 of the Electricity Act, 2003 (36 of 2003); the Central Electricity Authority hereby makes the following regulations for Measures relating to Safety and Electric Supply, namely:-

Chapter I

1. **Short title and Commencement.**- (1) These regulations may be called the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010.

(2) They shall come into force on the date of their final publication in the Official Gazette.

2. **Definitions.**- (1) In these regulations, unless the context otherwise requires,

(a) "Act" means the Electricity Act, 2003;

(b) "accessible" means within physical reach without the use of any appliance or special effort;

(c) "ampere" means a unit of electric current and is a constant current which, flowing in two parallel straight conductors of infinite length of negligible cross section and placed at a distance of one meter apart in a vacuum will produce a force of 2×10^{-7} Newton per meter length between the conductors;

(d) "apparatus" means electrical apparatus and includes all machines, fittings, accessories and appliances in which conductors are used;

(e) "bare" means not covered with insulating materials;

(f) "cable" means a length of insulated single conductor (solid or stranded) or of two or more such conductors each provided with its own insulation, which are laid up together. Such insulated conductor or conductors may or may not be provided with an overall mechanical protective covering;

(g) "circuit" means an arrangement of conductor or conductors for the purpose of conveying electricity and forming a system or a branch of a system;

(h) "circuit breaker" means a device, capable of making and breaking the circuit under all conditions, and unless otherwise specified, so designed as to break the current automatically under abnormal conditions;

(i) "concentric cable" means a composite cable comprising an inner conductor which is insulated and one or more outer conductors which are



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60. Clearance from buildings of lines of voltage and service lines not exceeding 650 Volts.- (1) An overhead line shall not cross over an existing building as far as possible and no building shall be constructed under an existing overhead line.

(2) Where an overhead line of voltage not exceeding 650 V passes above or adjacent to or terminates on any building, the following minimum clearances from any accessible point, on the basis of maximum sag, shall be observed, namely:-

(i) for any flat roof, open balcony, varandah roof and lean-to-roof-

(a) when the line passes above the building a vertical clearance of 2.5 metres from the highest point, and

(b) when the line passes adjacent to the building a horizontal clearance of 1.2 metres from the nearest point, and

(ii) for pitched roof-

(a) when the line passes above the building a vertical clearance of 2.5 metres immediately under the line, and

(b) when the line passes adjacent to the building a horizontal clearance of 1.2 metres.

(3) Any conductor so situated as to have a clearance less than that specified above shall be adequately insulated and shall be attached at suitable intervals to a bare earthed bearer wire having a breaking strength of not less than 350 kg.

(4) The horizontal clearance shall be measured when the line is at a maximum deflection from the vertical due to wind pressure.

(5) Vertical and horizontal clearances shall be as specified in schedule-X.

Explanation:- For the purpose of this regulation, the expression "building" shall be deemed to include any structure, whether permanent or temporary.

61. Clearances from buildings of lines of voltage exceeding 650 V.- (1) An overhead line shall not cross over an existing building as far as possible and no building shall be constructed under an existing overhead line.

(2) Where an overhead line of voltage exceeding 650 V 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-

(i) for lines of voltages exceeding 650 Volts - 3.7 metres
upto and including 33,000 Volts

(ii) for lines of voltages exceeding 33 kV - 3.7 metres plus 0.30 metre
for every additional 33,000
Volts or part thereof.



(3) 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-

- (i) for lines of voltages exceeding 650 V - 1.2 metres
upto and including 11,000 Volts
- (ii) for lines of voltages exceeding 11,000 V - 2.0 metres
and up to and including 33,000 V
- (iii) for lines of voltages exceeding 33 kV - 2.0 metres plus 0.3
metre fore every
additional 33kV
or part thereof.

(4) For High Voltage Direct Current (HVDC) systems, vertical clearance and horizontal clearance, on the basis of maximum deflection due to wind pressure, from buildings shall be maintained as below:

Sl.No	DC Voltage (kV)	Vertical Clearance (mtrs.)	Horizontal Clearance (mtrs.)
1.	100 kV	4.6	2.9
2.	200 kV	5.8	4.1
3.	300 kV	7.0	5.3
4.	400 kV	7.9	6.2
5.	500 kV	9.1	7.4
6.	600 kV	10.3	8.6
7.	800 kV	12.4	10.7

(5) Vertical and horizontal clearances shall be as specified in schedule-X.

Explanation:- For the purpose of this regulation the expression "building" shall be deemed to include any structure, whether permanent or temporary.

62. **Conductors at different voltages on same supports.-** Where conductors forming parts of systems at different voltages are erected on the same supports, the owner shall make adequate provision 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 and the methods of construction and the applicable minimum clearances between the conductors of the two systems shall be as specified in regulation 69 for lines crossing each other.



63. Erection or alteration of buildings, structures, flood banks and elevation of roads.- (1) If at any time subsequent to the erection of an overhead line, whether covered with insulating material or not, any person proposes to erect a new building or structure or flood bank or to raise any road level or to carry out any other type of work whether permanent or temporary or to make in or upon any building, or structure or flood bank or road, any permanent or temporary addition or alteration, he and the contractor whom he employs to carry out the erection, addition or alteration, shall, give intimation in writing of his intention to do so, to the supplier or owner and to the Electrical Inspector and shall furnish therewith a scale drawing showing the proposed building, structure, flood bank, road or any addition or alteration and scaffolding thereof required during the construction.

(2) On receipt of such intimation, the supplier or owner shall examine,-

(i) whether the line under reference was laid in accordance with the provisions of these regulations and any other law;

(ii) whether it is technically feasible;

(iii) whether it meets the requirement of Right of Way (ROW);

(iv) whether such person was liable to pay the cost of alteration of the overhead line and if so, send a notice without undue delay, to such person together with an estimate of the cost of the expenditure likely to be incurred to so alter the overhead line and require him to deposit, within thirty days of the receipt of the notice, with the supplier or owner, the amount of the estimated cost.

(3) If such person disputes the cost of alteration of the overhead line estimated by the supplier or owner or even the responsibility to pay such cost, the dispute may be referred to the Electrical Inspector whose decision thereof shall be final.

(4) The Electrical Inspector shall estimate the cost of alteration of overhead line on the following basis, namely:-

(i) the cost of material used on the alteration after crediting the depreciated cost of the material which shall be available from the existing line;

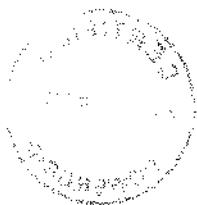
(ii) the wages of labour employed in affecting the alteration;

(iii) supervision charges to the extent of fifteen per cent of the wages mentioned in sub clause (ii); and charges incurred by the supplier or owner in complying with the provisions of section 67 of the Act, in respect of such alterations.

(5) Any addition or alteration to the building or structure shall be allowed only after the deposit of such estimated cost to the supplier or owner.

(6) No work upon such building, structure, flood bank, road and addition or alteration thereto shall be commenced or continued until the Electrical Inspector





has certified that the provisions of regulation 58, 60 and 61 should not be contravened either during or after the aforesaid construction:

Provided that the Electrical Inspector may, if he is satisfied that the overhead line has been so guarded as to secure the protection of persons or property from injury, certify that the work may be executed prior to the alteration of the overhead line or in the case of temporary addition or alteration, without alteration of the overhead line.

(7) The supplier or owner shall, on receipt of such deposit, alter the overhead line in such a way that it does not contravene the provisions regulation 58, 60 and 61 either during or after such construction within two months from the date of such deposit or within such longer period as the Electrical Inspector may allow.

64. Transporting and storing of material near overhead lines.- (1) No rods, pipes or similar materials shall be taken below, or in the vicinity of, any bare overhead conductors or lines if these contravene the provisions of regulations 60 and 61 unless such materials are transported under the direct supervision of a person designated in this behalf by the owner of such overhead conductors or lines.

(2) No rods, pipes or other similar materials shall be brought within the flash over distance of bare live conductors or lines.

(3) No material or earth work or agricultural produce shall be dumped or stored, no trees grown below or in the vicinity of, bare overhead conductors, or lines to contravene the provision of regulations 60 and 61.

(4) No flammable material shall be stored under the electric supply line.

(5) No fire shall be allowed above underground cables.

(6) Firing of any material below electric lines shall be prohibited.

65. General clearances.- (1) For the purpose of computing the vertical clearance of an overhead line, the maximum sag of any conductor shall be calculated on the basis of the maximum sag in still air and the maximum temperature as specified under regulations 57 and computing any horizontal clearance of an overhead line the maximum deflection of any conductor shall be calculated on the basis of the wind pressure specified under regulations 57.

(2) No blasting for any purpose shall be done within 300 metres from the boundary of a sub-station or from the electric supply lines of voltage exceeding 650 V or tower structure thereof without the written permission of the owner of such sub-station or electric supply lines or tower structures and in case of mining lease hold area, without the written permission of the Inspector of Mines.

(3) No cutting of soil within ten meters from the tower structure of 132 kV and above voltage level shall be permitted without the written permission of the owner of tower structure.

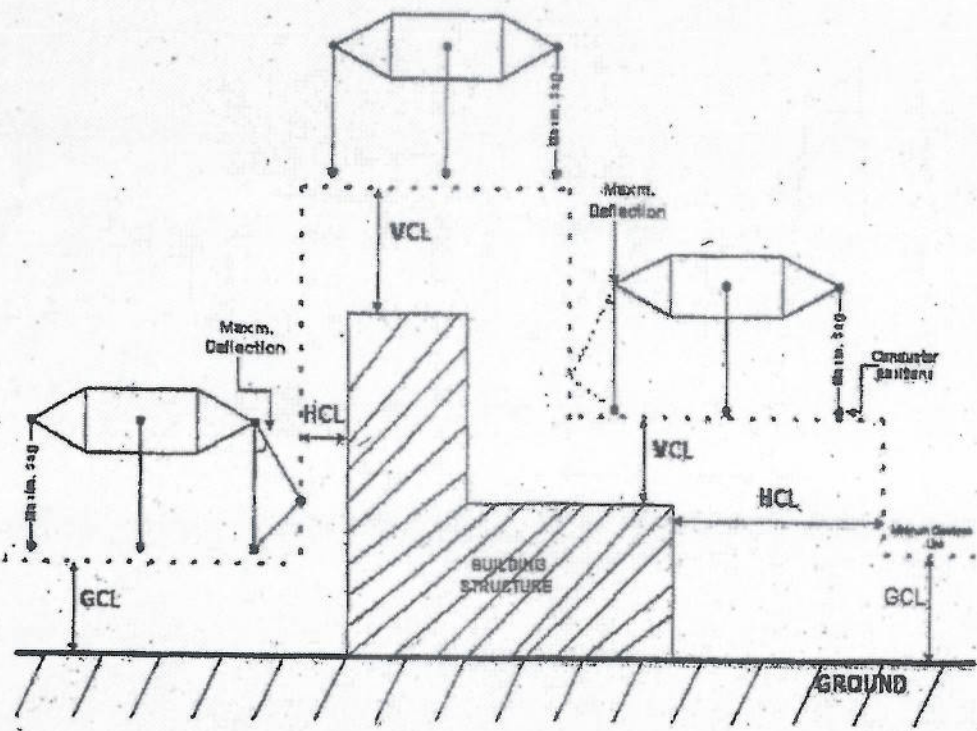




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Schedule-X

Ground, Vertical and Horizontal clearances
[See sub-regulation (6) of regulation 58, sub-regulation (5) of regulation (60) and sub-regulation (5) of regulation 61]



GCL: Clearances as per Regulation 59
VCL: Clearances as per Regulation 60 & 61
HCL: Clearances as per Regulation 60 & 61



