

BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly owned by Government of Karnataka Undertaking)

No. : BESCOM/GM(T)/BC-07/F-259/Cys-190

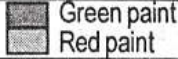
Encl. :

Corporate Office
BESCOM, K.R.Circle
Bangalore-560 001.
Date : 01.02.2006

CIRCULAR

Sub : Color Coding of assets of BESCOM

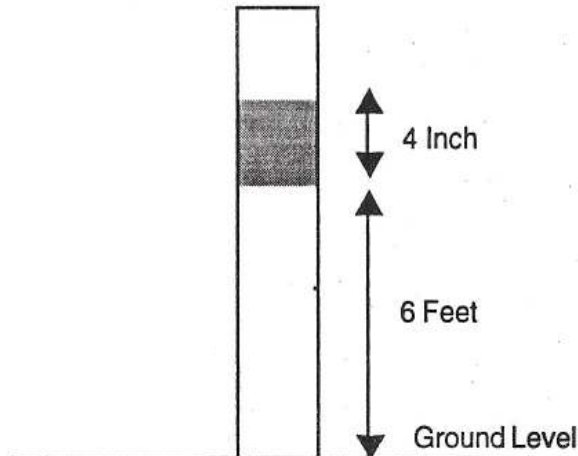
Works under different Programmes are being carried out in the field are required to be identified for asset listing. It is decided to use the following Color code for the Poles and transformers commissioned under different works. You are requested to take action to implement the same in respect of all ongoing works and in all future works. The paint used should be weather and waterproof.

Name of the work	Color code on Pole and Transformers
RLMS	Green
APDRP	Blue
RGRHCL	Yellow
E&I Works (Turnkey)	Red
E&I Works (Departmentally)	Grey
Drum Works	Black (Ltr. No.BESCOM/BC-14/F-667/9775-84 Dtd. 18-10-2007
NJS Works	10 cms 

The color code on poles and transformer for identification shall be made as detailed hereunder :-

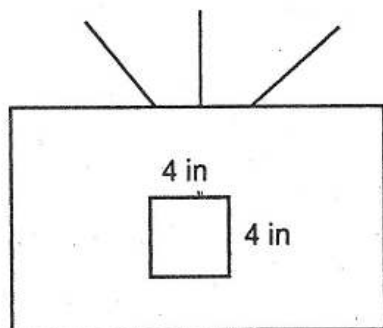
1. Poles

The pole should be painted on all four faces from a height of 6 feet from the ground with a band width of 4 inches as shown in the sketch.



2. Transformers

Transformer shall be painted (4 inch x 4 inch) on the facing side so as to be clearly visible from a distance.



Sd/-

General Manager (Technical)
BESCOM, Bangalore

Copy to :

1. Chief General Manager (Comm., O&M), Bangalore Rural Circle and Chitradurga Circle.
2. General Manager (Comm., O&M), Bangalore Rural Circle, Kolar Circle, Tumkur Circle, Davanagere Circle.
3. The General Manager, Ele., Procurement/Planning, BESCOM, Corporate Office.
4. All the General Managers Ele., C O&M, Circles, BESCOM for information.
5. All the Executive Engineers (Ele), C, O&M, Divisions, BESCOM, for information.
6. All the Assistant Executive Engineers (Ele), C,O&M, Divisions, BESCOM, for information.
7. PS to MD/Dir(T), to place the same before the Managing Director / Director (Tech), BESCOM for kind information.
8. M.F. / O.C.

BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly owned by Government of Karnataka Undertaking)

No. : BESCOM/GM(T)/BC-20/F664/05-06/Cys-174

Encl. :

Corporate Office

K.R.Circle

Bangalore-560 001.

Date : 10.01.2006

Circular

Sub : Quantity of returnable released conductor during reconductoring works.

- Ref. : 1. Note of DGM(TA&QC), dated 30-11-05
2. Minutes of the Technical Committee Meeting held on 30-12-05.

HT and LT re-conductoring works are being carried out through out BESCOM. The work involves releasing of existing lower capacity conductor (Squirrel, Weasel Rabbit) and replacing with higher size conductor. The released conductor will be old and some margin has to be allowed while showing credit in the estimate on account of oxidation of conductor and taking into consideration other aspects. The Accounts Volume-2 stipulates the procedure to be followed while preparing the estimate etc., and there is no mention about the quantity Corporate Office that each division is following its own norms and hence there was no uniformity in showing the quantity of released conductor to be returned to store as credit. In the absence of clear cut instructions, there will be scope for pilferage and misuse of such released conductor.

Hence it was instructed to DGM (TA&QC) to select some random samples from the store and measure the same to ascertain the weight. Accordingly the DGM (Ele.,) TA&QC with his staff has selected the samples at various divisional stores and has given a report vide reference-1 recommending that 8 to 10% less allowance in weight be considered.

In view of this it is clarified that **10% less allowance in weight** shall be given to the quantity of released returnable conductor at the time of reconductoring works which is as indicated in the table below.

Type of Conductor	Standard weight of conductor in Kgs / per Km.	Returnable weight of Conductor in Kgs / per Km
Squirrel	84.7	76
Weasel	127.7	114
Rabbit	213.6	192

This will come into immediate effect. This is also applicable to all sanctioned work orders which have not been operated.

Sd/-
General Manager (Tech).
BESCOM

Copy to :

1. The CGM (F&C), BESCOM, Bangalore
2. The Chief General Managers (Electy), BMAZ / BRAZ / CTIAZ for information.
3. All General Managers, (C, O&M) Circles, BESCOM
4. The Deputy General Managers, TA & QC / General / HRD., BESCOM, Bangalore.
5. All Executive Engineer Elec., (C,O&M) Divisions, BESCOM
6. All Asst. Executive Engineer Elecl., sub Dvns., BESCOM

BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly owned by Government of Karnataka Undertaking)

No.: BESCOM/BC-35/07-08/CYS-86

Encl. :

Corporate Office
K.R.Circle
Bangalore-560 001.
Date : 22.10.2007
23.10.2007

Sub : Clarification of adoption of rates for realignment of slanted DTC's Structure -
Regarding.

Ref. : Ltr.No.GME/EE(O)/AEE(T)/07-08/3549 dt.31.07.2007 from General Manager
(El.,) (C, O&M) Kolar. Addressed to General Manager (El.,) (Corporate Planning)

PREAMBLE :

Some of the field officers are preparing stereo typed estimates for straightening/realigning of DTC's structures making provision for releasing and re-erection of poles, transformers, LT Kit, DOLO / HG Fuse unit, releasing and restringing of HT/LT Lines etc., allowing 90% of labour charges towards realigning/dismantling and 100% labour charges towards re-erection.

Provision is being made in the estimates for all the works, even though all the above works are not necessary to be taken up.

In light of the above, clarification has been sought from field staff regarding fixing of specified rates towards labour charges for re-alignment of DTC's.

The labour charges involved in respect of straightening / realigning the DTC's structure varied from structure to structure depending on the individual condition of each Transformer Centre and in some cases the DTC's can be realigned / straightened only by tightening the existing loose guy or by providing new guys with out releasing any material and hence a specific labour charges can not be fixed for realigning the DTC's.

In view of the above the following circular is issued for guidance.

CIRCULAR

The field officers are directed to prepare the required necessary estimates for straightening/ realigning the Distribution Transformer Centres, duly making provision for labour charges only in respect of such works which are necessary to be carried out. The estimates shall be accompanied with detailed report narrating the works to be taken up and enclosed with photographs showing the existing condition of the structure to be realigned / Straightened. After completion of the works, another photograph shall be taken showing the condition after completion of works.

Normally releasing and re-fixing of DOLO/HG Fuse, GOS, LT Protection kit etc., are not required. The Transformers have to be released and re-fixed only in extraneous conditions. The Executive Engineers (El.) are directed to ensure that only necessary works are included in the estimate and as far as possible arrange to carry out the works by the maintenance staff / temporary staff available in the sub-division. In respect of works awarded on labour contract the labour charges for releasing and re-fixing of the items shall be paid at 90% of the erection charges only of the particular items which has to cover release and re-fixing.

The Executive Engineers (El.) (C,O&M) shall ensure that necessary entries are made in the estimate sanction book before sanctioning of estimate / award as specified in the note vide page No.117 SR 2006 and 2007.

Sd/-
General Manager (Technical)
BESCOM

Copy to :

1. The Chief General Managers (F&C) BESCOM, Bangalore.
2. The Chief General Managers (Electy.) (C,O&M) BRAZ, BMAZ, Chitradurga Zone for kind information.
3. All General Managers, (C,O&M) Circle, BESCOM
4. All Executive Engineers (Ele.) (C,O&M) Division, BESCOM
5. The Deputy General Manager, TA&QC/General/HRD., BESCOM, Bangalore.
6. All Asst. Executive Engineers (Ele.), Sub Divisions, BESCOM
7. All Section Officers O&M Units, BESCOM
8. Office copy / M.F.

CIRCULAR

Subject : Execution of Works – Guidelines

- I. Undertaking of works either for maintenance or for creation of assets is an important function of the Company to bring in improvement in the quality of service provided to consumers and also to enhance the profitability of the Company. BESCOM is a wholly owned undertaking of the Government of Karnataka and is obliged to follow the Cannons of Financial Propriety as envisaged in the Financial Code. Norms / rules have been formulated as prescribed by the company for applying the same in execution of works by the executive subordinates and the other officials starting from the stage of preparation of estimate to the payment of bills both in cases of works executed departmentally and by outside agencies.
- II. The work contracts undertaken by BESCOM to execute the above work are broadly classified as Total Turnkey contract, Partial Turnkey, Key contract and Labour Contract Works.
- III. Under Total Turnkey Contract the contractor / Agency to whom the work is awarded is shall have to provide all the materials required for the work and execute the work as stipulated in the contract using his labour force.
- IV. Under the Partial Turnkey Contract, certain major/minor materials will be provided by BESCOM to the Agency. The Agency is to provide some miscellaneous materials as stipulated in the contract and labour force for execution of work.
- V. Under labour Contract all the required materials for the entire work will be provided by BESCOM and the contractor is required to execute the work using his labour force
- VI. Instances of violation of prescribed norms in many divisions relating to execution of works have surfaced in recent times which have resulted in substandard work and consequential financial loss to BESCOM. The violations observed relate to improper preparation of estimates, inclusion of unwanted materials for specific work, provision of excess labour, not exercising proper scrutiny of the estimate, splitting of the estimate to be within their powers of sanction, non-calling for tenders, lapses in awarding works, exceeding the limits of authority, not exercising due physical supervision of works, lapses in recording measurements, recording measurements without actually visiting the work spot, multiple payment for the same work etc., The violations could have been avoided had the officials / officers responsible exercised due diligences at each stage as per the prescribed norms and prevented the consequential financial losses.
- VII. The Company has observed these violations on a serious note and resolved to view such lapses / deviations in procedure very seriously and to initiate stern actions against the erring officers / officials.
- VIII. In order to prevent such violations of rules / norms in the execution of works the following guidelines are issued, though some of these are already prescribed in the accounts Manuals and other documents of the company, certain provisions which are important are re-iterated for the immediate reference of the officials / officers for necessary compliance
- IX. **Estimates :**
Preparation of an estimate or detailed Project Report is essential for any type of work either under revenue expenditure / maintenance or Capital work. The following guidelines as prescribed

in the Accounts Manual Volume-II-Part-A are to be followed while preparation of an estimate / Detailed Project Report.

1. Para 252 :

No. estimate shall be prepared and submitted for sanction if the expenditure cannot be met out of the financial provision in the current years budget for that class of work unless specifically called for.

Rates considered in preparation of estimates should be generally agreed with the schedule of Rates.

Provisions for quality of different materials and labour shall be in accordance with the Cost data Sheet as provided in the Schedule of rates.

2. Para 255.

Every estimate should be accompanied by a report and abstract containing the details such as History, Scope, Specification and drawings, Cost, Financial Provision, Data Sheets, Load data and proposed method of execution.

3. Para 254

Every estimate has to be certified by the executive sub-ordinate who prepares the estimate in his own hand writing as "Certified that I have personally visited the spot and prepared the estimate using the sanctioned schedule of rates in most economical and safe way of executing the work" and should be countersigned by the sub-divisional officer / AEE / EE

X. Scrutiny of estimates and placement of work orders and issue of work awards :

1. Administrative Approval : The estimates shall be verified for being covered under the Administrative approval of the Competent Authority. Without the grant of Administrative approval, technical sanction shall not be given.

2. Para 268 :

Estimates received by the Divisional Officer shall be referred to the technical section for registering them in the register of estimates and for technical scrutiny.

3. Para 269 :

After technical scrutiny the estimate shall be sent to the Accounts Officer for scrutiny and for furnishing the certificate relating to availability of funds in the year's budget and allocation of expenditure under appropriate Heads of Accounts.

Credits for released materials should be shown in the sanctioned estimate.

XI. Awarding works to contractors – Calling for Tenders.

Works shall be awarded to contractors in accordance with the following provision and as per the powers delegated to the respective officers in the "Manual of Delegation of Powers" duly following the provision of KTCP Act.

1. Para 307 :

Earnest money deposit is to be collected as per Circular No.GM (Proc)/DGM(Proc)/BC-10/F-550/08-09/228 dated 05.03.09 while calling for tenders and even in case of Labour contract.

2. Para 308 :

Security deposit at the rate of 10% of the value of the contract has to be collected as per Circular No.GM(Proc)/DGM/(Proc)/BC-10/F-550/08-09/227 dated 05.03.09 while issuing work award as a security against proper fulfillment of the contract.

3. Para 288 :

- a. Before a work is given out on contract, the Divisional officer must prepare contract documents to include;
- b. A Complete set of drawings showing the general dimensions of the proposed work and the details of various parts to the extent necessary.
- c. A detailed specification of the work to be done and of the materials to be used.
- d. A set of "Conditions of Contract" to amplify to the extent necessary, the preliminary and other specifications.

4. Para 334 :

- a. The completion report shall be prepared based upon the actual materials used on the works by taking an inventory and not with the aid of indents, invoices and returned material invoices.
- b. The quantities of materials and their cost, labour and other charges as per C-Register will be filled up in the Divisional office and any difference promptly investigated.

XII. Execution of works : Functions of Executive Engineer and Executive Sub-ordinates during the course of execution of works.

- a. **Para 360(1) :** Measurement Book should be recorded by the Executive sub-ordinate in charge of work jointly by two or more officers.
- b. **Para 360 (3) :** The Executive Engineer is required to check measure frequently the work in progress and maintain check measurements. He should also check measure final measurement of the works costing more than 25,000 to the extent of 25% of the total value of the work done.
- c. **Para 360(5) :** The Assistant Executive Engineer is required to check measure the first and final bills of the works and all final bills on running account irrespective of their cost.
- d. **Para 360(6) :** The object of check measurements is to detect errors in measurement and to prevent fraudulent entries. Check measurements should therefore be conducted with discretion and care.
- e. **Para 360(7) :** The fact of check measurement by Assistant Executive Engineer/Executive Engineer should invariably be noted in the measurement book at the time of check measurement and the item check measured should be indicated by the initials of the checking officer.
- f. **Para 370(1)(2)&3 :** Measurements recorded in the concerned measurement books should be arithmetically checked, with reference to the recorded measurements correspondingly with sanctioned and schedule of rates.

- g. **Para 370(5)** : Verify whether all the required certificates, recording of measurements, check measurements Etc are recorded under dated signatures of the Executive Subordinates / Officers.
- h. **Para 370(6)** : Verify whether the deviations if any from the sanctioned estimates are covered by the approval of the competent authority.
- i. **Para 370(9)** : After scrutinizing the work bills with reference to sanctioned estimates, agreements, measurement book and as above a certificate to this effect should be recorded in the bill under the dated signatures of AAO/AO.
- j. **Para 399** : Maintenance of 'C' register, register of estimates, contractor bills, completion reports and posting of cost and quantities of work bills and necessary checks as required are to be ensured.

XIII. Apart from the above the following supplemental guidelines shall be followed in the course of execution of works.

1. All works to be undertaken shall be carefully planned.
 - a. **One estimate may be prepared for a single work, where as in case of a large no. of works of a similar nature, estimates shall be prepared DTC wise / feeder-wise / sub-division wise / Division-wise duly avoiding splitting up of estimates / works.**
 - b. The work of similar nature shall not be split into number of estimates to bring the cost within the powers of sanction of Division / Circle offices. Deviation of this instruction will be viewed seriously.
 - c. The estimates shall not be combined for the works under Capital and Revenue works i.e. separate estimates shall be prepared under each Head i.e. for Capital expenditure and revenue expenditure.
2. The Countersigning Authorities of the estimates at sub-divisional level shall invariably check the necessity of the work/estimate, provisions of materials and labour in the estimate as per current S.R. and Cost data sheet.
3. The Sub-divisional officer shall ensure non-repetition of the works at the same work spot with different nomenclature before signing the estimates.
4. The sub-divisional AEE shall ensure that estimates are prepared as per the above principles at Para XIII (1).
5. Wherever the S.R. and Cost data sheet are not available for works to be taken up on all DTCs like Refurbishment of transformers, providing Aerial Fuse Boards, providing Meter Housing Boxes, Providing ABC Cables and any other works specified by the Corporate Office, they shall be obtained from the Chief General Manager (Technical), Corporate Office.
6. After receipt of the estimates in the Division office, the Technical Section including the Assistant Engineer (Technical) and Assistant Executive Engineer (Office) shall invariably check, provisions of the materials and labour in the estimate as per current S.R. and Cost data sheet, repetition of the works in the sub-division and availability of Budget Provision.
7. The Accounts Officer shall invariably certify the availability of budget grants for the year for the work proposed before sanction and issue of Work order by the Executive Engineer.

8. The Executive Engineer shall sanction the estimates duly ensuring all the above aspects.
9. The above procedure of sanction of estimates shall be invariably followed in the Circle and Zonal Offices for the works to be sanctioned by them.
10. Sanctioned Copies of the Work Orders shall be invariably marked to Internal Audit and the next higher authority.

XIV. WORK AWARD :

- a. Except in case of emergency situations like restoring power supply and break down works, all the other works of the nature of System improvement etc., either on partial or total turnkey shall be awarded duly calling for tender in accordance with KTCP Act.
- b. Necessary clarification / guidance in connection with issue of tenders and issue of award and documentation there on shall be obtained from the General Manager (Procurement).
- c. Work Award Registers as per norms shall be maintained in Division / Circle / Zonal Officers and copies of work awards shall be sent to next higher authorities.
- d. **Pre Audit by Internal Audit :** Work Awards of all the labour contract, Total Turnkey and Partial Turnkey shall be pre-audited by the Internal Audit.
- e. **KTCP Act :** All Work Awards shall be issued strictly in accordance with the provision of KTCP act. The works shall not be split into a number of units to bring the cost of each estimate / work order to be well within the powers of the authority issuing the work award. The works shall be bunched section wise, sub division wise and feeder wise and action taken to award the works by calling the tenders, duly following the KTCP Act and as per the Manual of Financial Powers 2008.
- f. While issuing the work award list of approved vendors of suppliers of materials shall be enclosed along with other enclosures.
- g. No work should be awarded to the Contractor unless previous works (upto maximum 5) awarded to them is completed.
- h. Concurrence of the Accounts Officer / Deputy Controllers of Accounts / Zonal Controller shall be obtained before issue of NIT and work awards.

XV. Execution : (also refer amended circular Cys.160/23-01-2010).

- a. All the materials procured by the Contractors for execution of Total turnkey / partial turnkey and self execution works shall invariably be subjected to inspection by the TA&QC for its quality and specifications as approved by BESCO before commencement of work.
- b. Inspection & Tests Checks : Chief Engineers, Superintendent Engineers, Executive Engineers, TA&QC and SOs/AEEs shall inspect and test check to a minimum of percentages specified below in respect of total & partial turnkey works.

Respective Zonal CEEs - 3%

Respective Circle SEEs - 5%

Respective Divisional EEEs - 10%

TA & QC E.E.'s/AEE's - 25% *

Respective SOs / AEEs - 100%

* Please Refer Circular No. Cys-126 Dd. 19-02-2014 (Page No. 266)

XVI. Book Keeping :

- a. Details of works sanctioned have to be recorded in the register maintained at section office / sub division / division office as instructed in page no.288 of SR 2008. Sanction to estimates and awards have to be issued by the Executive Engineer only after verification in the above book and ensuring that the sanctions are not repeated.
- b. A separate feeder wise work order Register shall be maintained at the Sub-division office to facilitate verification of the estimates submitted by the subordinate officers.
- c. Works carried out or undertaken shall be incorporated in TC Registers maintained at Section offices.

XVII. Bill Passing :

The bills shall be passed strictly in accordance with the KPTCL working manual as detailed below :

- a. Verify the bills received with reference to work awards, estimate and 'C' – Register. In case of maintenance expenditure ensure that revenue budget is not exceeded.
- b. The labour contract bills shall be submitted by the agencies within 3 months from the date of completion of work and the section officers shall ensure that the bills are submitted immediately along with inventory, Completion Report, MBs and other documents.
- c. Assign bill register number with date and obtain counter signature of the head of the office on the bill and MB, duly ensuring that the contractor has signed in the bill and the MB in token of acceptance of the measurement and the correctness of the bill prepared.
- d. Bills shall be passed for payment only after obtaining the certificates of inspection of TA&QC as mentioned in the Para. XV and payment shall be arranged on Pre-Audit of bill by the Internal Audit.
- e. Ensure that the materials have been drawn only after the issue of Work Award.
- f. The quality and labour charges as per award shall be verified with the current SR.
- g. Ensure that Rates of material and labour not available in SR are obtained from the Corporate office.
- h. The arithmetical accuracy of calculation in MB. Any correction has to be properly attested with signature and seal.
- i. Ensure measurements claimed in the as per measurements recorded in MB.
- j. Ensure the Terms and conditions of the award are complied.
- k. The total quantity of material drawn shall not exceed the estimated quantity and the quantity booked in the C register.
- l. Discrepancy in drawl of material and utilization shall be rectified before passing the bill.
- m. Recovery of security deposit at prescribed percentage.
- n. Necessary entries are recorded in the C – register with BR No. and Date by the C-register assistant to avoid multiple payments.
- o. Put up encasement on work award to avoid multiple payments.

- p. Maintain year wise separate file with copies of sanctioned estimates, contract agreement, copies of the admitted bills and related correspondence.
- q. Clearance from TA&QC wing regarding quality and specification of materials for partial / total turnkey and self-execution works.
- r. 'Material handed over and takeover statement' from the Agencies to BESCOM has been obtained.

XVIII) Payment of Bills : All the Bills of works under Total / Partial Turnkey works shall be pre-audited before arranging payment. Similarly all the bills in relation to outsourced activities like Total Revenue management, Hiring of Vehicles etc., shall also be subject to pre-audit.

XIX) Internal Audit :

Accounts Officers (I/A) of the respective Accounting units have to certify the work awards and the Bills only after ensuring that the above guidelines are followed from the process of preparation of estimates to the point of arranging payment.

The provisions and guidelines mentioned above in connection with preparation of estimate, Sanction of work order, Award of works, Payment of Bills, ensuring of materials, maintenance of records, compliance of KTPP Act / Manual of Delegation of Powers shall invariably be followed by the officials / officers involved at various levels of execution of works. Negligence of the officials / officers in adhering to these instructions resulting in financial loss to the Company will be viewed very seriously.

**Chief General Manager (Technical)
BESCOM**

Copy to :

1. The Chief General Managers Projects, BESCOM
2. All the Chief Engineers (Elec), BMAZ / BRAZ / Chitradurga Zone, BESCOM
3. All the General Managers, Corporate Office, BESCOM
4. The Superintendent of Police, Vigilance, BESCOM
5. All the Superintending Engineers (Ele), O&M Circles, BESCOM
6. All the Controller of Accounts, BESCOM
7. All the Deputy General Managers, Corporate Office, BESCOM
8. All the Executive Engineers (Ele), O&M Divisions, BESCOM
9. All the Deputy Controller of Accounts, BESCOM
10. All the Deputy Superintendent of Police, Vigilance, BESCOM
11. All the Assistant General Managers, Corporate Office, BESCOM
12. All the Accounts Officers (I/A) / (F&C), BESCOM
13. All the Assistant Executive Engineers (Ele), O&M Sub Division, BESCOM
14. All the Assistant Engineers (Ele) / Junior Engineers O&M Section offices, BESCOM
15. PS to MD/D(T)/CGM(F&C), Corporate Office, BESCOM

ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ನಿಯಮಿತ

(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಂಪೂರ್ಣ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)

ಸಂಖ್ಯೆ : ಬೆವಿಕಂ/ಮುಪ್ರವ್ಯ(ತಾ)/ಉಪ್ರವ್ಯ(ಸಾ)-
ಸಪ್ರವ್ಯ-1/ಬಿಸಿ-20/ಕ-1111/2008-09/

ಕಂಪನಿ ಕಾರ್ಯಾಲಯ
ಕೆ.ಆರ್.ವೃತ್ತ
ಬೆಂಗಳೂರು-560 001.
ದಿನಾಂಕ : 24-06-2010.

ಸುತ್ತೋಲೆ

ವಿಷಯ : ಕಂಪನಿಯಿಂದ ಅನುಮೋದಿಸಲ್ಪಟ್ಟ Vendor ಗಳಿಂದ ಹಾಗೂ Vendorಗಳು ದೃಢೀಕರಿಸಿದ ಡೀಲರ್‌ಗಳಿಂದ ಗುತ್ತಿಗೆದಾರರು ಸಾಮಗ್ರಿಗಳನ್ನು ಖರೀದಿಸಿ ಕಾಮಗಾರಿಗಳನ್ನು ನಿರ್ವಹಿಸುವ ಬಗ್ಗೆ.

ಬೆವಿಕಂ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಅನೇಕ ಕಾಮಗಾರಿಗಳನ್ನು ಸಂಪೂರ್ಣ/ಭಾಗಶಃ ಟರ್ನಕೇ ಗುತ್ತಿಗೆಯಾಧಾರದಲ್ಲಿ ನಿರ್ವಹಿಸಲಾಗುತ್ತಿದೆ. ಈ ಕಾಮಗಾರಿಗಳಿಗೆ ಅಗತ್ಯವಾದ ಸಾಮಗ್ರಿಗಳನ್ನು ಕಂಪನಿಯಿಂದ ಪೂರೈಸದಿರುವ ಸಂದರ್ಭಗಳಲ್ಲಿ ಬೆವಿಕಂನ ಸಾಮಗ್ರಿಗಳ ಮಾನದಂಡಗಳನುಸಾರ ಒದಗಿಸುವ ಪೂರೈಕೆದಾರರಿಂದ ಖರೀದಿಸಿ ಕಾಮಗಾರಿಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವ ಸಲುವಾಗಿ ವೆಂಡರ್ ಅನುಮೋದನೆ ನೀಡಲಾಗುತ್ತಿದೆ. ಈ ರೀತಿ ಅನುಮೋದನೆ ನೀಡುವಾಗ ಸಂಬಂಧಿಸಿದ ಸಾಮಗ್ರಿ/ಉಪಕರಣ ಮತ್ತು ಇತರೇ ಪೂರಕ ಸಾಮಗ್ರಿಗಳನ್ನು ತಯಾರಿಸುವ ಬಗ್ಗೆ ಸದರಿ ಸಂಸ್ಥೆಯು ಹೊಂದಿರುವ ಮೂಲಭೂತ ಸೌಲಭ್ಯಗಳಾದ ಕಾರ್ಖಾನೆ ಅದರ ಸಾಮರ್ಥ್ಯ ಹಾಗೂ ಸದರಿ ಸಾಮಗ್ರಿಗಳನ್ನು ಪರೀಕ್ಷಿಸುವ/ತಪಾಸಿಸುವ ಸೌಲಭ್ಯಗಳನ್ನು ಪರಿಗಣಿಸಲಾಗುತ್ತಿದೆ.

ಮುಂದುವರೆದು ಮೇಲ್ಕಂಡಂತೆ ಅನುಮೋದನೆ ನೀಡಿದಾಗ ಕಂಪನಿಯ ಕಾಮಗಾರಿಗಳ ಗುಣಮಟ್ಟವನ್ನು ಕಾಯ್ದುಕೊಳ್ಳಲು ಸೂಕ್ತ ಮುಂಜಾಗ್ರತೆ ತೆಗೆದುಕೊಳ್ಳಲು ಈ ಕ್ರಮವನ್ನು ಅನುಸರಿಸಲಾಗುತ್ತಿದೆ. ಮೇಲೆ ತಿಳಿಸಿರುವ ವಿಧಾನದನ್ವಯ ಎಲ್ಲಾ ಗುತ್ತಿಗೆದಾರರು ಅನುಮೋದಿತ ಸಂಸ್ಥೆಯಿಂದ ಸಾಮಗ್ರಿಗಳನ್ನು ಪಡೆಯಬೇಕಾಗುತ್ತದೆ. ಆದರೆ ಈ ವಿಧಾನಕ್ರಮದಿಂದಾಗಿ ಕಾಮಗಾರಿಯಲ್ಲಿನ ಅನುಷ್ಠಾನದಲ್ಲಿ ಅಗತ್ಯ ವೇಗವನ್ನು ಕಾಪಾಡಲು ಸಾಧ್ಯವಾಗುವುದಿಲ್ಲವೆಂದು ಅನೇಕ ದೂರುಗಳು ಬಂದಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಈ ಕೆಳಕಂಡ ಪೂರಕ ಸೂಚನೆಗಳನ್ನು ನೀಡಲಾಗಿದೆ.

ಈ ಕೆಳಕಂಡ ಸಾಮಗ್ರಿಗಳನ್ನು ಕಂಪನಿಯಿಂದ ಅನುಮೋದಿಸಲಾದ ವೆಂಡರ್‌ಗಳಿಂದಲೇ ಖರೀದಿಸಬೇಕಾಗುತ್ತದೆ.

1. ಟ್ರಾನ್ಸ್‌ಫಾರ್ಮರ್
2. 11 ಕೆ.ವಿ. ಸ್ವಿಚ್‌ಗೇರ್
3. ಆರ್.ಎಂ.ಯು.
4. ಎಲ್.ಬಿ.ಎಸ್.
5. ಒಂದು ಕಿ.ಮೀ.ಗಳಿಗಿಂತಲೂ ಅಧಿಕ ಕಂಡಕ್ಟರ್‌ಗಳು
6. ಮೀಟರಿಂಗ್ ಕ್ಯುಬಿಕಲ್
7. ಹೆಚ್.ಟಿ. ಯು.ಜಿ. ಕೇಬಲ್
8. ಎಲ್.ಟಿ. ಯು.ಜಿ. ಕೇಬಲ್
9. 11 ಕೆ.ವಿ. ಪಿನ್ ಇನ್ಸುಲೇಟರ್ಸ್
10. 11 ಕೆ.ವಿ. ಸಿಂಗಲ್ / ಡಬಲ್ ಬ್ರೇಕ್ ಜಿ.ಒ.ಎಸ್.

ಮೇಲ್ಕಂಡ ಸಾಮಗ್ರಿಗಳನ್ನು ಹೊರತುಪಡಿಸಿ ಇನ್ನುಳಿದ ಇತರೇ ಸಾಮಗ್ರಿಗಳನ್ನು ಬೆವಿಕಂನ ಮಾನದಂಡದ ರೀತ್ಯಾ ಬೆವಿಕಂ ಅನುಮೋದಿತ ಗಳಿಂದ ದೃಢೀಕರಿಸಿದ ಡೀಲರ್‌ಗಳಿಂದಲೂ ಖರೀದಿಸಬಹುದಾಗಿದೆ. ಈ ರೀತಿ ಖರೀದಿಸಿದ ಸಾಮಗ್ರಿಗಳು ಐ.ಎಸ್./ಐ.ಇ.ಸಿ. ಮಾನದಂಡಗಳ ರೀತ್ಯಾ ಪರೀಕ್ಷೆಗಳಲ್ಲಿ ಯಶಸ್ವಿಯಾಗಬೇಕಾಗಿದ್ದು ಇವುಗಳನ್ನು ಅಳವಡಿಸಿದಾಗ ಬೆವಿಕಂ ವಿದ್ಯುತ್ ಜಾಲಕ್ಕೆ ಹೊಂದಿಕೊಳ್ಳಬೇಕಾಗುತ್ತದೆ ಹಾಗೂ ಇವುಗಳು ವಿಫಲಹೊಂದಿದ ಸಂದರ್ಭದಲ್ಲಿ ಗುತ್ತಿಗೆದಾರರೇ ಹೊಣೆ ಹೊರಬೇಕಾಗುತ್ತದೆ. ಈ ರೀತಿ ಸಾಮಗ್ರಿಗಳನ್ನು ಖರೀದಿಸಿದಾಗ ಸಂಬಂಧಿಸಿದ ಡೀಲರ್‌ಗಳಿಂದ ಸಂಬಂಧಿಸಿದ ಡೀಲರ್‌ಶಿಪ್ ಸರ್ಟಿಫಿಕೇಟ್ ಪಡೆದು ಬಿಲ್‌ಗಳ ಜೊತೆ ಲಗತ್ತಿಸುವುದು. ಮುಂದುವರೆದು ಸಾಮಗ್ರಿಗಳ ವಿಶಿಷ್ಟ ವಿವರಣೆಯನ್ನು ಮತ್ತು ಗುಣಮಟ್ಟವನ್ನು ಬೆವಿಕಂ ನಿಂದ ಪರಿಷ್ಕರಿಸಿದ ಸಂದರ್ಭದಲ್ಲಿ ಈ ರೀತಿ ಖರೀದಿಸಲಾದ ಸಾಮಗ್ರಿಗಳ ಪರಿಷ್ಕೃತ ಮಾನದಂಡಗಳಿಗನುಗುಣವಾಗಿ ಇರಬೇಕು. ಈ ಸಾಮಗ್ರಿಗಳ ಐ.ಎಸ್./ಐ.ಇ.ಸಿ. ಪರೀಕ್ಷೆಗಳು ನೊಂದಾಯಿತ ಕಂಪನಿಯ ಹೆಸರಿನಲ್ಲಿ ಯೇ ಇರಬೇಕಾಗುತ್ತದೆ.

ಮೇಲೆ ತಿಳಿಸಲಾದ ಸಂಗತಿಗಳನ್ನು ಅಗತ್ಯವಾಗಿ ಪಾಲಿಸಲು ಕೋರಿದೆ.

ಸಹಿ/-

ಮುಖ್ಯ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು (ತಾಂತ್ರಿಕ)
ಬೆವಿಕಂ

ಪ್ರತಿಗಳು ಮಾಹಿತಿಗಾಗಿ :

ವ್ಯ.ನಿ. / ನಿ(ತಾಂ) / ಮು.ಪ್ರ.ವ್ಯ (ಹ ಮತ್ತು ವಾ), ಬೆವಿಕಂ ರವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳಿಗೆ

ಪ್ರತಿಗಳು :

1. ಎಲ್ಲಾ ಮುಖ್ಯ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ
2. ಎಲ್ಲಾ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
3. ಎಲ್ಲಾ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
4. ಎಲ್ಲಾ ಲೆಕ್ಕ ನಿಯಂತ್ರಣಾಧಿಕಾರಿಗಳು, ಬೆವಿಕಂ
5. ಎಲ್ಲಾ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ
6. ಎಲ್ಲಾ ಉಪ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ
7. ಎಲ್ಲಾ ಉಪ ನಿಯಂತ್ರಣಾಧಿಕಾರಿಗಳು, ಬೆವಿಕಂ
8. ಎಲ್ಲಾ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
9. ಎಲ್ಲಾ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
10. ಎಲ್ಲಾ ಲೆಕ್ಕಾಧಿಕಾರಿಗಳು (ಕಾ ಮತ್ತು ಪಾ), ಬೆವಿಕಂ
11. ಎಲ್ಲಾ ಲೆಕ್ಕಾಧಿಕಾರಿಗಳು (ಆಂ.ಪ.), ಬೆವಿಕಂ
12. ಪ್ರಧಾನ ಕಡತ.

ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ನಿಯಮಿತ

(ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಂಪೂರ್ಣ ಸ್ವಾಮ್ಯಕ್ಕೆ ಒಳಪಟ್ಟಿದೆ)

ಸಂಖ್ಯೆ : ಬೆವಿಕಂ/ಬಿಸಿ-33/ಕ-2291/2010-11/Cys-60

ಕಂಪನಿ ಕಾರ್ಯಾಲಯ
ಕೆ.ಆರ್.ವೃತ್ತ
ಬೆಂಗಳೂರು-560 001.
ದಿನಾಂಕ : 07-08-2010.

ಸುತ್ತೋಲೆ

ವಿಷಯ : ಕಾಮಗಾರಿ ಅನುಷ್ಠಾನ-ಅಂದಾಜು ಪಟ್ಟಿ ತಯಾರಿಸುವಿಕೆ-ಟೆಂಡರ್ ಆಹ್ವಾನಿಸುವ ಸಂದರ್ಭದಲ್ಲಿ ಟೆಂಡರ್ ಗಿಡಲಾಗುವ ಮೊಬಲಗು ಹಾಗೂ ಟೆಂಡರ್ ಹೋಲಿಕೆ ಮೊಬಲಗಿನ ನಿರ್ಧರಣಾ ವಿಧಾನಕ್ರಮದ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ : ಬಿಸಿ-33/2291/2010-11/ಸಿವೈಎಸ್-14/ದಿನಾಂಕ 25.05.10

ಬೆವಿಕಂನ ಕಾಮಗಾರಿಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಕೂಲಿ ಗುತ್ತಿಗೆಯಾಧಾರಿತ, ಭಾಗಶಃ ಹಾಗೂ ಸಮಗ್ರ ಗುತ್ತಿಗೆ ಆಧಾರದ ಮೇಲೆ ಟೆಂಡರನ್ನು ಆಹ್ವಾನಿಸಲು ಸಾಮಗ್ರಿ ಮೊತ್ತ, ಕಾರ್ಮಿಕ ಕೂಲಿ ಮೊತ್ತಗಳನ್ನು ಹೊರತುಪಡಿಸಿ ಇತರೇ ಹಲವಾರು ಮೇಲ್ವಿಚ್ಛೆಗಳನ್ನು ಹಾಗೂ ಈ ಮೇಲ್ವಿಚ್ಛೆಗಳನ್ನು ಸಾಮಗ್ರಿ ಹಾಗೂ ಕೂಲಿವೆಚ್ಚ ಮೊಬಲಗಿನ ಮೇಲೆ ನಿರ್ದಿಷ್ಟ ಶೇಕಡವಾರು ಪ್ರಮಾಣವೆಂದು ಕವಿಪ್ರನಿನಿ ಆಡಳಿತಾವಧಿಯಲ್ಲಿ ನಿರ್ದಿಷ್ಟಗೊಳಿಸಲಾಗಿತ್ತು. ಬೆವಿಕಂ ಪ್ರಾರಂಭದ ನಂತರವೂ ಸಹ ಇದೆ ವಿಧಾನ ಕ್ರಮವನ್ನು, ಸದರಿ ವಿಧಾನಕ್ರಮಗಳನ್ನು ಪರಿಷ್ಕರಣೆಗೊಳಿಸುವವರೆಗೂ ಮುಂದುವರಿಸಬೇಕೆನ್ನುವ ಕಂಪನಿಯ ಆಡಳಿತ ಮಂಡಳಿಯ ತೀರ್ಮಾನದಂತೆ ಮುಂದುವರಿಸಲಾಗಿರುತ್ತದೆ. ಸದರಿ ಅಂಶಗಳ ಯುಕ್ತತೆ, ನಿಖರತೆ ಹಾಗೂ ಯಥಾಸ್ಥಿತಿಯ ಪರಿಷ್ಕರಣೆಯನ್ನು ಕೈಗೊಳ್ಳಬೇಕೆನ್ನುವ ಇತ್ತೀಚಿನ ಆಡಳಿತ ಮಂಡಳಿಯ ತೀರ್ಮಾನದಂತೆ ಸಮಿತಿಯೊಂದನ್ನು ರಚಿಸಲಾಗಿದ್ದು ಈ ಸಮಿತಿಯ ವರದಿ ಬರುವವರೆಗೂ ಅನಿವಾರ್ಯ ಮತ್ತು ತುರ್ತು ಕಾಮಗಾರಿಗಳನ್ನು ಕೈಗೊಳ್ಳುವುದರಲ್ಲಿ ಅಡ್ಡಿಯಾಗದಿರಲೆಂದು ಟೆಂಡರ್ ತಯಾರಿಕೆ ಮತ್ತು ಟೆಂಡರ್ ಪ್ರಕ್ರಿಯೆ ಬಗ್ಗೆ ತಾತ್ಕಾಲಿಕ ಕಾರ್ಯವಿಧಾನಗಳನ್ನು ದಿನಾಂಕ 25-05-2010 ರ ಸುತ್ತೋಲೆಯಲ್ಲಿ ನಿರೂಪಿಸಿ ಅವುಗಳನ್ನು ಕಟ್ಟುನಿಟ್ಟಾಗಿ ಪಾಲಿಸಲು ತಿಳಿಸಲಾಗಿತ್ತು.

ಬೆವಿಕಂ ಮತ್ತು ಇತರೇ ಎಸ್ಕಾಂಗಳ ಕಾಮಗಾರಿ ನಿರ್ವಹಣೆಯಲ್ಲಿ ತಯಾರಿಸಲಾಗಿರುವ ಅಂದಾಜು ಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಬೇಕಾಗಿರುವ ವೆಚ್ಚಾಂಶಗಳು, ಮೇಲ್ವಿಚ್ಛಾಂಶಗಳು ಮತ್ತು ಅವುಗಳ ಪ್ರಮಾಣಗಳು ಹಾಗೂ ವಿಧಿಸುವ ವಿಧಾನಕ್ರಮಗಳ ಬಗ್ಗೆ ಸಮಿತಿಯಿಂದ ಹಾಗೂ ಎಸ್ಕಾಂಗಳ ಪ್ರತಿನಿಧಿಗಳಿಂದ ಕೂಲಂಕುಷ ಚರ್ಚಿತವಾಗಿ ಅವುಗಳ ಬಗ್ಗೆ ಒಮ್ಮತವಾಗಿ ತೀರ್ಮಾನವಾಗಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಟೆಂಡರ್ ಗೆ ಇಡಲಾಗುವ ಮೊಬಲಗಿನ ನಿರ್ಧರಣೆ ಹಾಗೂ ಟೆಂಡರ್ ಹೋಲಿಕೆ ಮೊಬಲಗು ನಿರ್ಧರಣೆ ಬಗ್ಗೆ ಈ ಕಚೇರಿ ಸುತ್ತೋಲೆ ದಿನಾಂಕ 25-05-2010 ರ ಮುಂದುವರಿದ ಭಾಗವಾಗಿ ಕೆಳಕಂಡ ಪೂರಕ ಮಾರ್ಗದರ್ಶನಗಳನ್ನು ನಿರೂಪಿಸಲಾಗಿದೆ.

1. ಕಾಮಗಾರಿ ಟೆಂಡರ್‌ಗೆ ಇಡಲಾಗುವ ಮೊಬಲಗಿನ ಹಾಗೂ ಟೆಂಡರ್ ಹೋಲಿಕೆ ಮೊಬಲಗು ನಿರ್ಧರಣೆ (Ascertainment of Amount put to tender and amount for comparison of tenders)

1. ಕಾರ್ಮಿಕ ಕೂಲಿಗುತ್ತಿಗೆ ಪದ್ಧತಿ :

ಕ್ರ.ಸಂ.	ವಿವರಗಳು	ಮೊಬಲಗು
1.	ಕೂಲಿ ಮೊಬಲಗು	✓
2.	ಕೂಲಿ ಮೊಬಲಗಿನ ಮೇಲೆ ಸೇವಾ ತೆರಿಗೆ ಶೇ.10.3 ರಂತೆ	✓
3.	ಕೂಲಿ ಮೊಬಲಗಿನ ಮೇಲೆ ಇಸಿಎಸ್ ಕೊಡುಗೆ ಶೇ.13.61 ರಂತೆ	✓
4.	ಟೆಂಡರ್‌ಗೆ ಇಡಲಾಗುವ ಮೊಬಲಗು (Amount put to tender)	(ಕಾಲಂ 1+2+3) ದಿನಾಂಕ 25.05.10 ರ ಸುತ್ತೋಲೆಯಲ್ಲಿ ಈಗಾಗಲೇ ಸೂಚಿಸಲಾಗಿದೆ.
5.	ಸಾಗಾಣಿಕೆ ವೆಚ್ಚ - ಸಾಮಗ್ರಿ ದರದ ಮೇಲೆ ಶೇ.2 ರಂತೆ	✓
6.	ಪ್ರಾಸಂಗಿಕ ವೆಚ್ಚಗಳು - ಸಾಮಗ್ರಿ+ಕಾರ್ಮಿಕ ದರದ ಮೇಲೆ ಶೇ.2 ರಂತೆ.	✓
7.	ಸಿಬ್ಬಂದಿ ವೆಚ್ಚ - ಕಾರ್ಮಿಕ ದರದ ಮೇಲೆ ಶೇ. 10 ರಂತೆ	✓
8.	ಟೆಂಡರ್ ಹೋಲಿಕೆ ಮೊಬಲಗು (Amount for comparison of tender)	ಕಾಲಂ 4 ರಿಂದ 7ರ ಜುಮ್ಮಾ

2. ಭಾಗಶಃ ಹಾಗೂ ಸಮಗ್ರ ಗುತ್ತಿಗೆ ಪದ್ಧತಿ :

ಕ್ರ.ಸಂ.	ವಿವರಗಳು	ಮೊಬಲಗು
1.	ಸಾಮಗ್ರಿ ಮೊಬಲಗು	✓
2.	ಕೂಲಿ ಮೊಬಲಗು	✓
3.	ಕೂಲಿ ಮೊಬಲಗಿನ ಮೇಲೆ ಸೇವಾ ತೆರಿಗೆ ಶೇ.10.3 ರಂತೆ	✓
4.	ಕೂಲಿ ಮೊಬಲಗಿನ ಮೇಲೆ ಇಸಿಎಸ್ ಕೊಡುಗೆ ಶೇ.13.61 ರಂತೆ	✓
5.	ಟೆಂಡರ್ ಗಿಡಲಾಗುವ ಮೊಬಲಗು (Amount put to tender)	(ಕಾಲಂ 1+2+3+4) ದಿ. 25.05.10 ರ ಸುತ್ತೋಲೆಯಲ್ಲಿ ಈಗಾಗಲೇ ಸೂಚಿಸಲಾಗಿದೆ.
6.	ಉಗ್ರಾಣದಿಂದ ಕೆಲಸ ನಡೆಯುವ ಸ್ಥಳಕ್ಕೆ ಸಾಗಾಣಿಕೆ ವೆಚ್ಚ - ಸಾಮಗ್ರಿ ವೆಚ್ಚದ ಮೇಲೆ ಶೇ.2 ರಂತೆ (ಕಂಪನಿಯಿಂದ ನೀಡಲಾಗುವ ಸಾಮಗ್ರಿಗಳ ಮೊತ್ತವೂ ಸೇರಿದಂತೆ)	✓

ಕ್ರ.ಸಂ.	ವಿವರಗಳು	ಮೊಬಲಗು
7.	ಪ್ರಾಸಂಗಿಕ ವೆಚ್ಚಗಳು - ಸಾಮಗ್ರಿ + ಕಾರ್ಮಿಕ ದರದ ಮೇಲೆ ಶೇ.2 ರಂತೆ.	✓
8.	ಪಹರ ಮತ್ತು ಕಾವಲು ವೆಚ್ಚ - ಸಾಮಗ್ರಿ ದರದ ಮೇಲೆ ಶೇ.1 ರಂತೆ	✓
9.	ಕಳ್ಳತನ ಹಾಗೂ ಅಪಘಾತ ವಿಮೆ - ಸಾಮಗ್ರಿ ದರದ ಮೇಲೆ ಶೇ.1 ರಂತೆ	✓
10.	ಕಾರ್ಯನಿರ್ಧಾರಿತ ಠೇವಣಿ ಹಾಗೂ ಬ್ಯಾಂಕ್ ಖಾತರಿ ಪ್ರಯುಕ್ತದ ಅಲ್ಪಾಂಶ ಹಣದಿಂದ ಆಗುವ ಬಡ್ಡಿ ನಷ್ಟದ ಪರಿಹಾರ - ಬ್ಯಾಂಕ್ ಖಾತರಿ ಹಣದ ಮೇಲೆ ಶೇ.2.5 ರಂತೆ	✓
11.	ಟೆಂಡರ್ ಹೋಲಿಕೆ ಮೊಬಲಗು (Amount for comparison of tender)	ಕಾಲಂ 5 ರಿಂದ 10 ರ ಜುಮ್ಮಾ

ಅಂದಾಜು ಪಟ್ಟಿ ತಯಾರಿಕೆ ಹಾಗೂ ಕಾಮಗಾರಿ ಟೆಂಡರ್‌ಗಳನ್ನು ಆಹ್ವಾನಿಸುವಾಗ ಈ ಕೆಳಕಂಡ ಮಾರ್ಗದರ್ಶನಗಳನ್ನು ಪಾಲಿಸುವುದು.

- ಬೆವಿಕಂ ಹಾಗೂ ಎಸ್ಕಾಂಗಳ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಮೇಲ್ಕಂಡ ಕಾಮಗಾರಿಗಳ ನಿರ್ವಹಣೆಗಾಗಿ ತಯಾರಿಸಲಾಗುವ ಅಂದಾಜು ಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಬೇಕಾಗಿರುವ ವೆಚ್ಚಾಂಶ, ಮೇಲ್ವಿಚಾರಣೆ ಹಾಗೂ ಅವುಗಳ ಶೇಕಡಾವಾರು ಪ್ರಮಾಣವನ್ನು 2010-2011ನೇ ಸಾಲಿನ ಶೆಡ್ಯೂಲ್ ದರಪಟ್ಟಿಯಲ್ಲಿ ವಿವರವಾಗಿ ತಿಳಿಸಲಾಗಿದೆ. ಈ ಅಂಶಗಳನ್ನು ಪಯೋಗಿಸಿ ಅಂದಾಜುಪಟ್ಟಿ ತಯಾರಿಸುವುದು.
- ಎಲ್ಲಾ ಟೆಂಡರ್‌ಗಳನ್ನು ಈ ಕಚೇರಿ ದಿನಾಂಕ 25.05.2010ರ ಸುತ್ತೋಲೆಯಲ್ಲಿ ನ ಪ್ರಸ್ತುತ ಚಾಲ್ತಿಯಲ್ಲಿರುವ ನಿಯಮ ಹಾಗೂ ಮಾರ್ಗದರ್ಶಕಗಳ ಪ್ರಕಾರ ಸಿದ್ಧಪಡಿಸುವುದು.
- ನೌಕರರ ಭವಿಷ್ಯ ನಿಧಿ (ಇ.ಪಿ.ಎಫ್)/ರಾಜ್ಯ ನೌಕರರ ವಿಮೆ (ಇ.ಎಸ್.ಐ.) ಇವುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸುತ್ತೋಲೆ ಸಂಖ್ಯೆ : ಬೆವಿಕಂ/ಪ್ರ.ವ್ಯ(ಲೆ ಮತ್ತು ತ)/ಬಿಸಿ-43/3041/08-09/1568-73 ದಿನಾಂಕ 19.01.09 ಮತ್ತು ಬೆವಿಕಂ/ಸಿವೈಎಸ್-6 ದಿನಾಂಕ 10.08.09ರ ನಿಯಮಗಳನ್ನೇ ಅನುಸರಿಸುವುದು.
- ಸೇವಾ ತೆರಿಗೆ ಪ್ರಾಧಿಕಾರಿಗಳಿಂದ ನೊಂದಣಿ ಪ್ರಮಾಣ ಪತ್ರವನ್ನು ಪಡೆದಿರುವ ಗುತ್ತಿಗೆದಾರರಿಗೆ ಮಾತ್ರ ಸೇವಾ ತೆರಿಗೆಯನ್ನು ಪಾವತಿಸುವುದು.
- ಕೆಟಿಪಿಪಿ ಕಾಯ್ದೆ 1999 ಹಾಗೂ ಹಣಕಾಸು ಬಳಕೆಯ ಅಧಿಕಾರ ನಿಯೋಜನೆಯ ಕೈಪಿಡಿ-2008 ಹಾಗೂ ಕಾಲಕಾಲಕ್ಕೆ ಹೊರಡಿಸಿರುವ ಇತರ ನಿರ್ದೇಶನಗಳ ಪ್ರಕಾರ ಗೊತ್ತುಪಡಿಸಿರುವ ಮಿತಿಗೆ ಒಳಪಟ್ಟು ಅಧಿಕೃತ ಅಧಿಕಾರಿಗಳು ಕಾಮಗಾರಿಗಳನ್ನು ಅನುಮೋದಿಸುವುದು.

- ಡಿ.ಸಿ.ಡಬ್ಲ್ಯು ಕಾಮಗಾರಿಗಳ ಅಂದಾಜು ಪಟ್ಟಿಯನ್ನು 2010-11ನೇ ಸಾಲಿನ ಶೆಡ್ಯೂಲ್ ದರಪಟ್ಟಿಯಂತೆ ತಯಾರಿಸಿ, ಸದರಿ ಕಾಮಗಾರಿಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವಾಗ ಕ್ರಮ ಸಂಖ್ಯೆ 1 ರಲ್ಲಿ ಸೂಚಿಸಲಾಗಿರುವ ಪರ್ಯಾಯಗಳಲ್ಲಿ ಆಯ್ಕೆಯಾಗುವ ಪದ್ಧತಿಗೆ ಅನ್ವಯವಾಗುವ ನಿಯಮಗಳಂತೆ ಕ್ರಮ ಕೈಗೊಳ್ಳುವುದು.

ಮೇಲ್ಕಂಡ ಮಾರ್ಗಸೂಚಿಗಳನ್ನು ಚಾಚೂ ತಪ್ಪದೇ ಪಾಲಿಸುವಂತೆ ಸೂಚಿಸಲಾಗಿದೆ.

ಸಹಿ/-

ಮುಖ್ಯ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು (ತಾಂತ್ರಿಕ)
ಬೆವಿಕಂ

ಪ್ರತಿಗಳು ಮಾಹಿತಿಗಾಗಿ:

ವ್ಯ.ನಿ./ನಿ(ತಾಂ)/ಮು.ಪ್ರ.ವ್ಯ (ಹ ಮತ್ತು ವಾ), ಬೆವಿಕಂ ರವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳಿಗೆ

ಪ್ರತಿಗಳು:

1. ಎಲ್ಲಾ ಮುಖ್ಯ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ.
2. ಎಲ್ಲಾ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
3. ಎಲ್ಲಾ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
4. ಎಲ್ಲಾ ಲೆಕ್ಕ ನಿಯಂತ್ರಣಾಧಿಕಾರಿಗಳು, ಬೆವಿಕಂ
5. ಎಲ್ಲಾ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ
6. ಎಲ್ಲಾ ಉಪ ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು, ಬೆವಿಕಂ
7. ಎಲ್ಲಾ ಉಪ ಲೆಕ್ಕ ನಿಯಂತ್ರಣಾಧಿಕಾರಿಗಳು, ಬೆವಿಕಂ
8. ಎಲ್ಲಾ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
9. ಎಲ್ಲಾ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್ (ಎ), ಬೆವಿಕಂ
10. ಎಲ್ಲಾ ಲೆಕ್ಕಾಧಿಕಾರಿಗಳು (ಹ ಮತ್ತು ವಾ), ಬೆವಿಕಂ
11. ಎಲ್ಲಾ ಲೆಕ್ಕಾಧಿಕಾರಿಗಳು (ಆಂ.ಪ.), ಬೆವಿಕಂ
12. ಪ್ರಧಾನ ಕಡತ.

Table – 1

Minimum IR Values at 30°C for New Oil Filled Transformers.

Rated Voltage	< 6.6kV	6.6kV – 22kV	33kV	≥66kV	415 Volts
IR value in Mega Ohms	200	300	400	500	100

1. IR Values in Oil-drained condition shall be 15 to 20 times more than that in oil filled condition.
2. Polarisation Index (IR at 10 Minutes / IR at One minute) shall be more than 1.5.

Table – 2

Cables on Secondary Side of Transformers (11kV/433V)

Capacity of Transformers (kVA)	Secondary Current (A)	Minimum size of AYPY Cable. (MM ²)
63	84	50
100	133.3	95(2x50)
160	213.3	185 (2x95)
200	266.6	300 (2x120)
250	333	(2x185)
315	420	(2x300) or (3x185)
400	533	(3x300) or (2x400)
500	666.5	(3x400) or (4x240)

Ref. : Technical Diary Electrical inspectorate-2013

Material Requirements for cement concrete work.

Materials required for 1 cum Concrete.				
Sl. No.	Cement Concrete Ratio	Granite Metal stone Cum	Sand Cum	Cement Bag.
1.	1:1:2	0.76	0.38	10.815 (9.96)
2.	1:1.5:3	0.85	0.416	8.3 (7.86)
3.	1:2:4	0.90	0.45	6.475 (6.02)
4.	1:3:6	0.90	0.45	4.55 (4.16)
5.	1:4:8	0.96	0.48	3.50 (3.16)

Note: The values within the brackets are for unfinished items of work.

Ref. : KEB Technical Diary -2013

Current carrying capacity of Bare Steel Cored Aluminium Conductors.

Sl. No.	Standard Nominal Copper Sq.mm	Size		No. Strands / Strand Dia in mm		Current in Amps for Temp. Rise in °C		Approx. Ultimate Strength	Approx. Resistance at 20°C Ohms per Km
		Code	Dia of Complete cable in mm	Aluminium	Steel	30°C	50°C		
1.	13	Squirrel	6.33	6/2.11	½.11	70	97	971	1.374 (1.403)
2.	20	Weasel	7.77	6/2.59	½.59	100	123	113	0.9116 (0.9352)
3.	30	Rabbit	10.05	6/3.35	1/3.35	148	183	1864	0.5449 (0.5560)
4.	80	Coyote	15.89	26/2.25	7/1.90	286	367	4645	0.2214
5.	110	Lynx	19.53	30/2.79	7/2.79	385	475	7945	0.1589

Ref. : KEB Technical Diary -2013 Page No.41

Measures and Weights.

Conversion of English and US Measures and Weights and Vice Versa

Linear measures	Inch	Foot	Yard	cm	m
1 inch	1	0.0833	0.0278	2.540	0.0254
1 foot	12	1	0.3333	30.48	0.3048
1 yard	36	3	1	91.44	0.9144
1 cm (centimeter)	0.3937	0.0382	-	1	0.01
1 m (meter)	39.37	3.281	1.094	100	1
Square measures	Sq. Inch	Sq. Foot	Sq. Yard	cm²	m²
1 square inch	1	-	-	6.452	-
1 square foot	144	1	0.1111	929	0.0929
1 square yard	1296	9	1	8361	0.8361
1 cm ²	0.155	-	-	1	0.0001
1 m ²	1550	10.76	1.196	10000	1
Cubic measures	cu.inch	cu.foot	US Gallon	Cm³	m³
1 cubic inch	1	-	-	16.39	0.0164
1 cubic foot	1728	1	7.481	-	28.32
1 US gallon	231	0.1337	1	3785	3.785
1 cm ³	0.061	-	-	1	0.001
1 m ³	61.02	0.035	0.2642	1000	1

CABLE IDENTIFICATION CODE.

IS 694-PVC Insulated LT Cables		IS 1554-PVC Insulated HT Cables.	
Aluminium Conductor	A	Aluminium Conductor	A
PVC insulation	Y	PVC insulation	Y
PVC Sheath	Y	Steel round wire armour	W
Earth continuity conductor (ECC)	(ECC)	Non-magnetic round wire armour	Wa
Suitable for outdoor	OU	Suitable for low Temperature	T
Steel Strip armour	SZ	Non-magnetic strip armour	FF
		Double steel wire armour	WW
		Double steel strip armour	FF
		PVC outer sheath	Y
IS-7098-XLPE Insulated LT Cables		IS 692-PVC Insulated HT Cables.	
Aluminium Conductor	A	Aluminium Conductor	A
XLPE insulation	2X	Paper insulation	P
Steel round wire armour	W	Lead Sheath	L
Non-Magnetic round wire armour	WA	Lead alloy sheath	LY
Steel strip armour	F	Lapped bedding or serving of compound fibrous materials	S
Non-magnetic steel strip armour	FA	Extruded PVC bedding or serving	Y
Double steel round wire armour	Ww	Double steel tape armour	T
Double steel strip armour	FF	Double steel tape armour galvanized	Tg
PVC Outer Sheath	Y	Single round steel wire armour	W
		Single steel Strip armour	I
		Double round steel wire armour	WW
		Double steel strip armour	FF

Example: Cable Type "APLSTY 3X300 SM. 11Kv (E)" Stands for Aluminium Conductor, Paper insulation, Lead sheath, Bedding, Double steel tape armor, PVC outer sheath, Sector shaped conductor, 11kV earthed system.

**Aerial bunched cables for LT Distribution
(IS: 14255 : 1995)**

a) Phase and street light conductors as per REC Specifications.

Nominal sectional area.	No. of strands	Diameter of compacted conductor	Approximate mass of conductor	Max. D.C. resistance at 20°C	Insulation Thickness Nom.
mm ²		mm	Kg/km	Ohm/km	mm
16	1	4.04	42	1.91	1.0
25	7	5.5	65	1.20	1.0
35	7	6.8	95	0.868	1.0
50	7	7.9	127	0.641	1.2

Sl. No.	Cross section in (sq.mm)	Nominal conductor diameter	Apprx. over dia of cable (in mm)	Max. SC current in amps for 1 second duration.		Continuous load in amps.
				Al Phase conductor in amps	Copper screen in amps	
1	25	6.2	20.8	2.4	672	97
2.	35	7.3	21.9	3.3	672	119
3.	50	8.4	23.0	4.7	672	141
4.	70	10.1	24.7	6.56	672	176
5.	95	12.0	26.6	9.0	672	216
6.	120	13.2	27.8	11.3	672	251
7.	150	14.6	29.2	14.2	672	282

b) Neutral / Messenger conductor.

Nominal sectional area.	No. of strands	Diameter of compacted conductor	Approximate mass of conductor	Max. D.C. resistance at 20°C	Insulation Thickness Nom.
mm ²		mm	Kg/km	Ohm/km	mm
25	7	5.8	65	1.38	7.4
35	7	6.8	95	0.986	10.3

Ref. : KEB Technical Diary -2013 Page No.49

Aerial bunched cables for HT Distribution.

HT Aerial Bunched Cable 6.35/11kV Reference Standard: Generally to IS: 7098 (2) – 1985

	Description	3x25 + 1x35	3x35 + 1x35	3x50 + 1x35	3x70 + 1x55	3x95 + 1x55
1.	Power Cores:					
1.1	Conductors:					
	(a) Nom. cross sectional Area (mm ²)	25	35	50	70	95
	(b) Max. D.C. resistance of conductor at 20°C (ohm/km)	1.20	0.868	0.641	0.443	0.320
	(c) Approximate diameter of conductor (mm)	6.2	7.3	8.35	10.1	12.0
1.2	Messenger Wire:					
	(a) Nom. Cross sectional Area (mm ²)	35	35	35	55	55
	(b) Approx. breaking Load	41	41	41	62	62
2.	Current Ratings:					
	Continuous current carrying capacity of cable in air at ambient temperature at 40°C – Amps.	107	130	155	195	238
3.	Approximate weight (kg/km)	1002	1165	1315	1740	2040

Fuse protection and LT Wire sizes for Distribution Transformers.

Capacity in kVA	Full load Current in Amps		HT Size Horn Gap fuses gap 250 mm in SWG	LT side Protection	L.T. Wires / Cables Sectional Area in Sq.mm
	11kV	433kV			
25	1.21	33.4	38		25
50	2.62	66.7	35	Protection kits up to 100kVA MCCBs of 250A – 2 No's. MCCBs. of 250A-4 No's.	50
63	3.31	84.5	35		95
100	5.25	133.5	33		185
250	13.13	333.4	23		240
300	15.75	400.5	23		In two runs.
500	26.26	666.8	20		240 in 4 Runs.

Ref. : KEB Technical Diary -2013 Page No.50

11kV 3 Core XLPE Cables.

Cross sectional area sq.mm.	Approximate overall diameter D in mm **	Current Rating in Amps		Short Circuit Current Rating*	
		In Ground	In Air	kA	MVA
6.35/11kV (E)					
3x95 rm/v	59	190	220	8.93	170
3x150 rm/v	66	240	285	14.10	268
3x185 rm/v	70	270	330	17.40	331
3x240 rm/v	76	315	385	22.60	430
3x300 rm/v	82	355	440	28.20	537
3x400 rm/v	90	405	510	37.60	716
11kV (UE)					
3x95 rm/v	68	190	220	8.93	170
3x150 rm/v	75	240	285	14.10	268
3x185 rm/v	79	270	330	17.40	331
3x240 rm/v	86	315	385	22.60	430
3x300 rm/v	92	355	440	28.20	537
3x400 rm/v	99	405	510	37.60	716

* Duration of Short Circuit: 1 Sec. Max. Allowable conductor temperature during Short Circuit: 250⁰C. Conductor temperatures just before S.C.: 90⁰C. ** Min. bending radius = 15xD

Ref. : KEB Technical Diary -2013 Page No.48



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly owned by Government of Karnataka Undertaking)

E-Mail cgmcawork@gmail.com

No: BESCOM/BC-9/CGM(CA)/DGM(CA-3)/AGM(CA-3)/F-752/2013-14/CYS-113

Encl.:

O/o Chief General Manager (El.),

Corporate Affairs, BESCOM,

Corporate Office, K.R. Circle,

Bangalore - 560 001.

Date: 29/08/2013

PREAMBLE:

Sub: Usage of Polymer Insulators in BESCOM Network for Total Turnkey, Partial Turnkey and Self Execution works.

Ref : 1. O.M. No. BESCOM/BC-35/2012-13/CYS-35 Dt: 03.09.2012.
2. Email dated 26.08.2013 from Hon'ble Managing Director, BESCOM in respect of inspection of Yelahanka Division on 23.08.2013

O.M has already been issued vide O.M. No. BESCOM/BC-35/2012-13/CYS-35 Dt: 03.09.2012 regarding procurement of 11kV polymeric pin insulators and 45kN, 70kN & 90kN Disc Insulators in BESCOM.

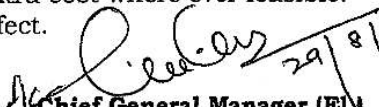
During the inspection of Yelahanka Division by Hon'ble Managing Director, BESCOM, it has been noticed that Ceramic 11kV Pin Insulators are used in Self Execution works. The Corporate Office has taken a decision that only polymer insulators shall be used for 11kV Pin and Disc Insulators. Therefore it is necessary that the polymer insulators shall be used in the Total Turnkey, Partial Turnkey and Self Execution works. Hence, the Official Memorandum.

OFFICIAL MEMORANDUM

BESCOM/BC-9/CGM(CA)/DGM(CA-3)/AGM(CA-3)/F-752/2013-14/CYS-113 Dated: 29/08/13

The following directions are issued in respect of 11kV Pin and Disc Insulators.

1. 11kV Polymer Pin Insulators and Polymer 45kN, 70kN & 90kN Disc Insulators only shall be used in all Total Turnkey, Partial Turnkey and Self Execution works.
2. The field officers shall make provision for 11kV Polymer Insulators in all future estimates.
3. For ongoing / sanctioned works the agencies may be directed to use Polymer Insulators for ongoing / sanctioned works at no extra cost where ever feasible. This order shall come into force with immediate effect.


Chief General Manager (El.)
Corporate Affairs, BESCOM

Copy to:

1. The Chief General Manger (Operations), BESCOM, Corporate Office, Bangalore.
2. All the Chief Engineers (Ele.), O & M Zones, BESCOM
3. All General Managers (Ele.), Corporate Office, BESCOM
4. All the Superintending Engineers (Ele.), C,O&M Circles, BESCOM.
5. All Deputy General Managers (Ele.), Corporate Office, BSECOM.
6. All Executive Engineers (Ele.) C,O&M Division, BESCOM.
7. All Assistant Executive Engineer (El.) C,O&M Sub-Divisions, BESCOM.
8. PS to MD /D(T) /D (F) Corporate Office, BESCOM with a request to place before Hon'ble Managing Director, Director (Technical) and Director (Finance), BESCOM.
9. All the Section officers, BESCOM.
10. Officer Copy/ MF

Copy for kind information to:

1. Sri. M. Nagaraj, President, KPTCL Employees Union & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.
2. Sri. V. Venkatasivareddy, President, KEB Engineers Association & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED
(Wholly owned Government of Karnataka Undertaking)

Preamble:

Sub: Procuring the DAS compatible RMUs for all the works.

Ref: Proceedings of the meeting held on 18.10.2012

Bangalore is the fastest Growing city in the country. Various studies were conducted and the results recorded, that the Reliability Index in Bangalore City is 99%. The annual average consumer hours lost due to 11kV feeder interruption is 51.57 Hours, 66kV feeder / sub-station - 20.22 Hours, DTC / LT interruptions - 143 Hours. Total 86.2 Hrs./Year/Consumer.

To achieve 100% reliability, and to reduce the annual average consumer hours lost in BMAZ, the BESCOM has taken up Distribution Automation Scheme (DAS) of the 11-kV network in the Bangalore Metropolitan Area Zone under the Bangalore Distribution up-gradation project with financial assistance from Japan International Cooperative Agency.

Scope of the project includes:

- Drawing 11kV new lines with Coyote ACSR/AB cables/UG cables to create redundancy for change over under distribution automation.
- Upgrading the existing overhead lines/HT UG cable system with higher size of conductor/ higher underground cable diameter in the distribution system.
- Providing SCADA - ready switches like DAS compatible RMUs, Line reclosures, and Load break switches to 11-kV network for distribution automation.
- Replacing the existing conventional/compact RMUs by DAS compatible RMUs for distribution automation.
- Providing Remote Terminal Units (RTU) with communication facility at all RML locations.
- Establishing Master Control Center at Corporate level with necessary communication hardware and software.

The above works are awarded to various agencies and works are under progress, about 40% work is already completed; the project is scheduled to be completed by next year. To carry forward the automation scheme to further locations in future, the DAS compatible RMUs has to be provided in future also.

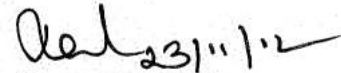
During the meeting held on 18.10.2012 the above issues were discussed and it was resolved to procure only DAS compatible RMUs for all the works, including self execution works. Hence this Circular

Circular

No: BESCOM/GM(DAS & SG)/DGM2(DAS)/BC46/2012-13/CYS-02 Date: 23.11.2012

All the field officers are hereby requested to procure and use only DAS compatible RMUs in future, for all the works including service connections, self execution works.

This O.M. shall come in to force with immediate effect.


(Ananda Naik)

Chief General Manager, Electy.,
Corporate Affairs, BESCOM

Copy to:

1. The Chief General Manager (Operations)/(F&C), BESCOM Corporate office, Bangalore.
2. The Chief Engineer (Electy.), BMAZ, BESCOM, Bangalore.
3. All the General Managers, Corporate office, BESCOM, Bangalore.
4. The General Manager (IT/MIS), corporate office BESCOM to please arrange to upload this circular in BESCOM website and Face book wall.
5. All the Superintending Engineers (Ele), O&M circle of BMAZ, BESCOM, Bangalore.
6. All the Executive Engineer (Ele), O&M Division of BMAZ, BESCOM, Bangalore.
7. All the Assistant Executive Engineer (Ele), O&M of BMAZ, BESCOM, Bangalore
8. PS to MD/ D(T) Corporate office, BESCOM with a request to place before Hon'ble Managing Director, BESCOM and Director (Technical), BESCOM.
9. Office copy/MF.



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED

(Wholly owned by Government of Karnataka Undertaking)

An ISO 9001:2008 Certified Company.

Tele No:080 22354926

Fax No:080 22354925

e-mail: dt@bescom.co.in

No: BESCOM/BC-2/DT/GM(QS&S) /2014-15 /cys. 75

Corporate office

K.R Circle, BESCOM

Bangalore

Date:

3 JAN 2015

Sub: Procurement of Distribution Transformer conforming to Energy Efficient Level -1(BEE 3 star rated) in BESCOM including Turnkey, Partial turnkey and Self-execution works.

Ref: 1. T.O circular : BESCOM/PS/DT/Cys-104 dated:11.02.2013.
2. EN 65 VSC 2014 dated: 01.10.2014.

Preamble:

The Energy Department GOK has constituted a committee for preparation of specification for Distribution Transformers common to all ESCOMs. The Committee report has been accepted and order has been issued to comply with the committee recommendations. The recommendation of the committee has been incorporated in the Distribution Transformer specification and the specification has been revised. The revised specification conforms to latest edition of IS-1180/2014 where in the maximum total losses at 50% & 100% load have been prescribed as Energy Efficient level-1 which is equivalent to BEE 3 star rated values.

As per the CEA guidelines, BESCOM is already procuring BEE 3 star rated Transformers and has made mandatory to use BEE 3 star rated transformers in all self execution works. for Transformers up to and including 100 KVA capacity. However Conventional Transformers of capacity 250KVA & 500 KVA are being procured and also permitted for use in self execution works.

Consequent to revision of IS-1180 it is necessary that BESCOM shall procure Transformers conforming to IS-1180-2014 with loss levels prescribed for energy efficient Level-1. Hence the order.

ORDER

BESCOM/BC-2/DT/GM(QS&S) /2014-15/201-75

Date: 31/1/15

1. 11KV Distribution Transformers of all capacity shall conform to IS 1180-2014. The maximum total losses at 50% & 100% load shall not exceed the losses specified for energy efficient level-1 as prescribed in IS 1180-2014 and is as under.

Sl. No.	Rating (KVA)	Impedance (Percent)	Maximum Total Loss (W) (Energy Efficiency Level -1)	
			50 % Load	100 % Load
1.	16	4.5	130	480
2.	25	4.5	210	695
3.	63	4.5	380	1230
4.	100	4.5	520	1800
5.	160	4.5	770	2200
6.	200	4.5	890	2700
7.	250	4.5	1050	3130
8.	500	4.5	1600	4750
9.	630	4.5	2000	5855
10.	1000	5.0	3000	9000

2. Henceforth all procurement of Distribution Transformers across BESCOM shall conform to 1180-2014 with the above loss levels.
3. All tenders issued for Total Turnkey, Partial Turnkey or Rate Contract etc., shall clearly specify that transformers shall conform to IS 1180-2014 with the above loss levels.
4. The field officers shall insist and ensure that the Distribution Transformers installed for self execution works are conforming to IS 1180-2014 with the above loss level for all applications registered with immediate effect.

This order shall come into force with immediate effect.


(H. Nagesh)
Director Technical,
BESCOM

copy to :

1. All the Chief General Manager, Corporate Office, BESCOM.
2. All the Chief Engineers, C, O & M Zones, BESCOM.
3. All the General Managers Corporate Office, BESCOM.
4. All the Superintending Engineers, C, O & M Circles, BESCOM.
5. All the Executive Engineers, C, O & M Divisions, BESCOM.
6. All the Assistant Executive Engineers, C, O & M Sub-Divisions, BESCOM.
7. PS to MD/DT to place before Hon'ble MD/DT.
8. OC/ME



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED
(Wholly owned Government of Karnataka Undertaking)

No: BESCOM/BC-35/GM(Q&S)/DGM(2)/AGM(3)/12-13/Cys-39
Tel No: 080- 22353293.
Fax No: 080-22342128.
Email: : gmqs.work@gmail.com

O/o General Manager (El.),
Quality & Safety, Corporate
Office, BESCOM, K. R. Circle,
Bangalore - 560 001.
Date: 11-09-12

CIRCULAR

PREAMBLE

All of us are aware, that BESCOM is an essential service organization involved in fulfilling its mission of satisfying its customer by providing uninterrupted quality and reliable power supply at quantitative rates.

While perusing fulfillment of mission, dealing with electricity is quite hazardous and lead to accidents if proper care is not exercised in availing line clearance for safe execution of works.

A close look at the common cause of accidents reveal that in most of the accident cases it is the overconfidence of the Field / Maintenance Staff and lack of following the safety rules especially in obtaining line clearance.

In BESCOM, particularly in Bangalore most of the Transformer Centers are fed from different sources, hence it is mandatory on the part of the persons who avail LC to create a safety zone by isolating on both the sides of the working zone.

It is alarming to note that even after initiating many steps for ensuring safety in the field, there are many electrical accidents occurring both fatal and non-fatal to departmental and non-departmental persons.

From the analysis of the accidents that are reported to this Office, it is observed that most of the accidents are due to not availing of Line Clearance. These accidents could have been avoided if the concerned officer has taken Line Clearance and created proper safety zone by using 11kV Earthing rods by first fixing the ground wire of the Earthing rod to the ground point and then fixing the earthing rod to the conductors which are on LC. The vision of BESCOM is to achieve zero accidents and hence the field staff shall ensure work only after taking proper Line Clearance.

Hence, this Circular.

Sub: Creating Safe Working Zone before carrying out the work

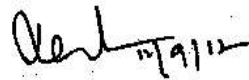
This circular is issued only in respect of creating safety zone and creating effective grounding of the lines and DTCs. The maintenance staff working in the field while carrying regular maintenance and breakdown works should follow the following safety rules:

1. The field staff shall wear the uniform compulsorily.
2. Danger boards shall be displayed at the work spots and the necessary barricades erected for the safety of the pedestrians and general public.
3. Each and every work shall be carried out only after availing required and proper line clearance.
4. The person who has availed the line clearance and supervises the work shall be present at the work spot till the line clearance is returned and line charged.
5. The work shall be carried out after creating SAFE WORKING ZONE i.e. by isolating both the ends of working zone.
 - **Annexure-A shows a schematic procedure of grounding the lines for creating safety zone.**
 - **Annexure-B shows a schematic procedure of grounding the Distribution Transformers for creating safety zone.**
6. All the necessary safety materials such as helmets, belts etc., shall be compulsorily used properly.

The Controlling officer shall carry out the test checks and shall ensure that the safety precautions mentioned above are being adopted during the works and if any violation of the safety procedure has occurred while execution, respective O&M AEE / AE / SO will be held responsible.

The action taken on the officials shall be intimated to their immediate superiors and also to this office immediately.

This circular shall come into force with immediate effect.




(Ananda Naik)
Chief General Manager (El.)
Corporate Affairs

Copy to:-

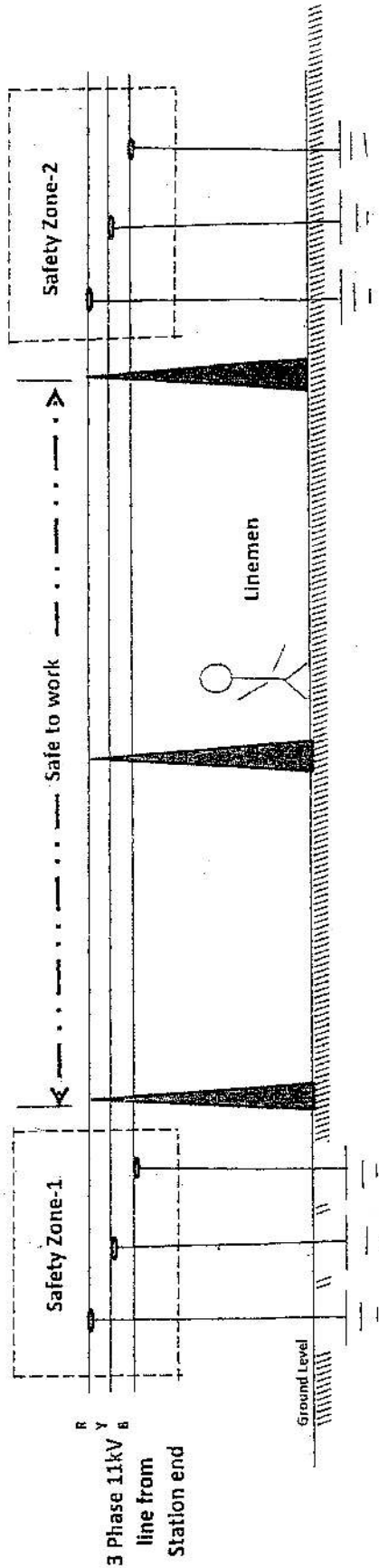
1. The Chief General Manger/Operations/CR&C/F&C, BESCOM Corporate Office, Bangalore.
2. All the Chief Engineers (Electy.) O & M Zones, BESCOM
3. All General Managers, Corporate Office, BESCOM
4. The General Manager (IT&MIS), Corporate Office, BESCOM to *please arrange to upload this Circular in BESCOM website and face book wall.*
5. All Superintending Engineers (El.,) C,O&M Circles, BESCOM.
6. The Superintendent of Police, Vigilance, BESCOM.
7. All Controllers of Accounts, BESCOM.
8. All Deputy Control of Accounts, BESCOM.
9. All Deputy General Managers, Corporate Office, BSECOM.
10. All Executive Engineers (Ele.) C,O&M Division, BESCOM.
11. The Executive Engineers (Civil) BMAZ/BRAZ/Chitradurga, Divisions, BESCOM.
12. All Assistant Executive Engineer (El.,) C,O&M Sub-Divisions, BESCOM.
13. All the Accounts Officers (I/A) /F&C, BESCOM.
14. PS to MD /D(T) /CGM (F&C) Corporate Office, BESCOM.
15. All the Section officers, BESCOM.
16. Officer Copy/ MF

Copy for kind information to:

1. Sri. M. Nagaraj, President, KPTCL Employees Union & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.
2. Sri. V. Venkatasivareddy, President, KEB Engineers Association & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.
3. The General Secretary, KPTCL Employees Union, A.R. Circle, Bangalore.
4. The General Secretary, KEB Engineers Association, A.R. Circle, Bangalore
5. The General Secretary, KPTCL Accounts Officers Association, A.R. Circle, Bangalore.
6. The General Secretary, KEB SC/ST Employees Welfare Association, K.R. Circle, Bangalore.
7. The General Secretary, KPTCL Diploma Engineers Associations, K.R. Circle, Bangalore.

 Bangalore Electricity Supply Company Limited

Attending line trouble in Distribution lines by creating Safety zone at both end duly providing Safety Earthing Roads:



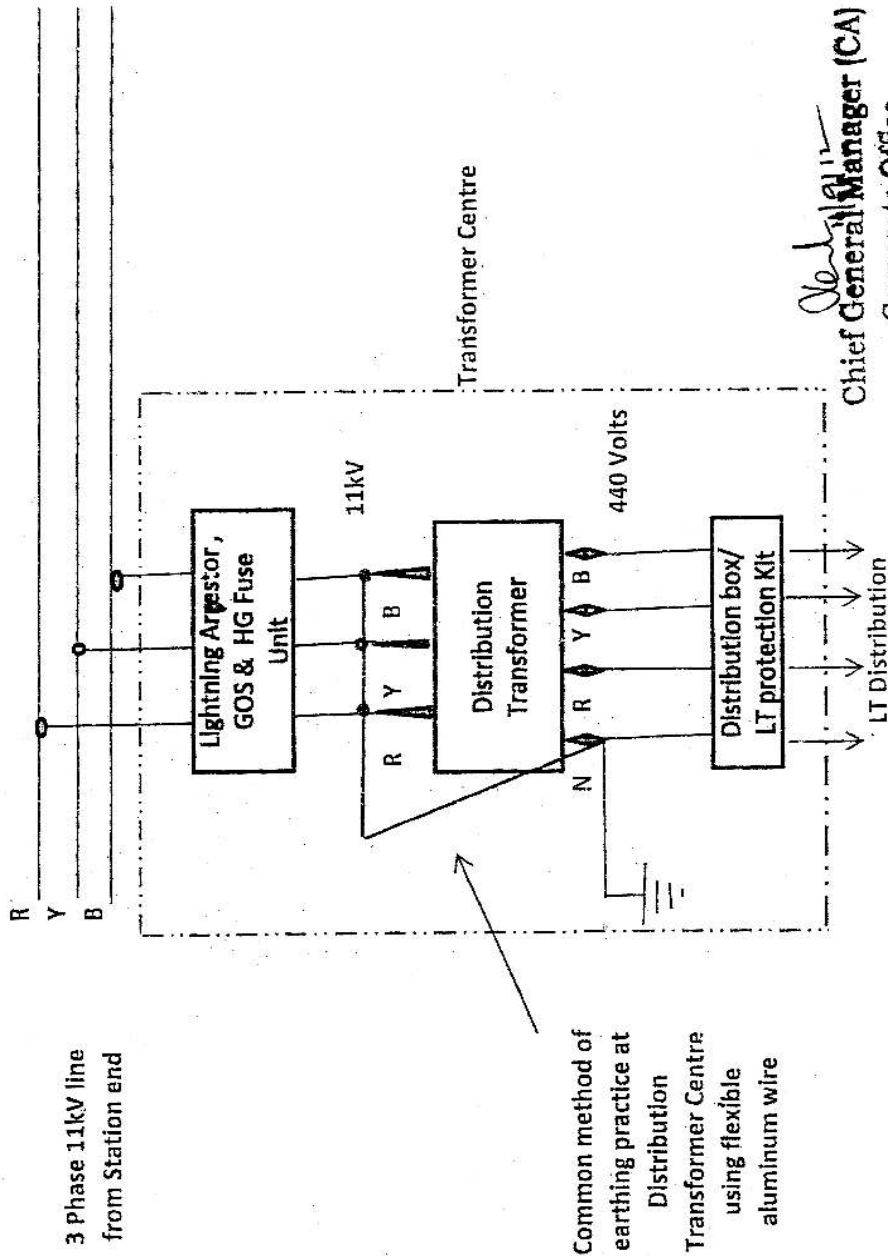
Red 19/12/2018
Chief General Manager (CA)
Corporate Office,
BESCOM, K.R. Circle,
Bangalore - 560 001.

Annexure -A

Bangalore Electricity Supply Company Limited

Typical 11 kV line with Distribution Transformer Centre with Earthing method practice by Rural linemen

ANNEXURE - B



Annexure - B

Handwritten Signature
Chief General Manager (CA)
 Corporate Office,
 BESSCOM, K.R. Circle,
 Bangalore

Since our system is 11kV, voltages available in distribution system are

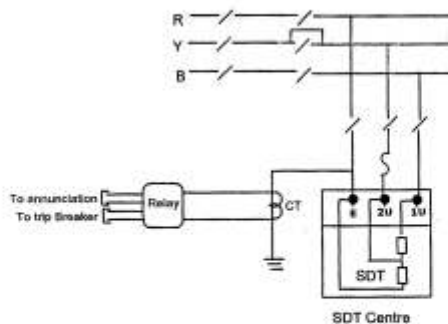
As per Supply voltage - 11000V					
HV side		LV side			
RY	6350V	m	144V	ry	68V
YB	3328V	yn	76V	yb	296V
BR	9678V	bn	220V	br	364V

- To avoid over loading of SDTs, protection scheme is to be adopted.

When consumers can use phase shifters, how load can be controlled by installing SDT?

- By providing a CT in the neutral and a relay and ammeter in control panel, over load protection can be given.

SDT with protection scheme:

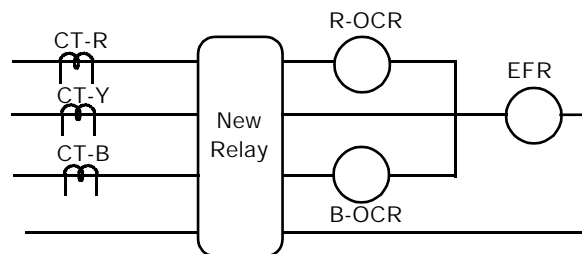


- Since the load current returns through the neutral, proper earthing of neutral is very very important and earthing should be of CI pipe with GI flat only.
- If SDTs are installed inside the station premises, SDT earthings are to be integrated to station earth mat in co-ordination with KPTCL officers

Brief write up on providing overload protection to agricultural feeders by fixing Numerical relays.

Purpose of providing overload protection:

- ◆ BESCOM is arranging continuous power supply to single phase loads coming on agricultural feeders. In order to restrict the IP set loads during single phase power supply, BESCOM is providing overload protection to agricultural feeders.
- ◆ The numerical relay will be provided in series with the existing feeder protection relay as shown in the figure and overload settings are adopted considering total single phase connected load on the feeder.



Functioning of the numerical relay:

- ◆ The relay will be in service both during 3 phase and single phase supply period.
- ◆ Hence the numerical relay will be having 2 setting groups (G-1 & G-2).
- ◆ Group G-1 is set with IDMT 3 seconds relay characteristics curve for feeder protection and will be active during 3 phase supply mode.
- ◆ Group G-2 is set for definite time delay relay characteristics curve and will be active during single phase supply mode.
- ◆ To avoid operation of numerical relay for feeder faults, group G-1 settings are set on higher side when compared to the existing feeder protection relay settings.
- ◆ Relay is having inbuilt logic for selection of desired group.
- ◆ By default the relay will be in G-1 only.
- ◆ When all the three phase current exists, relay remains in G-1 setting group only.
- ◆ When any one phase current or two phase currents exist, relay automatically selects G-2 setting group.



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED
(Wholly owned by Government of Karnataka Undertaking)

Telephone No. 080-22352593, Fax No.080-22342128,

E-Mail gm@besc.com

No: BESCOM/GM(Q&S)DGM(EL.-1)/BC-35/13-14/CYS-126

Encl:

O/o General Manager (El.),

Q, S&S, Corporate Office,

K.R. Circle, Bangalore-01

Date: 19-02-14

To,

All the Executive Engineers (El.,)

C.O&M, Division,

BESCOM.

Sir,

Sub: 3% Random inspection of Bills.

Ref: 1. Corporate office Circular No: GM(QS&S)/DGM-3/12-13/Cys-52
dtd:28.09.2012.

2. BESCOM/GM(Q,S&S)/DGM(3)/13-14/Cys-143 Dated 25.07.2013.

As per the direction of the Corporate Office, issued vide letter cited under reference(1) QS&S Section is inspecting 3% of the bills selected at random for inspection.

During the inspection of the works it is reported that some of the field staff are not inspecting the works and the bills are being countersigned without actually inspecting the works.

The following defects in the works are noticed in almost all the inspections made by Q,S&S staff during 3% inspection of the bills.

1. The earth pits provided to DTC's are not constructed as per specification vide BESCOM approved drawing no: BESCOM/GM/CP-46 Dtd: 24.10.2007.
2. All components of materials as per bill of material pertaining to LT wiring kit for 25/63/100 KVA Transformers not provided to the DTCs.
3. Cost of the PG Clamps is again claimed in the bills by the TK and PTK agencies in the bills. The P.G Camps / Lugs are already covered in the bill of materials for LT wiring kit for 25/63/100 KVA DTCs and payment made for PG Clamps / Lugs as a separate item is a double payment incurring financial loss to BESCOM. This Payment has to be recovered.
4. The poles are not planted upto GL mark engraved on the pole.
5. Stringing is not properly done resulting in loose spans and hence sag.
6. Joint inventory report duly signed by the BESCOM staff and the agencies are not being enclosed to the bills and payments are being made without joint inventory report.
7. Asset Categorization is not being properly done due to non-availability of field joint inventory in all the works including Total Turnkey, Partial Turnkey, Self Execution works etc.,
8. Materails not provided in the sanctioned estimate / work order / work award are also included in the bill and payments are being made.
9. Materials sanctioned in different work order but not operated in the above work order are accounted in other work order where there is no provision.
10. Lightening arrestors are erected but are not energized.

You are therefore directed to:

1. Direct the field staff under your jurisdiction to properly supervise the works during execution weekly / monthly / quarterly before completion of the works.
2. Direct the firm to submit the bills directly to the division office strictly for the quantity of the materials used in the works along with:
 - a. Pole to pole and DTC's wise joint inventory signed by the agencies, jurisdictional AEE and section officer.
 - b. Copies of the invoices / bills / DC etc.,
 - c. Copies of the Dispatch instructions issued in respect of materials inspected.
 - d. Gurantee Certificate for the materials used (wherever applicable).
 - e. ACK in respect of un used materials and returned materials to stores (where ever applicable).
 - f. Note:- Please see Corporate Order No. BESCO/ GM(Q,S&S)/DGM(3) /13-14/CYS-143 Dated 25.07.2013.
3. Issue necessary direction to the agencies working in your jurisdiction to:-
 - a. Execute the works in accordance with the DWA and best practices of work and instruct to erect the poles up to GL mark.
 - b. To take up re-erection of the pole / pole concreting at places where ever the poles not planted upto GL mark at agencies cost.
4. Any discrepancy pointed out in the inspections made by Q,S&S in respect of 3% bills shall be verified / inspected in the other 97% bills also and arrange recoveries if required. The details recoveries so made shall be intimated to this office monthly and if no recoveries are made a nil statement shall be sent to this office.

The above instructions shall be followed scrupously.

Yours faithfully,


(N. Mohan Kalluraya)
General Manager (El.,)
Q,S&S BESCO.

Copy to

1. The Chief General Manger (CA) BESCO Corporate Office, Bangalore.
2. All the Chief Engineers (Electy) O & M Zones, BESCO
3. All General Managers, Corporate Office, BESCO.
4. All the Superintending Engineers (El.), C,O&M Circles, BESCO.
5. The Superintendent of Police, Vigilance, BESCO.
6. All Controllers of Accounts, BESCO.
7. All Deputy Control of Accounts, BESCO.
8. All Deputy General Managers, Corporate Office, BESCO.
9. The Deputy General Manager (El.) QS&S, Chitradurga zone.
10. All Assistant Executive Engineers (Ele.) C,O&M Sub-divisions BESCO.
11. The Assistant General Manager (El.)- 1, 2, 3, 4 & 5 Q,S&S, Corporate office &Kolar, Tumkur, Davanagere BESCO.
12. All Account Officers (I/A) / F&C, BESCO.
13. PS to MD /D(T) / D(F) / CGM(F&C) Corporate Office, BESCO with a request to place before Hon'ble Managing Director, BESCO, Director (Technical), BESCO. Director (Finance), BESCO & CGM(F&C), BESCO.
14. All Section officers, BESCO.
15. Officer Copy/ MF.

Copy for kind information to:

- Sri. M. Nagaraj, President, KPTCL Employees Union & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.
- Sri. V. Venkatasivareddy, President, KEB Engineers Association & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.



BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED
(Wholly owned by Government of Karnataka Undertaking)

Telephone No. 080-22354926,

No: BESCOM/PS/DY/cys-143

Encl:

Corporate Office, K.R. Circle

Bangalore-560 001

Date:

25 JUL 2013

PREAMBLE:

Sub: Payment of inspectorate charges and adaptation of standard terms and conditions in respect of labour award throughout BESCOM.

Ref: Proceedings of the meeting held on 05.07.2013.

Meetings were convened to discuss on the revision of labour charges in respect of 1 to 4 pole works in respect of service main connection and maintenance work and fixing EMD payment.

During the discussion it was brought to the notice that the terms and conditions stipulated in the labour awards are not uniform and each division / sub-division is specifying different terms and conditions and important conditions are left out which is not correct. A draft terms and conditions and agreement to be executed by the agency were placed in the meeting which was approved unanimously and this has to be followed.

Further, it was represented by the KSLECA that payment to be made to electrical inspectorate is delayed resulting in delay in commissioning the works and thus resulting in belated payment to the agencies. Hence it was resolved to make payment of inspectorate charges out of imprest / discretion funds. **Hence the Order.**

ORDER

BESCOM/GM(Q,S&S)/DGM(3)/13-14/cys-143

Dated: 25 JUL 2013

In suppression of all the previous orders the following directions have to be followed in case of labour awards

1. Permanent Earnest Money Deposit (PEMD):

The order issued vide No: BESCOM/GMP/DGMP/AGMP2/BC-10/Cys-7 dated: 26.03.2013 is withdrawn. Henceforth the following procedure shall be adopted in respect of labour award.

- The PEMD amount to be payable (towards labour awards) by the contractor/agency for each division shall be Rs. 25,000/- only and payable in cash or DD as per prevailing BESCOM norms.
- A maximum number of 5 labour awards (each award not exceeding Rs. 1,00,000/- both material and labour) may be awarded against the PEMD of Rs. 25,000/-.
- The award issuing authorities may at their discretion issue additional labour work awards over and above five, only in cases where the works are not completed by the agencies for non issue of materials by BESCOM. The award issuing authorities shall furnish the following certificate on each additional award over and above five work award.

"Certified that this additional labour award is issued to the agency as BESCO has not issued the materials to the agency to complete the work and hence the agency is not responsible for not completing the works already awarded".

2. Terms of conditions in labour awards:

Common terms and conditions have to be incorporated in all the labour awards throughout BESCO. The approved format is enclosed as annexure-A and these terms and conditions shall invariably be specified by the award issuing authorities in the awards.

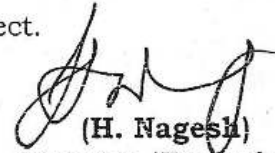
3. The agreement to be executed by the agencies:

The agreement format is enclosed as Annexure-B. The agencies shall execute the agreement on stamp paper of Rs-200/-. This agreement shall be preserved in safe custody along with other bank guarantees by the concerned. The materials shall be issued to the agencies only after the agreement is executed by the agency and submitted to the awarding authority.

4. Statutory payment towards inspection fees payable to Electrical Inspectorate:

In order to avoid delay and ensure speedy commissioning of the completed works, the award issuing authorities are authorized to make the Statutory payment towards inspection fees payable to Electrical Inspectorate out of imprest /discretionary funds subject to regularization.

This order shall come in to force with immediate effect.


(H. Nagesh)
Director (Technical)
Corporate Office, BESCO.

Copy to

1. The Chief General Manager (Operations) / CA BESCO Corporate Office, Bangalore.
2. All the Chief Engineers (Elect) O & M Zones, BESCO
3. All General Managers, Corporate Office, BESCO.
4. The DGM(CA-2) Corporate Office, BESCO to please arrange to upload this circular in BESCO website and face book wall.
5. All the Superintending Engineers (El.), C,O&M Circles, BESCO.
6. The Superintendent of Police, Vigilance, BESCO.
7. All Deputy General Managers, Corporate Office, BESCO.
8. The Deputy General Manager (El.) QS,&S, Chitradurga zone.
9. The Executive Engineers (Civil) BMAZ / BRAZ / Chitradurga, Divisions, BESCO.
10. The Executive Engineer (El.) BESCO Stores, Rajajinagar, Bangalore.
11. All Executive Engineers (El.) C,O&M Division, BESCO.
12. All Assistant Executive Engineers (El.) C,O&M Sub-divisions BESCO.
13. The Assistant General Manager (El.)-1, 2, 3, 4 & 5 QS&S, Corporate office &Kolar, Tumkur, Davanagere BESCO.
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15. All Section officers, BESCO.
16. Officer Copy/ MF.

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- Sri. V. Venkatasivareddy, President, KEB Engineers Association & Director, KPTCL and all ESCOM's, A.R. Circle, Bangalore.

Agreement to be executed by the agency on stamped paper of value
..... for each labour work award.

Certificate No :
Certificate Issue Date :
Account Reference :
Unique Doc. Reference :
Purchased by :
Description of Documents :
Description :
Consideration Price (Rs.) :
Stamp Duty Amount (Rs.) :
First Party : Divisional Executive Engineer (Ele.)
Second Party : The concerned agency to whom the labour award is made.
License issued by CEI, GoK :
License valid up to :
Stamp Duty Paid By : The above agency.

AGREEMENT

1. All the materials required will be supplied by the Company and handed over to me to the place convenient to company and mutually agreed to between the undersigned and the Engineer in charge. The materials will be acknowledged by me.
2. I am agreeable to purchase small items other than major materials such as poles, conductors, Transformers, Lightening arrestor, GOS etc., at Schedule of Rates (which are not available at stores) at the written approval. The cost of such items procured shall not exceed 10% of the estimate cost. The material purchased will be to BESCO specification and guaranteed for one year from the date of commissioning.
3. I am agreeable to keep the materials under my safe custody and agreeable to produce the same for inspection by any of the BESCO staff authorized by the officer who has issued the award.
4. I shall commence the works assigned immediately after handing over the materials to me.
5. I shall complete the work within the stipulated time.


6. In case, the work is not completed in all respects within the stipulated period, the works may be got executed by the company and the extra cost involved in the form of labour transportation supervision etc., may be recovered from any of the bills pending against this work award or / and other awards also.
7. I shall return the unused materials and returnable materials under credit to the engineer in charge of the works at his head quarters in good original condition, within a week after completion of the work.
8. If any of the materials are found damaged / deteriorated / cut into pieces / not returned etc., the cost of such materials shall be recovered out of the bills or through legal proceedings / filing the police case etc.,
9. The bills will be submitted **TO THE DIVISION OFFICE** within 15 days from the date of completion of work along with the following documents.
 - a. Bills in Quadruplicate Duly signed and stamped,
 - b. Self declaration that the work is fully completed as per award.
 - c. ACK in respect of unused Materials and returnable materials under credit for having returned to the section officer.
 - d. Inventory of the work with drawing wherever necessary.
 - e. Guarantee certificate for both material procured by the agency and work executed.
10. I am a service tax payer registered vide
11. The employees are registered under PF
12. The employees are covered under ESI
13. I am solely responsible for any compensation payable to the labour employed, as per relevant acts and in the event of any accident or for any other reasons. I also indemnify BESCO against any claims, suits, litigation etc., in respect of cases which may arise while executing the award.
14. In the event of delay in execution of the works on time I am agreeable to pay the penalty at the rate of ½% per week subject to a maximum of 10% as stipulated in the award.
15. I am not having more than 5 awards in the division against PEMD of Rs./- the details of the awards on hand are as under:-

Sl. No.	O&M Unit / sub-division / Division	Work award No.	Amount of the award / estimate	Status of work	Remarks
1.					
2.					
3.					
4.					
5.					

16. I am agreeable for all the terms and conditions stipulated in the award and will carry out the work to the best standards.

Signature with designation and seal of the awarding authority i.e., AEE(E.,) / EE(EI.,) C,O&M sub-division, / Division BESCO

Signature of the LEC with name, seal and certificate No. etc.,

Approved

 Director (Technical)
 BESCO, Corporate Office
 Bangalore.

Contractor

Standard Terms and Conditions proposed to be incorporated in the labour work awards:

1. **Execution:** The work shall be carried out as per the sanctioned estimate and as per the directions of the field Engineer.
2. **Completion:-** The work shall be completed within days from the date of this award / issue of last material. The works shall be carried out under supervision of the jurisdictional Engineer duly taking all the safety measures.
3. **Penalty:-** If the work is not completed within the specified period a penalty at the rate of 1/2% per week subject to a maximum of 10% of cost of labour and materials supplied by the agency will be levied.
4. **Imperfect / Un-standard work:-** Any imperfect work shall be removed and redone to the standards at no extra cost to BESCO.
5. **Materials procured by LEC:-** Small materials are other than poles, conductors, Transformers, Lightning arrestor, GOS at Schedule of Rates not exceeding 10% of the total estimate cost may be procured after specific approval of the authority who has issued the award. The material procured shall conform to BESCO specification and shall be guaranteed for 12 months from the date of commissioning.
6. **Safety measures:-** The agency at his own cost shall provide safety devices like Helmets, Slings, ropes, belts etc., to the labour engaged by him and ensure all safety precautions.
7. **Accident liability:-** The contractor shall be responsible for all accidents to persons employed by him which may arise in the execution of the works and from whatever cause. The contractor shall indemnify the BESCO against all action suits / claims / demands, cost of expenses arising in connection with the injuries / death etc.,
8. **Labour laws / acts :-** The contractor shall comply with all the labour laws in force.
9. **Safe Custody of materials.-** The materials issued shall be kept under safe custody and the place of storage shall be intimated to the jurisdictional engineer who shall have the rights for inspection at any reasonable time.
10. **Non Return of materials:-** If any of the materials are found damaged / deteriorated / cut into pieces / not returned etc., the cost of such materials shall be recovered out of the bills or through legal proceedings / filing the police case.
11. **Bills:-** After completion of the work the bills shall be submitted to the division Office along with the following within 15 days from the date of completion of work.
 - a. Bills in Quadruplicate Duly signed and stamped,
 - b. Self declaration by the agency that the work is fully completed as per award.
 - c. ACK in respect of unused Materials and returnable materials under credit for having returned to the section officer.
 - d. Inventory of the work with drawing wherever necessary.
 - e. Guarantee certificate for both material procured by the agency and work executed.
12. **Payment:** The payment will be arranged against the submission of the bills and other documents mentioned above after the completion of works subject to observing BESCO formalities.

13. **Balance materials unused and Released materials:** should be returned to concerned Section officer within 7 days from the date of completion / cancellation / short closing of the award.
14. **Cancellation / short close of award:-** In case, the work is not completed in all respects within the stipulated period, the award will be cancelled / short closed and may be entrusted to other agencies. The extra cost involved in the form of labour transportation supervision etc., will be recovered from any of the bills pending against this work award or / and other awards in BESCO.
15. **Filing complaints:-** If the unused materials and released materials are not returned after the completion of the work within 15 days from the date of completion / when the work award is cancelled BESCO reserves the right to initiate suitable action as deemed necessary.
16. **Statutory payments:-** The contractor is responsible for remitting service tax, ESI, PF and such other statutory payments to the Government.
17. **Agreement:** The contractor shall enter into an agreement in the prescribed format.

Contractor

Assistant Executive Engineer (Ele.)
..... Division

Accounts officer (I/A)
..... Division.

Executive Engineer (Ele.)
..... Division

Copy for kind information to:

1. The superintending Engineer (Ele.), C, O&M Circle, BESCO

Copy to:

1. M/s
2. The Assistant Executive Engineer (Ele.), sub-division, BESCO.
3. AAO – Billing Section.
4. AO – Internal Audit.
5. JE – I/ HD.
6. M/F.

Approved
[Signature] 24/8/13
Director (Technical)
BESCO, Corporate Office
Bangalore.