

**CHAPTER-I****TRANSMISSION LINES**

The annual maintenance allowance for single circuit 33 KV transmission lines has been worked out on the basis of probable replacement of a defective cracked insulators, worn out jumpers, dead end clamps etc. during the year. However, for the maintenance of double circuit lines, additional material allowance of 50% over that of single circuit lines of the same voltage has been recommended because of increase in the circuit length of the line and fittings thereto. Another 30% increase in the maintenance allowance has been recommended for the transmission lines in hilly areas as compared to the ones adopted for plain sections.

**MAINTENANCE ALLOWANCE PER K.M. OF 33 KV LINE**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	33 KV line on single rails/pole	700/-
<b>2</b>	33 KV lines on double rails.	875/-

**ADDITIONAL ALLOWANCE FOR PAINTING OF LINES PER RAIL TOWER ONCE IN FIVE YEARS SHALL BE ALLOWED ON FOLLOWING NORMS.**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	33 KV double rail lines	450/-
<b>2</b>	33 KV single rail line/steel items on PCC poles.	260/-

**MAINTENANCE ALLOWANCE FOR POWER TRANSFORMERS**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	Up to 5 MVA	5000/-
<b>2</b>	Above 5 MVA to 8 MVA	6250/-
<b>3</b>	From 8 MVA to 10 MVA or more	7000/-

**MAINTENANCE ALLOWANCE FOR HT CAPACITORS**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	Up to 1.5 MVAR	2000/-
<b>2</b>	Above 1.5 MVAR to 2.5 MVAR.	3000/-

**FIRE FIGHTING EQUIPMENT AT 33 KV S/STN.**

	<b>Rate</b>
i) Fire Bucket	Rs. 78/- each
ii) 2.5 Kg. capacity CO2 type	Rs. 170/- each
iii) 5 Kg. capacity CO2 type	Rs. 270/- each
iv) 10 Kg. capacity CO2 type	Rs. 400/- each
v) 22.5 Kg. capacity CO2 type	Rs. 700/- each
vi) 5 Kg. capacity dry chemical powder type	Rs. 350/- each
vii) 10 Kg. capacity dry chemical type	Rs. 600/- each

**CHAPTER –II****ELECTRICAL EQUIPMENT OF RECEIVING STATIONS.****1. BASIC ALLOWANCE PER BAY**

Sr. No.	Description	Rate in Rs.
1	33 KV S/S	1100/-
2	11 KV Bus	550/-

**2. BATTERY AND BATTERY CHARGING EQUIPMENT**

I) 24 Volt Battery 300/- 750/-

**1. CONTROL ROOM SWITCH YARD LIGHTING**

I) Ordinary lamps (Per point)

Sr. No.	Description	Rate in Rs.
1	Indoor lamps	75/-
2	Outdoor lamps	225/-

II) Fluorescent tubes (Per point)

Sr. No.	Description	Rate in Rs.
1	1x20 Watts	200/-
2	1x40 Watts	270/-
3	2X20 Watts	400/-
4	2x40 Watts	500/-

III) Reflector

Sr. No.	Description	Rate in Rs.
1	500/1000 Watts bulb	425/-

IV) Mercury Vapour Lamps (Per point)

Sr. No.	Description	Rate in Rs.
1	90 Watts	-
2	125 Watts	-
3	150 Watts	1275/-
4	250 Watts	1700/-
5	400 Watts	2250/-

V) H. P. Sodium Vapour Lamps

Sr. No.	Description	Rate in Rs.
1	250 Watts	2800/-
2	400 Watts	3300/-

**4. MAINTENANCE ALLOWANCE SWITCHGEAR INCLUDING CONTROL PANEL ISOLATING SWITCHES, CTs AND PTs etc**

Sr. No.	Description	Rate in Rs.
1	33 KV BOCB	1500/-
2	33 KV MOCB	1500/-
3	33 KV VCB/ACB	1500/-
4	11 KV OCB	3000/-
5	11 KV ACB/VCB	1500/-
6	L.T. OCB	750/-
7	33 KV CTs/PTs	1000/-

**Notes:-**

1. Painting of Switch Yard Steel structures will be got done under special estimate as per requirement after every 5 years.

**CHAPTER –III****11 KV LINES WITH OR WITHOUT LOW TENSION LINES**

1. Allowance per Km for Material Description:-

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	11 KV line	600/-
<b>2</b>	11 KV line with L.T. line (Composite Line)	750/-

The allowance for hilly area will be 30% over and above the plain area which will be identified by respective XENs.

**CHAPTER-IV****LOCAL DISTRIBUTION INCLUDING SUBSTATION T/F LT DISTRIBUTION MAINS,  
SUB-MAINS AND SERVICES.****1. ALLOWANCES PER KM FOR MATERIAL**

<b>Sr. No.</b>	<b>Description</b>	<b>Proposed Rate in Rs.</b>
<b>1</b>	Three phase L.T. distribution mains	100/-
<b>2</b>	Single phase L.T. Mains	80/-
<b>DISTRIBUTION T/F</b>		
<b>I</b>	Up to 100 KVA (Each)	1400/-
<b>II</b>	101 to 400 KVA (Each)	1540/-
<b>III</b>	501 KVA & above ( Each)	1680/-

**2. ALLOWANCE FOR CONNECTED LOAD (PER KW)**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	Up to 1000 KW	20/-
<b>2</b>	Above 1000 KW (Read with note II below)	15/-

- I) The calculations should be based on the length of L.T. distribution mains, No. of L.T. S/Stns., consumers, load connected in Kilowatts at the end of December prior to the financial year concerned. .
- II) The above is not intended to include the industrial consumers or bulk supply consumers having a connected load of 1000 KW or over. For such industrial/bulk consumers, an allowance for Rs. 2500/- for each bulk feeding point is allowed for the maintenance of S/Stn. and metering equipment only) In case there are two or more bulk feeding of points, the allowance shall be increased accordingly.

## CHAPTER-V

### VEHICLES

**A** For vehicles viz trucks and Tractor engaged on the construction of works and carriage of stores annual estimates chargeable to suspense Head, stock Manufacture, will be prepared in accordance with the instruction No. 41 of the Manual of Instruction.

**B.** For vehicles viz pick ups, jeeps and trucks used for the maintenance of transmission and Distributions system, the annual estimate shall be prepared on the following norms for various lines. These norms provided for all types of journeys whether for inspection of officers, or for attending to routine maintenance and attending to other break-downs on the lines during the year.

**I) For 33/11 KV line            140 times the lengths of the line(Both ways)**

These estimates shall also include the cost of petrol/Diesel, oil mobile, oil brake oil, petty repairs and items like spark plug, four tyre tube, one battery and pay of driver, cleaner, depreciation and interest charge.

**II)** Those offices which do not have any vehicle shall also make provision for corresponding allowance for running of vehicles in the annual maintenance estimates for the maintenance of various types of lines under their charge.

**Note: -**

- 1 The estimates for vehicle will also include licensing and registration, fees, motor insurance premium, taxes to be paid to the Govt. and expenditure incurred on painting/reconditioning the vehicles and removing other minor defects as pointed out by MVI.
2. The running expenses of vehicles under sub-head (b) will be charged to the estimate of "Running and maintenance of vehicles" for a particular duty and not to the work of service to which the vehicles is used. In case the vehicles is run for a different duty, the mileage charges shall be booked to the work concerned. The mileage rate shall be fixed as usual.

**CHAPTER – VI****APPROCH ROADS****A) Annual Maintenance.****I) Plains**

The Nigam has to maintain the approach roads connecting the public roads to the 33 KV S/Stns. and colonies.

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	For roads of width from 3.5 mtr and above mtc. allowance per KM including surfacing and labour cost	16000/-
<b>2</b>	If surfacing is not done than deduction to be made per KM	6000/-

**II) Hilly Areas.**

For hilly roads an additional allowances of 50% over and above the provision made under item (I) above.

**Note:-** Premix carpeting of roads be carried out after every 5 years

**CHAPTER-VII****MISCELLANEOUS CIVIL WORKS (I) ROADS & PATH (II) FENCING (III) DRAINS  
(IV) ARBORICULTURE.**

The roads, path and drains in the 33 KV S/Stn. colonies are very poorly maintained in the absence of adequate maintenance allowance. Similarly the arboriculture arrangement are not proper and presents a shabby outlook. The revised maintenance allowance is as under. :-

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
I	Basis allowance for roads and path Fencing and Drains	Rs. 4500+350 per acre or part thereof of land enclosed.

**Note :-**

1. In case there are multi-storey buildings in the colony, the basic allowance for roads and path, fencing and Drains shall be increased as under :-
  - a) If covered area of multi-storeyed buildings is between 25% to 50% of ground floor = 25%
  - b) If covered area of multi-storeyed buildings is between 50% to 100% of ground floor = 50%
1. In case storm water drains are provided in the colony, additional 4 Nos. contract labour per day for operating pumps and 2 Nos. contract labour for cleaning of the storm drains up to a maximum of 3 months shall be allowed for drainage purposes with the approval of XEN. The pumping material on actual basis shall be approved by XEN.

**I) Arboriculture: -**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
I)	Allowance for 4 acre of enclosed land or part thereof.	Rs. 4000/-

**II) Labour.**

- a) One Mali for every 4 acre of enclosed land or part thereof.
- b) One sweeper for cleaning of drains, roads and paths per 4 acre of land or part thereof .
- c) Chowkidar/Gateman for colonies as mentioned below shall be admissible.
  - i) Up to 6 acres of enclosed land = 4 No.
  - ii) 7 to 12 acres = Additional one No.

## **CHAPTER-VIII**

For the workshop engaged in manufacture of the stores articles, such as braced channel poles, Cross Arms, D. Straps, stay rods, T/F plate form etc. Annual maintenance and running estimate shall be prepared. The maintenance and running charges of workshop equipment shall be debited to the jobs done through the suspense head of manufacture. There is thus no need to specify any fixed allowance for the maintenance of workshop machinery.

As regards workshop meant exclusively for repair of plant and machinery of power plant fixed allowances for the maintenance depends on individual requirement and may be fixed by the respective Chief Engineer.

## **CHAPTER-IX**

### **FILTRATION SETS (FIXED AND PORTABLE)**

**1. Fixed maintenance allowance: -**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	Sets up to 1000 Ltrs	8000/-
<b>2</b>	Sets above 1000 to 2000 Ltrs. and above	15000/-

**2. Labour: -**

The staff admissible shall be on the basis of provision in the E.B. Manual of orders/the latest norms fixed by the Nigam.

**CHAPTER- X****RESIDENTIAL AND NON-RESIDENTIAL BUILDINGS.**

Class of building (both residential and non-residential )	Description	Allowance
A	Those in good order in a semi-permanent style with pucca foundations, pucca walls and floors, RCC slab, roof tile terracing on roof, walls surface finished with cement plaster/painting in lime cement.	1 to 3% of the capital cost of buildings upto 15 year old.
B	Buildings residential and non-residential buildings.	3 to 5% of the capital cost of buildings upto 15 year old.
C	Temporary building i.e. those with walls of mud masonry, shed or tiled-roof	5 to 7% of the capital cost excluding value of site for ordinary repair

**Note :-**

1. The percentage can be relaxed by the XENs depending on the specification and condition of the building after recording speaking order and the record of the same may be kept in a separate register.

2. The cost of annual repairs should not be allowed to exceed these limits.

2. For calculation of mtc. allowance on the basis of above percentage, the capital costs of these building shall be determined after consulting the civil organization of the Nigam every year in respect of the construction cost per Sq. ft. of the plinth areas as decided by the wing for that year i.e. the capital cost shall be equal to the plinth area multiplied by construction cost per Sq. ft. to be determined every year.

II In addition to the above allowances for the following posts in big colonies shall also be admissible for mtc. of buildings in each Operation Circle under the incharge of concerned S.D.O/XEN Civil Works.

- |                      |        |
|----------------------|--------|
| 1. Electrician       | 1 No.  |
| 2. Carpenter         | 1 No.  |
| 3. Helper            | 2 Nos. |
| 4. Mason-cum-painter | 1 No.  |

**CHAPTER-XI****REST HOUSE AND SHELTER HUTS.****1. Fixed allowances**

Repair of T&P articles to cover the normal maintenance, wear & tear and breakage of articles such as furniture, crockery, cutlery and cooking utensils etc.

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	A Class Guest/Rest House	20000/-
<b>2</b>	B Class Guest House	10000/-

II) For rest houses having following modern amenities an additional allowance as mentioned below shall also be admissible.

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	For air conditioners	1500/-
<b>2</b>	For refrigerators	1000/-
<b>3</b>	Geysers	500/-
<b>4</b>	Television Sets.	800/-
<b>5</b>	Cooking gas (one gas cylinder per month)	As per actuals

**2. Labour.**

Staff for mtc. and upkeep of Rest House.

- a) Mali 1 No.  
Chowkidar-cum-cook 1 No.
- b) An addl. Khansma/Bearer shall be admissible for 'A' class rest houses.

**Note:-**

XENs. Can incur the expenditure on mtc. of rest house exceeding the provision with the approval of the next higher authority.

**CHAPTER-XII****REPAIR AND CARRIAGE OF T&P.**

<b>Sr. No.</b>	<b>Description</b>	<b>Rate in Rs.</b>
<b>1</b>	Repair and carriage of T&P required for the mtc. of branch transmission lines.	Rs. 20000/-
<b>2</b>	For repair and carriage of T&P for major construction works carried out departmentally	Rs. 6000/-
<b>3</b>	For repair and carriage of T&P required for L.D system (based on number of J.E. as admissible for an LD center.	Rs. 2000/-
<b>4</b>	Repair and carriage of T&P required for 33 KV S/Stns.	Rs. 1000/-

**CHAPTER-XIII****WATER SUPPLY AND SEWERAGE SYSTEM**

1

<b>Sr. No.</b>	<b>Material</b>	<b>Rate in Rs.</b>
I	33 KV S/Stns./colonies up to 4 acres enclosed land	Rs. 5000/-
II	33 KV S/Stns./colonies above 4 acres land	Rs. 5000/- plus Rs. 500/- per acre or part thereof over and above 4 acres of enclosed area.

**2. Labour: -****I. Water supply system: -**

- a) For each colony with enclosed area up to 10 acres, one No. assistant Pump Driver on DC rate shall be admissible for mtc. and operation of water pump etc.

**II Sewerage and Disposal : -**

- a) One No. assistant pump driver for mtc. of pumps etc. and pumping of sewerage water where-ever provided.
- b) For attending and cleaning sewerage lines and septic tanks wherever provided, following staff shall be admissible.
- i) For colonies with enclosed area up to 10 acres 1 Sewer-man.
- ii) For colonies with enclosed area more than 10 acres 2 Sewer-man.

3. One no. plumber-cum-fitter for water supply shall be admissible for each colony having residence/non-residence more than 50 No.

**Note:- The maintenance allowance of various items under all the chapter will be enhanced every year in April @4% per annum without referring the matter to any committee/ authority. The TIE-4 will be revised after 10 year by the committee to be constituted by the Nigam.**