# **DEPARTMENT MANUAL**

# **CONSTRUCTION DEPARTMENT**

# 4.(b)(i): The particulars of its organization, functions and duties:

Name of the Dept. : **CONSTRUCTION** 

Address : 2nd Floor., Sewree RSS Annex. Bldg.,

Aacharya Donde Marg, Sewree,

Mumbai 400015

Tel. no. 022- 24162879

- 1.1 The Functions and Duties of the Department are as follows;
- 1.1.1 The department shall be responsible for execution of sanctioned schemes connected with the following **Capital works** 
  - 1) Equipping new 33kv/110kv Receiving Sub Stations.
  - 2) Extension/alterations of existing 22kv/33kv Receiving Sub stations.
  - 3) Laying of EHV/HV cables
- 1.1.2 The department shall also be responsible for :
  - i) Assisting Operation & Maintenance Departments in effecting repairs which involve laying of long lengths of EHV cables and / or replacement of equipments like Power Transformers, Switchgears, Capacitor Banks, Control Desk, Relay Panel, Metering Panel, Battery charger, Reactors as and when required.
  - ii) Inspecting the materials and arranging to forward tender recommendations for the items as per the approved schemes..

## 4.(b)(ii): The powers and duties of its officers and employees:-

1.1 The department shall be under the overall Supervision and Control of Divisional Engineer Construction (DECO), who shall be responsible to the DCEW/CEM/Asst..General Manager Supply (AGMES) for efficient administration and working of the department.

- 1.1.1 For the convenience of working, the department is divided into the following sections:
  - i) 110kV/33kV Receiving Sub .Stations .
  - ii) EHV Cable laying
- 1.1.2 The department has been sanctioned with a Divisional Engineer, One Superintendent, Three Assistant Engineers, Eight Deputy Engineers and other staff as may be sanctioned from time to time.
- 1.1.3 The Working hours and timing the department is given below.

	Weekdays	Working Hrs. Lun	ch Recess
Outdoor	Monday	08.00	12.30
Staff	to	to	to
	Saturday	17.30	13.30
Office	Monday	9.00	13.00
working	to	to	to
hours.	Friday	17.00	13.45

(Shop Recorders - Monday to Friday - 8.00 hrs. to 17.00 hrs. and Saturday 8.00 hrs to 13.30 hrs)

# 1. <u>DIVISIONAL ENGINEER (DECO)</u>: A-3

The Divisional Engineer shall be the Chief Executive Officer In-charge of the Department and shall be responsible to the DCEW/CEM/Asst.. General Manager Supply (AGMES) for the smooth and efficient working of the department. He shall have the powers to allocate manpower and materials for various projects undertaken by the department, certify the attendance of officers working under him and initiate disciplinary actions against officers and staff working under him.

He shall be responsible for:-

- i) Ensuring satisfactory execution of sanctioned schemes and other jobs.
- ii) Preparation of Annual report, Establishment Schedule, Budget Estimates pertaining to the department and DPR in the format of MERC.
- Setting of Yearly target for the department after reviewing various sanctioned schemes in hand and the priorities.
- iv) Dealing with the issues pertaining with external agencies like MCGB, Traffic Police, Police, Railways, BPT, Telephones etc.

v) Arranging for permanent/temporary staff from time to time for the working of the department.

#### **2.1** SUPERINTENDENT (SCO) :- A-4

- 2.1.1 Superintendent, Construction (SCO) shall be the Executive Officer In-charge of the Receiving Sub Station Section, and shall be responsible to DECO for all the work connected with this section. He shall have the powers to allocate manpower and materials for the projects under his control, certify the attendance of officers and staff working under him and initiate disciplinary actions against them.
- 2.1.2 He shall be mainly associated with execution of schemes connected with :
  - i) Commissioning of new 33/110 kV Receiving Sub Stations.
  - ii) Alteration/ Extension of equipments in the existing RSS.
  - iii) Assisting DECO in preparing yearly target of the department.
  - iv) Assisting O&M Department in repairs of faulty equipments as and when necessary.
  - v) Preparation of DPR in the format of MERC.

# 2.2 ASSISTANT ENGINEER. AECO-3 A-5 : Cable Laying section

- 2.2.1 Assistant Engineer (AECO-3) shall be the Executive Officer In-charge of the Cable Laying Section and shall be responsible to DECO for all the work connected with this section. He shall have the powers to allocate manpower and materials for the projects under his control, certify the attendance of officers and staff working under him and initiate disciplinary actions against them.
- 2.2.2 He shall be mainly associated with execution of schemes connected with :-
  - Laying of 33 kV EHV cables, Jointing & terminations for new 33kV/110 kV Sub Receiving Sub Station as per the schemes intimated by Project Department.
  - ii) Laying of 33 kV EHV cable, jointing & terminations and laying of communication cables in common excavation only when, sanctioned schemes are made available to the department by the respective departments.
  - iii) Assisting DECO in preparing Yearly Target for Cable Laying Section of the department.

- iv) Assisting O&M Department in repairing cable faults as and when necessary.
- 2.3 ASSISTANT ENGINEER CONSTRUCTION A-5 RSS section (AECO-1, AECO-2)
- 2.3.1 Assistant Engineer (AECO-1 & AECO-2) shall be the Executive Officer Incharge of the Receiving Sub Station Section and shall be responsible to SCO for all the work connected with this Section. He shall have the powers to allocate manpower and materials for the projects under his control, certify the attendance of officers and staff working under him and initiate disciplinary actions against them.
- 2.3.2 He shall be mainly associated with the execution of schemes of :
  - i) New 33/110kV Receiving Sub Station.
  - ii) Extension/alteration of existing 33/110kV Receiving Sub Station.
  - iii) Assisting O&M Department as and when necessary

## **2.4** DEPUTY ENGINEER(DyE CO) – GGVI

- 2.4.1 The Dy. Engineer will have the powers certify attendance and sanction of leave of staff and officers working under him. The allocation of work to Deputy Engineers shall be decided by concerned Superintendent, Assistant Engineers from time to time.
- 2.4.2 Besides being of general assistance to the Superintendent/Assistant Engineer, in the matters connected with the work allocated, the Deputy Engineer is specifically responsible for all technical work pertaining thereto. To recommend tenders for various items pertaining to the sections.
- 2.4.3 The Deputy Engineers shall be responsible for the following specific duties.:
  - i) Opening of electronic location codes before taking up execution of schemes.
  - ii) Forwarding of work commencement notice to the Accounts Department via E-mail.

- iii) Ensuring that necessary formalities in respect of permissions/intimations before taking any job in hand, taking into account the availability of material and transportation of materials.
- iv) Planning for efficient execution of schemes by preparing of daily program for execution of schemes, after taking into account the availability of transportation of materials.
- v) Establishing temporary chowkies as per the requirement by selecting the suitable site, getting the permission from various authorities. He is further responsible for posting the staff, allocation of work, maintaining necessary registers, maintaining regular inventory of the materials, maintaining security with the help of security guards and security officers.
- vi) Any other work assigned by his superiors.
- 2.4.4 Deputy Engineer Cable Laying Section has the following additional responsibilities:
  - i) Surveying and finalizing proposed route of cables to be laid before taking up execution of the relevant schemes.
  - ii) Ensuring the compliance of necessary formalities of MCGB, Traffic Police, BPT, Railways, etc. before commencing the execution of cable laying schemes.
  - iii) Arranging reinstatement advises to the appropriate authorities and ensuring satisfactory reinstatement.
  - iv) Arranging for removal of debris from the work sites and crediting scrapped materials from the work sites.
- 2.4.5 Deputy Engineer, 110kV/33kV Receiving Substation Equipping Section has following additional responsibilities.
  - i) Ensuring storing of sufficient materials and proper security arrangement at chow key sites.
  - ii) To ensure safe transportation of heavy equipments like power transformers, switchgears, reactors, etc. from storing sites to installation sites.
  - iii) Carrying out pre-commissioning tests on equipment installed in 110kV/33kV Substation, preparing test reports for submission to O & M Department.

- iv) To inspect the accessories of major equipments and to inform shortfall/defective items to concerned Supdt./Asst.Engineer before commencing execution of scheme.
- v) To install all the equipment as per the relevant code of practice.

# 2.5 SUB ENGINEER - GGV

- 2.5.1 The Sub Engineer shall work under the Deputy Engineer and his specific duties shall depend on the exigencies of the Department, which shall be decided by the Superintendent/Assistant Engineer. He shall perform the following duties.
  - i) Supervising the execution of schemes.
  - ii) Studying the schemes in detail and assessing the manpower and material required for the job.
  - iii) Arranging for necessary permission required from the Ward Office of MCGB and the Police authorities wherever required.
  - iv) Allocating work to the staff working under him.
  - v) Any other work assigned by his superiors and as mentioned in departmental manual.

# CHARGE ENGINEER. T-8

2.6

2.6.1 Charge Engineer shall work under one of the Deputy Engineers and his specific duties shall depend on the execution exigencies of the department and shall be decided by the Superintendent/Assistant Engineers from time to time. He shall perform following duties:-

- i) Allocating the work to the men working under him and carrying out direct supervision of jobs allotted to him i.e. execution of schemes.
- ii) Studying the schemes in detail & assuring the no. of men & material required for the jobs.
- iii) Complying with statutory requirements of MCGB in respect of displaying information on notice board of site.
- iv) Informing appropriate authorities in case of damage to the other utility services.

- v) Engaging work orders for different jobs.
- vi) Closing work order in time after checking and crediting materials.
- vii) Preparing requisitions/credit notes of materials for jobs under him.
- viii) Transporting jointer's materials to the job sites in time.
- ix) Taking attendance of the staff posted on the job & sending it to department.
- x) Reviewing progress of work and controlling labour on various jobs.
- xi) Any other work assigned by his superiors and as mentioned in departmental manual.
- 2.7 <u>TRADESMAN</u>: -The following categories of Tradesman/Asst.Tradesman are normally working in the different sections of the department as shown against them.

#### (A) Cable Laying Section :-

2.7.1 Sr. Jointer (T-6): Sr. Jointer working in the department is directly responsible for making all types of joints and termination of 22kv/33kv cables. Sr. Jointer (T6) shall work under Dy.Engineer and his specific duties shall depend on exigencies of the department. The staff working under the Sr.Jointer (T6) are Jointer in grade T5 - 1 no., Perm. Nawghany in grade T1 - 4 nos. He is the incharge of the permanent gate pass issued to transport the prescribed materials to the respective jointing site.

He shall perform the following duties.

- i) Making the jointer pit of required dimensions as per types of joint and as per site conditions.
- ii) Allocating work to the staff working under him
- iii) He shall take necessary precautions while installing tent over jointers pit so as to make it dust free, moisture free, accident proof (mechanical and electrical).
- iv) In case of water seepage, water leakage occurring in the jointer's pit, the Sr.Joitner shall make necessary arrangement of water draining. Further, he shall make necessary arrangement of safe guarding jointer's tent and his staff in case of heavy rains.

- v) Carrying out the jointing job with taking necessary precautions in case of water pipe, gas pipe or any other live cables existing in the pit.
- vi) Any other work assigned by his superiors and as mentioned in departmental manual.
- 2.7.2 <u>Jointer (T-5)</u>:- Jointer in grade T5 should have to assist the Sr. Jointer in preliminary work with regards to EHV cable joints and terminations. Jointer has to perform all the duties of Sr. Jointer while (i) St. jointing of HV & LV cables (ii) 'T' jointing of LV cables (iii) terminations of HV & LV cables. (iv) pot heading & sealing of HV & LV cables.

In addition to this he shall have to perform following duties.

- i) Fixing of cut out boards.
- ii) Providing proper earthling to the meter cabin, service cable towards consumer end.
- iii) Transporting the jointer hand cart to the jointing sites.
- iv) Assist T6 Jointer for carrying out 33ky joint as well as 33ky termination.
- v) To maintain the jointer tool box.
- 2.7.3 <u>Jointermate (T-4)</u>:- Jointermate has to assist the Jointer in preliminary works with regards to HV / LV cable joints and terminations. He shall have to perform all the duties of Jointer any other work assigned by his superiors and as mentioned in departmental manual.

# 2.7.4 <u>Muccadam</u>:- T-4/T-5

- i) He shall supervise nawghanies, for excavation for laying of HV & LV cables, erection of pillars, laying of house services etc.
- ii) Takes attendance of staff on minor jobs, posts Watchman to guard materials (such as cables, handcart etc.)
- iii) Furnishes information to Draughtsmen as regards the position of route of cables, joints, size of cables, cable colors, 'A' or 'Z' ends, for the purpose of preparation of sketches.
- iv) Informs the supervisor the particulars of damage to the property of other utilities, in the course of excavation work.

- v) Receives materials at the chowky and issues to workmen as instructed by the supervisor and reports any discrepancies in the stock position. Ensures safety of workmen while on the job, due to moving vehicles etc.
- vi) Keeps account of excavation tools, foot-boards, fencing caution boards etc.
- vii) Forwards damages / burnt tools for repairs.
- 2.7.5 <u>Nawghanies</u>: P1/T1: Nawghanies are engaged for the jobs of (i) Cable Laying section (ii) 110/33kV Receiving Sub station equipping section (iii) General administration section.

Duties of Nawghanies working in all the above mentioned three sections are as follow.

- i) He shall do the labour work e.g. carrying & transporting equipments & spares from office / stores to the work site / chowkey and vice-versa, to break the wall, to drill the holes, to excavate & to back fill the pit.
- ii) Other sundry jobs etc.

## (B) 110kV/33kV RSS Section

## 2.7.6 Fitter :- T-4/T-5/T-6

- i) He shall carry out general fitting and filling, drilling, grinding, tapping, jointing, cutting and shearing jobs and the fabrication of HV Breaker and frames, LV Switchgears, Boards and frames. He shall erect the switchgear, etc. in correct alignment in new substation.
- ii) He shall carry out overhauling and re-conditioning and repairs to switchgear, distribution transformers, jacks, etc.
- iii) To carry small welding jobs for fabrication. Any other work assigned by his superiors and as mentioned in departmental manual.
- iv) He will carry out other work assigned by his superiors and as mentioned in departmental manual.

## 2.7.7 <u>Assistant Fitter</u>:- T-4

i) He shall carry out general fitting and filling, drilling, grinding, tapping, jointing, cutting and shearing jobs and the fabrication with spot welding, for LV boards and pillars,.

- ii) He shall erect the switchgear, etc. in correct alignment in new substation. Also caries out overhauling and re-conditioning and repairs to switchgear, distribution transformers, jacks, etc.
- iii) He shall carry out overhauling and re-conditioning and repairs to switchgear, distribution transformers, jacks, etc
- iv) He will carry out any other work assigned by his superiors and as mentioned in departmental manual.
- 2.7.8 <u>Mason</u>: T-3 Mason is engaged for the jobs of (i) Cable laying section (ii) 22kv/33kv substation equipping section.

Duties of the Mason working in above mentioned both the section are as follows.

- i) To prepare switchgear foundations for control desk, relay panel, RTCC panel and related equipments as per the requirement.
- ii) To fix rag bolts in walls for cleating and to fix the rag bolts in foundation of various RSS equipments like 11KV switchgear, RTCC panel, control desk, Relay panel, transformer neutral link arrangement etc.
- i) To joint and align E.W., P.V.C. and R.C.C. pipes.
- ii) To construct manholes.
- iii) Any other work assigned by his superiors and as mentioned in departmental manual.
- iv) To carry out reinstatement of concrete, tiled flooring and plastering whenever & wherever required.
- v) To construct bundling wall around the transformer in transformer bay along with sump well trench.
- vi) To prepare cable trench in R.S.S. premises.
- vii) To prepare trench covers for trenches.
- viii) To seal the cable entries. To enlarge the cable entries.
- ix) To prepare masonry work for cable supporting arrangement for 11kV Switchgear, 33kv switchgear, transformer H.V./L.V. cables.

#### 2.7.9 Wireman :- T-3/T-4

- i) He shall carry out repairs to the wiring installation in Sub Station.
- ii) He shall replace defective switches, time switches and carry out rewiring of the installation, if necessary.
- iii) He shall connects supply from LV panel to machines and equipments required for maintenance of Receiving Sub Station equipment.
- iv) Rectifies defects in the supply connection terminals of hot plates, call bells, hand drills, hand lamps, exhaust fans, etc.
- v) He shall carry out additional wiring of control panels under the guidance of Charge Engineer.
- vi) He shall carry out alteration in control panel wiring under the guidance of Charge Engineer.

#### 2.8 ASSISTANT ADMINISTRATIVE OFFICER (AAO) :- AGVIII

- 2.8.1 The Assistant Administrative Officer shall work under the Divisional Engineer and shall co-ordinate the work of the supervisor and other staff under him. He will have the powers of certifying the attendance and sanction of leave of the staff working under him. He shall be responsible for the following.
  - i) General supervision of the work of the staff under him in connection with staff engagement forms, discharge notices, temporary staff return forms, maintenance and/or checking of the staff records, clothing records, annual reports, budget estimates, 'A' & 'B' Grade officers absentee memo advices for payment of various allowances, incentive bonus/ overtime etc. and also maintaining account of Imprest Cash.
  - ii) Attending to general correspondence
  - iii) Drafting of letters.
  - iv) To put up various proposals for staff sanction Temporary/Permanent

v) Replies to Union letters through E-office.

#### 2.9 SUPERVISOR/ ASSISTANT ADMINISTRATIVE OFFICER (AAOP): AGVIII

2.9.1 The Supervisor shall work under the AAO. He shall supervise the work of Clerk and Shop Recorders in the department and assist the AAO in all respect in his day-to-day work.

#### 2.10 CLERK / SHOP RECORDERS.:- AGV

The Clerks/Shop Recorders shall work under one of the Supervisors / AAO(P). The number of Clerks/Shop Recorders allotted to each Supervisor shall be decided by assistant admissive officers from time to time.

Their duties shall comprise of the following. :-

#### 2.10.1 <u>TABLE - I :-</u> ESTABLISHMENT (PERMANENT & TEMPORARY)

- i) To issue notes in respect of taking over of duties, Reversion I.D. Transfer I.D., Relieving DL, requisitions of various posts.
- ii) To fill up engagement forms of temp. nawghanies, taking over, service termination slip, to make all entries in register & S.R.files of temp. nawghanies.
- iii) Clothing & monsoon apparels requirement & related work.
- iv) Issue of badges & maintain the register.
- v) Preparing yearly report in connection with schemes, completed/part completed/ monthly & fortnightly report.
- vi) Preparing location code registers and submit the statement of location code completed and carried forward every year to C.A.
- vii) Any other work not mentioned above related to establishment or any other work assigned by Supr./OA. S
- viii) ESI & related work.
- ix) Issue of Identification notes of unpaid wages.

- x) Preparing various statements.
- xi) Any other work assigned by his superiors and as mentioned in departmental manual.

# 2.10.2 TABLE - II: JOINTER.

All work related to the Panel Chairman for conducting trade test for selection of candidates for the posts of Jointer in various grades.

# 2.10.3 TABLE - III : - DESPATCH

- i) To receive the papers and entered in Inward Register and to distribute papers.
- ii) To dispatch papers and entered in outward Register and dispatch Book.
- iii) To keep the movement of papers to send monthly statement of pending cases.
- iv) To maintain Tender files, Inspection Form and purchase form Register.
- v) To file papers in respective files and to maintain all departmental files, to maintain its register to issue of stationary to various chowkies and Receiving stations.
- vi) To maintain officers leave register.
- vii) Any other work assigned by his superiors and as mentioned in departmental manual.

#### 2.10.4 TABEL - IV :- ATTENDANCE

- i) To collect the attendance from Chowkies, Receiving Station compile it and entered the same in muster attendance register. To send negative attendance to various Time Keeping Department
- ii) Attending leave forms of all the staff and maintain the leave register.
- iii) To prepare overtime statement and to maintain OT Register.
- iv) Any other work assigned by his superiors and as mentioned in departmental manual.

#### 2.10.5 STENOGRAPHER:- AGVII

He/She shall perform the following duties:-

- i) Taking dictation and transcribing it on a Typewriter/P.C.
- ii) Preparation of routine and simple drafts.
- iii) Typing from drafts and hand written matter.
- iv) Cutting stencils according to instructions.
- v) Certifying the bills for routine maintenance of repairs of Typewriter/PC.
- vi) Updating / Maintaining records stored in P.C.

## 2.10.6 CLERK/TYPIST :- AGV

He/She shall perform the following duties:-

- i) Typing from drafts and hand-written matters, taking printouts etc.
- ii) Cutting of stencils according to instructions.
- iii) Certifying the work for routine maintenance or repairs of computers/typewriters.
- iv) Doing clerical work as may be allocated by AAO/Supervisor.

# 4.(b)(iii): The procedure followed in the decision making process including channels of supervision and accountability

There are no any activities carried out by the Department concerning direct involvement of members of public. The execution of activities and decision making involved in execution of technical projects are hierarchical by concerned officers. The Charge Engr is directly supervising the various activities of the ongoing project. The Charge Engrs are working under and are accountable to Dy.Engrs. The Dy. Engrs report to and are accountable to respective Superintendent / Assistant Engr . The Superintendents / Assistant Engrs and Assist. Administrative Officer are working under and are accountable to Divisional Engr who reports to Dy Chief Engr (Works)/ Chief Engr (Works). The organization chart is appended herewith. The various activities carried out by the Department are briefly described below.

- 4.1 Capital jobs in connection with EHV & LV.
- 4.1.1 The Project Department justifies and arranges to obtain the sanction of the appropriate authorities, whenever any scheme in connection with the following jobs is to be carried out:
  - i) New 110/33KV Receiving Substations.
  - ii) Extensions/alterations to the existing 110/33kV Receiving Substations.
  - iii) Extensions/alterations to EHV & HV cables.
  - iv) Diversion of EHV cables for MCGB and outside parties.
  - v) Laying of 33kv cables from Tata's Sub Station to BEST's Substation.
- 4.1.2 The Project Department then finalizes the sanctioned schemes and forwards to the Divisional Engineer (Construction), who in turn gets them, registered in his records. The decision as to when the work of installation of equipment or laying of cables in connection with the extensions/alterations of existing 22kv/33kv Receiving substations is taken at the level of DCEW/CEM and the Divisional Engineer is advised to prepare a schedule.
- 4.2 Execution of Work:
- 4.2.1 The Divisional Engineer, Project with his knowledge of time taken for delivery of materials in different categories, arrange to place orders for major items well in advance, so that the Divisional Engineer, Construction is not handicapped for want of materials whenever sanctioned schemes are to be taken up for execution. He also ensures through the Deputy Chief Material Manager of Stores & Purchase, Kussara, for recoupment of other sundry materials, well in time.
- 4.3 Commissioning of equipments :
  - i) New 110/33kV Receiving Substations.
  - ii) Extensions /alterations at existing 110/33kV Receiving Substations.
  - iii) Extensions/alterations of 110kV/33kV cables.
- 4.3.1 After the priority of execution of schemes is fixed and SCO/AECO-1/2 allocates the work to the concern Deputy Engineers who prepare their schedules/programs for execution.
- 4.3.2 In accordance with the program the Deputy Engineer ensures that a proper access to the substations from outside is available for transport of heavy equipment and also suitable access to 110/33kV Substation building and transformer yard exists for movement of equipments.

- 4.3.3 The work of erection of equipments at the new 110kV/33kV Substation shall not be commenced till the RSS building has been handed over by the DEMNE/DEMNW/DEMCN/DEMS/DEMCS to avoid any complaints later on regarding substation building structure and means of access by the staff of O&M Departments.
- 4.3.4 Deputy Engineer arranges for transport of materials and equipments either through Transport Section or through a contractor and arranges to place the equipments at the proper place of installation.
- 4.3.5 110/33KV Substation is normally equipped with the following items.:
  - i) Power Transformer 10MVA to 100 MVA
  - ii) Set of VCB, 11kv & 33kV Switchgears.
  - iii) Earthing equipment.
  - iv) Capacitor / Reactor.
  - v) Battery & Battery Charger
  - vi) Control panel & Relay panel
- 4.3.6 The circuit breakers installed at site in accordance with the instructions from the manufacturer. The entire operating mechanism including operating levels, toggle mechanism are checked for performance. If the circuit breakers are of withdraw able type provided with inter locking shutters, then it is important to observe the alignment very carefully, so that the interlocking shutters are operating properly and trucks can be pressed hopefully.
- 4.4 Normally the cables laid in connection with new substation are :
  - i) Incoming feeder from Tata/BEST 110kV RSS to new 33kV RSS.
  - ii) Outgoing feeders from the new substation to the existing. Receiving Station if in scheme it has mentioned in view of commission RSS.
  - iii) Transformer tails.
  - iv) Transformers & 33kv Switchgear Terminations.
- 4.4.1 As and when the laying of cables is scheduled the Superintendent / Deputy Engineer ensures that requisite lengths of cables, jointing material and other materials are available in stock.

The route of the cables as per the scheme is then surveyed by the Deputy Engineer, so that:-

- i) The quantum of labor and the period of execution could be assessed.
- ii) Timely solution could be found for any problems to be encountered.

- iii) Suitable location of chowkey may be selected in consultation with MCGB, from where the labor could be conveniently controlled and the movement of materials shall be economical.
- 4.4.2 On line permission is obtained from Ward Officers of MCGM for excavation for the requisite period and commences the work thereafter. Also intimation to 'Cable Information Service' of the Mahanagar Telephone Nigam Ltd., about the location of our excavations, is sent, so that they could post their staff wherever their cables are existing and thus avoid damage to the telephone cables. Wherever any excavations are involved across major roads, which are likely to disrupt the vehicular traffic, the Deputy Engineer arranges to submit online intimation to the Commissioner of Police, Traffic Department, so that he could post a traffic constable to regulate the traffic, if found necessary.
- 4.4.3 Normally, the cables are laid direct in the ground and wherever the cable has to cross a road or a vehicular entrance to a building, pipes are laid so that the cables shall be pulled through them, without any hindrance to vehicular traffic. Since pipe laying across the road disrupts the road surface, pipes/with ducts at intervals of 70 mtrs. or so and at road junctions whenever any roads are reconstructed.
- 4.4.4 The job of cable laying is divided into six major operations i.e. :
  - i) Excavation (trenching)
  - ii) Laying pipes, wherever necessary
  - iii) Laying cables in the trench or pulling through pipe
  - iv) Protecting with warning covers.
  - v) Backfilling (temporary reinstatement)
  - vi) Permanent reinstatement.
- 4.4.5 When only one cable is to be laid, the width of the excavation is about 0.6 mtrs., so that the workers can stand in the trench and pull the cables. Whenever more cables are to be laid in the same excavation, which are either laid side by side or in tier formation the spacing between the center of the cables is kept between 13 to 22 cms., depending upon the space availability. The width of the trench is increased accordingly.
- 4.4.6 Normally, the depth of the excavation shall be about 1.35 mtrs. in case of 33kV cables, 1.2 mtrs. in case of 11kV cables and 0.75 mtrs. in case of LV cables, unless some obstructions are encountered when the depth is decreased to suit the conditions.
- 4.4.7 Normally, the excavation is carried out by manual labor using tools like pick-axes, powrahs, cross-bars, chisels, sledge hammers and ghamelas. Wherever rock or

concrete surfaces are to be broken, Electric Rotary Hammer are used for the excavations.

# 4.(b)(iv) : The norms set up by it for the discharge of its functions :-

The work of laying the cables is carried out in the fair season from October to April whereas work of installation of equipments in Receiving Substations is carried out throughout the year. The targets for the year are set as per DPR schemes approved by MERC. The norms for each activity are studied and documented by our in house Joint Work Study Committee which are available in the department.

# 4.(b)(v): The rules, regulations, manuals and records held by the Department.:-

- 1. The rules governing the working of the Department are :
  - i) The Electricity Act 2003 and the Indian Electricity Rules 1956, relating to the particular conditions and working of the Department.
  - ii) The Factories Act 1948 and the Bombay Factories Rules 1950.
  - iii) The Bombay Industrial Relations Act 1946.
  - iv) The Bombay Industrial Disputes Act.
  - v) Shops and Establishment Act.
  - vi) Workmen's Compensation Act.
  - vii) Payment of Wages Act.
  - viii) Electricity Safety Rules and Codes issued by the Undertaking.
- 2. There is a departmental manual and norms for major activities as decided by JWSC which are available in the department.

#### 3. Test Certificates :-

The manufacturers of all the equipments provide test certificates as per relevant standards. Superintendent / Deputy Engineer shall thoroughly check the working of the equipment and then finally arrange to forward the Test Certificate to the respective Operation & Maintenance Department to enable them to commission the equipment after obtaining the Electrical Inspector's approval.

# 4.(b)(vi): The statement of the categories of documents that held by the Department.

- i) Service records of employees and officers
- ii) Sanction papers of various projects.
- iii) Attendance of employees and officers and other related records.

4.(b)(vii): The particulars of any arrangement that exists for consultation with or representation by the members of the public in relation to the formulation of its policy or implementation thereof.

N.A.

4.(b)(viii): A statement of the boards, councils, committees and other bodies consisting of two or more persons constituted as sits part or for the purpose of its advice, and as to whether meetings of those boards, councils, committees and other bodies are open to the public or the minutes of such meetings are accessible for public.

N.A.

4.(b)(ix): A directory of its officers and employees

Sr. No.	Name	Designation	Grade	Ch.No.	P.S.No.
1	S. B.Mukane	DECO	A-3	216134	130/02
2	S.N.Pawar	Supdt.	A-4	214129	130/02
3	D. R. Chormale	AE	A-5	214489	130/02
4	A. S. Adangale	AE	A-5	213237	130/02
5	A. A. Thorat	DyE	G/GVI	215363	130/02
6	A. A. M. S. Khan	DyE	G/GVI	212366	130/02
7	S. A. Malholi	DyE	G/GVI	212516	130/02
8	S.V. Shelke	DyE	G/GVI	216827	130/02
9	I.A.K. Malada	DyE	G/GVI	212934	130/02
10	G.K.Telange	DyE	G/GVI	215364	130/02
11	S.B.Attarde	DyE	G/GVI	217393	127/09
12	S.J.Kuril	DyE	G/GVI	215697	130/02
13	K. P. Deshmukh	Sub Engr.	G/GV	213272	130/02
14	G.P.Patakar	Ch. Engr.	T-8	403822	130/02
15	S. G. Mulam	Ch. Engr.	T-8	217012	130/02
16	M.S.Gurav	Ch. Engr.	T-8	216128	130/02
17	M.D. Boravadkar	Ch. Engr.	T-8	215626	130/02
18	A.T.Mengane	Ch. Engr.	T-8	216579	130/02

19	R.S.Sinalkar	Ch. Engr.	T-8	215282	130/02
20	P.P.Sarkate	Ch. Engr.	T-8	217232	457/02
21	Y.D.Tendulkar	Ch. Engr.	T-8	411968	130/02
22	S. P. Karkare	Ch. Engr.	T-8	214991	130/02
23	K.B.Rajput	Ch. Engr.	T-8	216874	130/02
24	N. R. Potdar	AAO(P)	AG/ VIII (P)	212605	130/02
25	S.V.Khengare	Sup.(P)	AG/ VII (P)	215543	130/02
26	G.M.Khan	S/R., Sup,(P)	AG/ VII (P)	213940	130/02
27	S.L.Kachve	Sup(P)	AG/ VII (P)	216226	130/02
28	Tatyabhau R. Waje	S/Recorder	AG/ V	196221	130/02
29	Laxman S. Darane	S/Recorder	AG/V	196643	130/02
30	S.S.Jambhle	Jamadar (P)	A/G2	280745	15/37
31	M. V. Narkar	S/R., Sup,(P)	AG/ VII	322182	130/02
32	Smt. C.P.Bhat	Clerk/Typist	AG/ V	217710	130/02
33	A.S. Singh	Foreman Jointer	T-7	402602	430/02
34	M. P. Karande	Jointer	T-5	402703	430/02
35	Y. G. Lanjekar	Jointer	T-5	402705	430/02
36	P.S. Dongale	Jointer	T-5	402709	430/02
37	S.B. Kamble	Fitter	T-5	408876	430/02
38	K.R.Shirsat	Asst./Welder	T-4	193450	430/02
39	A.K. Pawar	Fitter Fitter	T-5	404053	430/02
40	M. B. Pal	Fitter	T-5	404069	430/02
41	J. N. Nera	Fitter	T-5	407519	430/02
42	B. M. Mudigonda	Fitter	T-5	407312	430/02
43	S.T. More	Fitter	P1/T5	009196	430/02
44	L. GZavare	Fitter	T-4	408650	430/02
45	P. V. Tari	Fitter	T-4	411191	430/02
46	B. M. Bule	Fitter	T-4	412451	430/02
47	S.Y.Ugale	Fitter	T-4	410237	430/02
48	G. V. Rathod	Fitter	T-4	402855	430/02
49	S. K. Madake	Sr. Muccadam	T-4	323466	430/02
50	B. H. Mashalkar	Sr. Muccadam	T-4	409246	430/02
51	B. M. Gulve	Sr. Muccadam	T-4	409937	430/02

52	K.V.More	Muccadam	T-3	410410	430/02
53	S.R.Chavan	Muccadam	T-3	410553	430/02
54	A.V.Devlekar	Wireman	T-4	402286	430/02
55	R.H.Bhangre	Mason	T-4	402673	430/02
56	S.S.Tatale	Mason	T-4	402674	430/02
57	M. N. Motling	Mason	T-4	411204	430/02
58	A. R. Bhandare	M.V.D.	P2/G3	326867	430/02
59	V.K.Waingankar	M.V.D.	P2/G3	325559	430/02
60	P. G. Bhondave	M.V.D.	P2/G3	326868	430/02
61	Y. S. Pandit	M.V.D.	P2/G3	325663	430/02
62	L. C. Sangade	M.V.D.	P2/G3	327002	430/02
63	S. M. Kumare	M.V.D.	P2/G3	327003	430/02
64	A.K.Thukrul	Sr. Nawghany	P1/T2	408190	430/02
65	S. D. Jagtap	Sr. Nawghany	P1/T2	409617	430/02
66	M.V. Malunje	Sr. Nawghany	P1/T2	410044	430/02
67	R. S. Salvi	Sr. Nawghany	P1/T2	410070	430/02
68	G. R. Bansode	Sr. Nawghany	P1/T2	410285	430/02
69	S. S. Shukla	Sr. Nawghany	P1/T2	411206	430/02
70	R. P. Panchal	Sr. Nawghany	P1/T2	411234	430/02
71	A.B. Jagdale	Nawghany	P1/T1	411450	430/02
72	N. S. Rane	Nawghany	P1/T1	411528	430/02
73	T.A. Khan	Nawghany	P1/T1	411539	430/02
74	S. B. Bhosale	Nawghany	P1/T1	411547	430/02
75	D. K. Thorat	Nawghany	P1/T1	411554	430/02
76	N.R. Randive	Nawghany	P1/T1	411557	430/02
77	R.S. Jadhav	Nawghany	P1/T1	411558	430/02
78	S.H.A. Sayed	Nawghany	P1/T1	411566	430/02
79	P.S. Sawant	Nawghany	P1/T1	411576	430/02
80	V.P. Neman	Nawghany	P1/T1	411591	430/02
81	S. P. Gawade	Nawghany	P1/T1	411624	430/02
82	M.L.G.Kadar	Nawghany	P1/T1	411645	430/02
83	S.B. Kadam	Nawghany	P1/T1	411714	430/02
84	S. B. Sawant	Nawghany	P1/T1	411716	430/02

85	S. L. Bhogle	Nawghany	P1/T1	411719	430/02
86	R. D. Jadhav	Nawghany	P1/T1	411732	430/02
87	S. B. Pawar	Nawghany	P1/T1	411741	430/02
88	H. B. Khan	Nawghany	P1/T1	411749	430/02
89	S. C. Patil	Nawghany	P1/T1	411751	430/02
90	M. S. Gaikwad	Nawghany	P1/T1	411753	430/02
91	S. K.R. A. Hussain	Nawghany	P1/T1	411763	430/02
92	R. P. Mishra	Nawghany	P1/T1	411764	430/02
93	M.R. Sharma	Nawghany	P1/T1	411967	430/02
94	A.S. Mujawar	Nawghany	P1/T1	411987	430/02
95	S. K. Pansare	Nawghany	P1/T1	412068	430/02
96	N.K.Gaykwad	Nawghany	P1/T1	413185	430/02
97	I.M. Patel	Nawghany	P1/T1	412361	430/02
98	M. Y. G. Kadar	Nawghany	P1/T1	412537	430/02
99	R.G. Gawai	Nawghany	P1/T1	412545	430/02
100	R.T. Ubale	Nawghany	P1/T1	412554	430/02
101	V. D. Marolikar	Nawghany	P1/T1	411752	430/02
102	S.B. Singh	Nawghany	P1/T1	411980	430/02
103	G. R. Dhole	Nawghany	P1/T1	412724	430/02
104	S. S. Tambewagh	Nawghany	P1/T1	412729	430/02
105	Y. D. Bidye	Nawghany	P1/T1	412755	430/02
106	R. N. Khandekar	Nawghany	P1/T1	412610	430/02
107	Y.D. Dudhane	Nawghany	P1/T1	412876	430/02
108	D.V. Sable	Nawghany	P1/T1	412644	430/02
109	N. B. Phatak	Nawghany	P1/T1	412896	430/02
110	R. G. Arandidiyar	Nawghany	P1/T1	412900	430/02
111	S. S. Tambe	Nawghany	P1/T1	412658	430/02
112	U. K. Sonawane	Nawghany	P1/T1	412902	430/02
113	P.S. Salunkhe	Nawghany	P1/T1	412906	430/02
114	S. K. Kamble	Nawghany	P1/T1	412907	430/02
115	V. M. Mamunkar	Nawghany	P1/T1	412909	430/02
116	A.D. Kambli	Nawghany	P1/T1	412911	430/02
117	A. S. Helgaonkar	Nawghany	P1/T1	412913	430/02

118	S.V. Yevale	Nawghany	P1/T1	412931	430/02
119	A. M. Kadam	Nawghany	P1/T1	412936	430/02
120	M. Y. Bansode	Nawghany	P1/T1	412946	430/02
121	P. P. Parab	Nawghany	P1/T1	412947	430/02
122	M. A. Gosavi	Nawghany	P1/T1	412950	430/02
123	P. J. Dupte	Nawghany	P1/T1	412951	430/02
124	M. S. Kamble	Nawghany	P1/T1	412956	430/02
125	S.G.Jadhav	Nawghany	P1/T1	412663	430/02
126	K. B. Patel	Nawghany	P1/T1	412961	430/02
127	M. S. Nikam	Nawghany	P1/T1	412962	430/02
128	C.D. Mishra	Nawghany	P1/T1	412963	430/02
129	A.S. Kedare	Nawghany	P1/T1	412965	430/02
130	D. U. Moolya	Nawghany	P1/T1	412968	430/02
131	S. B. Shejwal	Nawghany	P1/T1	412969	430/02
132	D. P. Sakpal	Nawghany	P1/T1	412899	430/02
133	S.P. Kokate	Nawghany	P1/T1	412977	430/02
134	A.A. Jadhav	Nawghany	P1/T1	412979	430/02
135	M.M. Pawar	Nawghany	P1/T1	412980	430/02
136	A.P. Shete	Nawghany	P1/T1	412982	430/02
137	T. E. Narvekar	Nawghany	P1/T1	412983	430/02
138	S. S. Chavan	Nawghany	P1/T1	412984	430/02
139	L.H.A.A. Shaikh	Nawghany	P1/T1	412985	430/02
140	M. T. Dhale	Nawghany	P1/T1	412986	430/02
141	V. P. Tawade	Nawghany	P1/T1	412987	430/02
142	S. L. Lal	Nawghany	P1/T1	412990	430/02
143	S. L. More	Nawghany	P1/T1	412991	430/02
144	B.B. Ghadigaonkar	Nawghany	P1/T1	412992	430/02
145	B.Y Chandramore	Nawghany	P1/T1	412897	430/02
146	M.S. Shaikh	Nawghany	P1/T1	412932	430/02
147	B. M. Yadav	Nawghany	P1/T1	413023	430/02
148	M.A.Q. Siddique	Nawghany	P1/T1	413031	430/02
149	S. D. Shinde	Nawghany	P1/T1	413050	430/02
150	A A. Khan	Nawghany	P1/T1	413051	430/02

151	S. S. Vaydande	Nawghany	P1/T1	413052	430/02
152	S. E. Kamble	Nawghany	P1/T1	413066	430/02
153	N. V. Bharude	Nawghany	P1/T1	413075	430/02
154	G. V. Bhogale	Nawghany	P1/T1	413076	430/02
155	S. D. Dangale	Nawghany	P1/T1	413078	430/02
156	S. Z. Jadhav	Nawghany	P1/T1	413081	430/02
157	S. T. Rathod	Nawghany	P1/T1	413083	430/02
158	J. S. Jankar	Nawghany	P1/T1	413089	430/02
159	O. B. Bhore	Nawghany	P1/T1	413091	430/02
160	S. G. Javkar	Nawghany	P1/T1	413105	430/02
161	B. N. Jagtap	Nawghany	P1/T1	413116	430/02
162	R. G. Gosavi	Nawghany	P1/T1	413118	430/02
163	R.C. Dhumal	Nawghany	P1/T1	413139	430/02
164	S. T. Idekar	Nawghany	P1/T1	413142	430/02
165	J. Y. Pawaskar	Nawghany	P1/T1	413146	430/02
166	N. D. Parkar	Nawghany	P1/T1	413147	430/02
167	A.M. Solakar	Nawghany	P1/T1	413148	430/02
168	A.M. Modi	Nawghany	P1/T1	413149	430/02
169	R.V. Suryavanshi	Nawghany	P1/T1	413150	430/02
170	G.S. Patil	Nawghany	P1/T1	413151	430/02
171	S.M. Shinde	Nawghany	P1/T1	413152	430/02
172	M.S. Haram	Nawghany	P1/T1	413153	430/02
173	R.T. Metar	Nawghany	P1/T1	413155	430/02
174	S. S. Sonawane	Nawghany	P1/T1	413158	430/02
175	M.E.Deharkar	Nawghany	P1/T1	413168	430/02
176	N.V. Kavtankar	Nawghany	P1/T1	413179	430/02
177	S. R. Upadhya	Nawghany	P1/T1	413193	430/02
178	P. A. Yadav	Nawghany	P1/T1	413194	430/02
179	S.R. Vishwakrma	Nawghany	P1/T1	413376	430/02
180	S. R. Yadav	Nawghany	P1/T1	413421	430/02
181	N.G. Karbhari	Nawghany	P1/T1	413437	430/02
182	N. N. Bokad	Nawghany	P1/T1	413490	430/02
183	A.S. Wale	Nawghany	P1/T1	413513	430/02

184	S. S. Bhange	Nawghany	P1/T1	413514	430/02
185	U. R. Bhangare	Nawghany	P1/T1	413558	430/02
186	U.S. Kharat	Nawghany	P1/T1	413595	430/02
187	A.D. Waybhase	Nawghany	P1/T1	413626	430/02
188	B.B.Chavan	Nawghany	P1/T1	412903	430/02
189	N.H. Kazi	Nawghany	P1/T1	412926	430/02
190	M.M.Kamble	Nawghany	P1/T1	412927	430/02
191	N.P.Singh	Nawghany	P1/T1	412928	430/02
192	M.S.Shakih	Nawghany	P1/T1	412932	430/02
193	S.B.Mane	Nawghany	P1/T1	413030	430/02
194	A.B.Gholap	Nawghany	P1/T1	413329	430/02
195	R.V.Yadav	Nawghany	P1/T1	412591	430/02
196	T.S.Kardak	Nawghany	P1/T1	413328	430/02
197	P.D.Patil	Nawghany	P1/T1	413167	430/02
198	V.B.Patil	Nawghany	P1/T1	413164	430/02
199	S.M.Deltade	Nawghany	P1/T1	413145	430/02
200	V.M.Sangale	Nawghany	P1/T1	413144	430/02
201	R.P.Kambale	Nawghany	P1/T1	412935	430/02
202	V.G.Khire	Nawghany	P1/T1	412970	430/02
203	I.A.G.H.Shaikh	Nawghany	P1/T1	413012	430/02
204	M.J.Sawant	Nawghany	P1/T1	412989	430/02
205	A.S.Kori	Nawghany	P1/T1	413011	430/02
206	S.V.Surve	Nawghany	P1/T1	412930	430/02
207	S.S.Mane	Nawghany	P1/T1	413726	430/02
208	R.K.Gole	Nawghany	P1/T1	413734	430/02
209	A.D.Kurmi	Nawghany	P1/T1	413736	430/02
210	R.R.Pasulla	Nawghany	P1/T1	413778	430/02

4.(b)(x): The monthly remuneration received by each of its officers and employees including the system of compensation as provided in its regulations.

N.A.

4.(b)(xi): The budget allocated to each of its agency, indication the particulars of all plans, proposed expenditures and reports on disbursements made:-

The budget provisions are done by Project Dept.

4.(b)(xii): The manner of execution of subsidy programmes including the amounts allocated and the details of beneficiaries of such programmes.

N.A.

4.(b)(xii): Details in respect of the information, available to or held by it, reduced in an electronic form

Presently attendance and allowance records of employees and officers are available in electronic form.

4.(b)(xv): The particulars of facilities available to citizens for obtaining information including the working hours or a library or reading room, if maintained for public use.

N.A.

4.(b)(xvi): The names, designations and other particulars of the public information as may be prescribed; and thereafter updates these publications every year.

The information of Public Information Officer of respective department.

Public Information Officer - Shri. S.B. Mukane,

Divisional Enginner

Appellate Authority - Shri. S.G. Dhisle,

Dy. Chief Engineer (Works)

4.(b)(xvii): Such other information as may be prescribed.

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