ANNEXURE 'E'

PROFORMA FOR OVER HEAD LINES UPTO 33KV

Reference to inspection fee paid

Rs_____

1. Department :

2. Name of the owner :

3. Name of work :

(i) Location:

(ii) Tehsil :

(iii) District :

4. A drawing indicating the route alignment location where tapped And important features such as road, Telephone, Canal, Railway or power line crossing etc to be furnished. :

5. Particulars of over head line

(i) System of voltage :

(ii) Approximate length of line :

(iii) No. of circuits :

(iv) Voltage regulation at the end of Feeder to which the new line is added. :

6. GENERAL CONDITIONS OF THE SYSTEM :

| Rule of the J&K Electricity Rule 1978 | Requirements | Report |
|---|---|---|
| 3 (i) Is the list of authorized persons Properly made and kept upto date duly attested ? | | |
| (ii) Whether the authorized persons are competent for the work assigned to them ? | | |
| 29 (i) State, if all electric lines are Constructed, installed, protected, operated and maintained in accordance with the standards of Indian Standard Institution so as to prevent danger. | | |
| 50 (i) Has the isolation device of Requisite capacity been | | |

Provided at the commencement
of supply? Indicate its type.

63. State if the system has been charged
for testing after completion & examination
of lines. If so what was the behavior.

74. A- SPACIFICATION OF THE SUPPORTS
AND STAY WIRES.

(i) Type and length of supports.
(ii) Safe working load.
(iii) Minimum factor of safety at
Maximum spans in the direction.
(a) Transverse to the lines
(b) Along the line
(iv) Specification of stay wire( i.e
Size, ultimate breaking strength,
factor of safety etc .)
(v) Specification of galvanized
Guard wire(minimum required
Size of GI wire shall be 4mm
Hard quality or 5mm soft quality.

B- OVER HAED LINES WITH BARE CONDUCTOR :

(i) Normal/Maximum spans.
(ii) Minimum size and type of conductor.
(iii) Configuration of conductors.
(iv) Minimum phase to phase clearance.
(v) Minimum clearance between phase to
Support or other earthed metal parts
(vi) Minimum F.O.S at 32.2 degreesCelsius
Without external load
(vii) Maximum No. & Type of joints in a
Wire per span ?

MINIMUM REQUIREMENT :

No. of joints should not be moreThan two per
wire per span provided these are compression
type or bolted type and the ultimate strength of joint
should not be less than 95% of the conductor strength.

(viii) Size & Type of earth wire.

C- LINE WITH CAULES :

(a) Size, type and armouring of HV/EHV
Cable used.

been earthed properly at terminal points.
(c) Drawing showing the run of the cables and methods of layout of the cables to be furnished
(d) Whether laid in cable duels or embedded Ground.

77. MINIMUM GROUND CLEARANCE OF THE LOWEST CONDUCTOR :
(i) Across the street/public places/factory or in the private premises?
(a) No. of such crossing?
(c) Minimum ground clearance at each crossing.
Minimum required :
For LV & MV lines 5.791 mtrs
For HV lines 6.4 mtrs
(ii) ALONG THE STREET :
(a) Has the lines at such places been guarded And efficiently earthed at both the ends?
(b) Minimum ground clearance of the lowest Conductor.

MINIMUM REQUIRED :
For LV & MV lines 5.486 mtrs
For HV lines 5.791 mtrs
(iii) ELSEWHERE :
(A) Minimum ground clearance of the Lowest conductor :

MINIMUM REQUIREMENT :
Upto& including 11 KV
(if bare).
For LV, MV & HT lines 4.572 mtrs
For LV, MV & HV lines ( if insulated)
Upto& including 11 KV 3.962 mtrs
For HV lines above 11 KV 5.182 mtrs
(B) River/Canal crossings.
(a) No. of crossings.
(b) Has all the crossing been guarded and efficiently earthed at both the ends?
(c) Minimum clearance at each crossing.
For Non-navigable river 3.658 mtrs

80. Clearance of the overhead conductor From the building :

(i) Vertical clearance of the lowest
Conductor at maximum sag ( 3.658 mtrs)

(ii) Horizontal clearance on the basis of
Maximum deflection at the max. sag
of the line from vertical due to wind
Pressure.

MINIMUM REQUIREMENT

For HV lines upto and including 11 KV (1.319 mtrs)

For HV lines above 11 KV and upto & including
33 KV (1.529 mtrs)

Where conductors forming parts of system at different voltages are erected on the same supports.
Has the provision been made to guard against danger to lineman and others from lower voltage system being charged above its normal working voltage by leakage from contact with Higher voltage system ?

4. Have the lines erected in victinity of aerodromes been authorized by the Aerodrome authorities ?

(i) Where over head lines cross or are in proximity to each other :

(a) Have they been suitably protected to guard against possibility of coming in contact with each other?

(b) Have the crossing been made as nearly at right angle ? State the angle of Crossing. (not less than 60 degrees)

(ii) STATE THE FOLLOWING :

A- TELEPHONE LINE CROSSING :

(a) No. of crossings :

(b) Has all these crossings been made as nearly at right angles duly guarded and efficiently earthed at both the ends. State the angle of crossing ( not less than 60 degress)

(c) Minimum clearance at each crossing :
( Minimum requirement if guarding Provided on power line)

For 11 KV lines 1525 mm(5ft)

For 33 KV lines 1830 mm (6ft)

(d) Has PTCC clearance been obtained for
33 KV and above voltages lines.
(e) Breaking strength of conductor
of telecommunication line ( not less than 272.16 Kg)

B- POWER LINE CROSSING.

1. LV & MV LINE CROSSINGS :

(a) No. of crossings.

(b) Has all these crossings been made
as nearly at right angles duly guarded
and efficiently earthed at both ends.
State the angle of crossing ? (not less than 60 degrees)

2. 11 KV LINE CROSSING:

(a) No. of line crossings.

(b) Has all these crossings been made as
nearly at right angles duly guarded &
efficiently earthed at both ends.
State the angle of crossing ? (not less than 60 degrees).

(c) Minimum clearance at each crossing ( 2.44 mtrs)

3. 33 KV, 66 KV LINE CROSSING

(a) No. of line crossings.

(b) Has all these crossings been made
nearly at right angles duly guarded
and efficiently earthed at both ends.
State the angle of crossing ? (not less than 60 degrees)

(c) Minimum clearance at each crossing ( not less than 2.44mtrs)

4. 132 KV LINE CROSSINGS :

(a) No. of line crossings.

(b) Has all these crossings been made
nearly at right angles duly guarded
and efficiently earthed at both ends.
State the angle of crossing ? (not less than 60 degrees).

(c) Minimum clearance at each crossing (not less than 3.05 mtrs)

5. 220 KV LINE CROSSINGS:

(a) No. of line crossings.

(b) Has all these crossings been made
nearly at right angles duly guarded
and efficiently earthed at both ends.
State the angle of crossing ? (not less than 60 degrees).

(c) Minimum clearance at each crossing (not less than 4.58 mtrs)

90(i) State type of earthing whether continuous each

wire securily fastened to each pole and connected with earth ordinarily at three points every km or individual structure earthing is adopted.

(ii) Are the metal supports of the over head lines and metallic fittings attached there to permanently and efficiently.

(iii) (a) Have stay wires been provided with proper rated voltage guy insulator ?

(b) Have each stay wire provided has been efficiently earthed ?

(iv) (a) The individual electrode earth resistance in case of individual structure Earthing.

(b) Earthing resistance in the case of continuous earth wire system.

91 (i) Has over head line been suitably protected with a device for the lines electrically harmless in case it breaks at public places and other factory/private premises (where over head lines cross the rivers/water bodies, roads, factory premises, private premises or land along the road, canal/water bodies guard netting effectively earthed needs to be provided.

92 (i) Has the owner of over head lines adopted efficient means for diverting to earth any electrical surges due to lightening on every over head lines which is so exposed as to be liable to injury from lightening ?

(ii) Has earthing lead from lightening arrestors been connected to a separate electrode?

93. Are un-used over head lines being maintained in safe Mechanical conditions?

Any other remarks :

Signature by the owner

Name & Address

Date:

Certified that I have I have verified and found the installation fit for energisation/not fit for energisation as the clause No. _____ of Rules is not complied with.

INSPECTING OFFICER
Name and
Designation .....