



उत्तर प्रदेश पावर कारपोरेशन लिमिटेड

(उत्तर प्रदेश सरकार का उपक्रम)

U.P. POWER CORPORATION LIMITED

(Govt. of Uttar Pradesh Undertaking)

CIN:U32201UP1999SGC024928

संख्या- 1074-कार्य/चौदह/पाकालि/2021-17-के/2021

दिनांक : 17 जुलाई, 2021

प्रबन्ध निदेशक,
विद्युत वितरण निगम लि०,
पश्चिमांचल-मेरठ/दक्षिणांचल-आगरा/
मध्यांचल-लखनऊ/पूर्वांचल-वाराणसी,
एवं केस्को, कानपुर।

विषय :- विभिन्न विकास योजनाओं एवं वितरण निगमों की सामग्री प्रबन्ध इकाई द्वारा क्रय की जा रही सामग्री/उपकरणों तथा विकास कार्यों की गुणवत्ता के अनुश्रवण हेतु गठित क्वालिटी सेल के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक कारपोरेशन के पत्र संख्या-1652/रेस्पो/सौभाग्य/क्वालिटी सेल दिनांक 25.05.2019 (छायाप्रति संलग्न) जिसके द्वारा क्वालिटी सेल के गठन के निर्देश सहित इस सेल के मानक व दायित्वों के सम्बन्ध में आवश्यक दिशा निर्देश उक्त पत्र के साथ संलग्न 'Quality Assurance & Control Policy' में दिये गये हैं, का संदर्भ ग्रहण करने का कष्ट करें।

कारपोरेशन की उपरोक्त 'Quality Assurance & Control Policy' में सामग्री प्रबन्ध इकाई द्वारा क्रय किये जा रहे सामग्रियों/उपकरणों तथा विभिन्न योजना के अन्तर्गत क्रय किये जाने वाली सामग्रियों के निरीक्षण का भी उत्तरदायित्व डिस्काम क्वालिटी सेल/यू०पी०पी०सी०एल० क्वालिटी सेल का निर्धारित है।

उपरोक्त के सम्बन्ध में कारपोरेशन स्तर पर विचारोपरान्त यह निर्णय लिया गया है कि सामग्री प्रबन्ध इकाई द्वारा क्रय किये जा रहे सामग्रियों/उपकरणों तथा विभिन्न योजना के अन्तर्गत क्रय किये जाने वाली सामग्रियों के निरीक्षण पर भेजे जाने वाले अधिकारियों को प्रबन्ध निदेशक द्वारा नामित किया जाये।

अतः आपसे अनुरोध है कि कृपया उपरोक्तानुसार कार्यवाही करने का कष्ट करें।

संलग्नक :- यथोपरि।

भवदीय,

(पंकज कुमार)
प्रबन्ध निदेशक

प्रतिलिपि :-

1. निजी सचिव सम्बद्ध अध्यक्ष, उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ।
2. निदेशक (वितरण), उ०प्र० पावर कारपोरेशन लि०, शक्ति भवन, लखनऊ।
3. समस्त निदेशक (तकनीकी), विद्युत वितरण निगम लि०, पश्चिमांचल-मेरठ/दक्षिणांचल-आगरा/मध्यांचल-लखनऊ एवं पूर्वांचल-वाराणसी एवं केस्को कानपुर।
4. समस्त मुख्य अभियन्ता (सामग्री प्रबन्ध), विद्युत वितरण निगम लि०, पश्चिमांचल-मेरठ/दक्षिणांचल-आगरा/मध्यांचल-लखनऊ एवं पूर्वांचल-वाराणसी एवं केस्को कानपुर।

(5) आदेशावली आदेशिका (वेब) का डा. लं०-407 शक्ति भवन विस्तार लखनऊ एवं उ०प्र० पावर कारपोरेशन लि० का वेबसाइट WWW.UPPCL.org पर अपलोड करवायें।



उत्तर प्रदेश पावर कारपोरेशन लिमिटेड

(उपरो सरकार का उपक्रम)

शक्ति भवन, 14-अशोक मार्ग, लखनऊ।

दूरभाष : 0522-2218592, ई-मेल : cgmrespopcl@gmail.com

CIN : U32201UP1999SGC024928



संख्या: 652 /रेसपो/सौभाग्य/क्वालिटी सेल

दिनांक: 25-05-2019

विषय : विभिन्न विकास योजनाओं एवं वितरण निगमों की सामग्री प्रबन्ध इकाई द्वारा क्रय की जा रही सामग्री/उपकरणों तथा विकास कार्यों की गुणवत्ता के अनुश्रवण हेतु क्वालिटी सेल के गठन के सम्बन्ध में।

प्रबन्ध निदेशक,

विद्युत वितरण निगम लिमिटेड,

पश्चिमांचल- मेरठ/दक्षिणांचल- आगरा/

मध्यांचल-लखनऊ/पूर्वांचल-वाराणसी,

एवं केस्को, कानपुर।

माननीय ऊर्जा मंत्रीजी, उत्तर प्रदेश की अध्यक्षता में दिनांक 30.04.2019 को सम्पन्न समीक्षा बैठक में निर्देशित किया गया कि सामग्री एवं कार्यों की गुणवत्ता व प्रगति का गहन अनुश्रवण किया जाये। इस सम्बन्ध में दिनांक 03.05.2019 को पावर कारपोरेशन में वितरण निगमों के उच्चाधिकारियों के साथ सम्पन्न बैठक में विस्तृत चर्चा की गई। चर्चा में निर्णय लिया गया कि प्रत्येक वितरण निगम स्तर पर एक-एक क्वालिटी सेल का गठन किया जाये जो कि सामग्री प्रबन्ध इकाई व विकास योजनाओं में क्रय की जा रही सामग्री/उपकरणों के साथ-साथ कराये जा रहे कार्यों की गुणवत्ता एवं आपूर्ति सामग्री के सैम्पल संग्रहण हेतु भी उत्तरदायी होगा। पावर कारपोरेशन पर भी एक केन्द्रीकृत गुणवत्ता सेल का गठन किया जा रहा है जो वितरण निगमों में गठित क्वालिटी सेल की मॉनिटरिंग करेगा।

उपरोक्तानुसार गठित किये जाने वाले क्वालिटी सेल के मानक व दायित्वों के सम्बन्ध में आवश्यक दिशा-निर्देश संलग्न हैं। ये क्वालिटी सेल दिनांक 01.06.2019 के उपरान्त निर्देशित समस्त कार्यों हेतु उत्तरदायी होंगे। अतः कृपया आप संलग्न निर्देशानुसार अपने वितरण निगम में एक क्वालिटी सेल का तत्काल गठन कर दिनांक 27.05.2019 तक पावर कारपोरेशन को अवगत कराने का कष्ट करें।

संलग्नक : यथोपरि।

Spaena
(अपूर्णा यू०)
प्रबन्ध निदेशक

प्रति :

1. निजी सचिव सम्बद्ध अध्यक्ष, उ०प्र०पा०का०लि०।
2. निदेशक (वितरण), उ०प्र०पा०का०लि०।
3. समस्त निदेशक (तकनीकी), विद्युत वितरण निगम लिमिटेड, पश्चिमांचल-मेरठ/ दक्षिणांचल-आगरा/ मध्यांचल-लखनऊ एवं पूर्वांचल-वाराणसी एवं केस्को कानपुर।
4. समस्त मुख्य अभियन्ता (सामग्री प्रबन्ध), विद्युत वितरण निगम लिमिटेड, पश्चिमांचल-मेरठ/ दक्षिणांचल-आगरा/ मध्यांचल-लखनऊ एवं पूर्वांचल-वाराणसी एवं केस्को कानपुर।

Quality Assurance & Control Policy

"Uttar Pradesh Power Corporation Limited stands for quality & reliable power to all consumers" - this is our quality vision. Due to our enormous infrastructure and huge consumer base, this can only be realized with the help of an excellent Quality Assurance & Control Policy that encompasses all the important aspects of Distribution operation while catering quality and reliable power supply to consumers. The critical aspects towards ensuring quality in power distribution can be broadly divided as follows:-

- Procurement of Equipment & accessories of highest quality at a reasonable rate – Material Quality Plan (MQP)
- Erection of Infrastructure network as per best practice – Field Quality Plan (FQP)

The "Policy of Quality Assurance & Control" sets out the requirements and guidelines binding all the Discom's. It regulates the definition, goals, mandate, tasks and activities of Quality Assurance as well as the principles of cross-functional cooperation between Procurement & Scientific Storage, Project Execution, Routine & Emergency Network maintenance and the other company functions involved like HR Policy.

The Heads of the respective Quality Assurance & Control Cell in the Discom HQs and various Electricity Distribution Circles will be jointly responsible for the implementation of the QA&C requirements and guidelines defined by the Policy that is binding for all four Discom's.

Quality Assurance & Control Cell

At UPPCL HQ Level (UPPCL Quality Cell): To implement the policy across Discoms and ensure the policy guidelines are religiously followed, a Quality Assurance & Control Cell is to be constituted which shall be headed by a Executive Director (Resspo), UPPCL, One no. Chief Engineer, Resspo-UPPCL, one no. SE from Resspo-UPPCL, two no. EE (Executive Engineer) and two no. AE's (Assistant Engineer).

The primary responsibilities of this Cell's for Distribution Network Creation as well as Network up-gradation, are as under:-

- Standardisation of Technical Specification of major material viz. Power & Distribution Transformers, LT & HT Aerial Bunched Cable, ACSR Conductor, STP & PCC Pole, Single & Three Phase Meter.
- Review of standards for implementation of GoI/GoUP/FIs sponsored schemes.
- Review of timelines/PERT chart for GoI/GoUP/FIs sponsored schemes.
- Ensuring adherence of Field Quality Plan during implementation of the scheme.
- Ensuring procurement of quality material through sample inspection at vendor works (minimum 10% quantity of major material like Power & Distribution Transformers, Conductors, HT & LT Cables, LT & HT AB Cable, AB Fittings and hardware fittings etc.) and material inspection upto 100% quantity for a specific region to meet site

requirement. along with the material procured by the MM unit of Discoms for GoI/GoUP/FIs sponsored schemes.

- Ensuring routine safety checks and audit of material as per site requirement.
- Evaluations of requirement of additional infrastructure creation or network augmentation at Electricity Distribution Circle level.

The UPPCL quality cell will constitute additional teams from the officers at UPPCL HQ level as well as field level, for the adherence of above responsibilities.

At Discom Level (Discom Quality Cell): Similarly at each Discom & at various electrical circle (under the Discom) level, a Quality Assurance & Control Cell to be constituted by a Chief engineer, One no. Superintending Engineer, 2 no. Executive Engineer and 2 no. Assistant Engineer from Discom Hq. alongwith one Engineer officer nominated by each distribution circle.

The primary responsibilities of this cell are as under:-

- Preparation of Technical Specification of major material viz. Power & Distribution Transformers, LT & HT Aerial Bunched Cable, ACSR Conductor, STP & PCC Pole, Single & Three Phase Meter and submission to UPPCL Quality Cell.
- Prepare & report MQP and FQP and report to UPPCL Quality Cell.
- Monitor the implementation of MQP and FQP in implementation of scheme.
- Review the impact of MQP and FQP in ensuring the quality and reliable power supply.
- Keeping records of distribution transformers breakdown and preparing methodology for its reduction.
- Responsible for sampling from the each supplied lot of material.
- Selection of Project Management Agency for Quality Assurance & Control of work being executed under Business Plan.

The members of this cell are also responsible for inspection of items to be procured under various schemes and also procurement under periodic requirement of maintaining asset inventories as well. The DQC shall also be mandatorily responsible for get the material & work inspected from the UPPCL quality cell, as mentioned above.

Third Party Inspection Agency (TPIA): Additionally, UPPCL may engage a third party inspection agency during implementation of various schemes to inspect materials procured and standard of execution through physical verification at Stores as well as installation/erection at project site. This engagement of TPIA may be based on actual volume of work executed in different schemes. They will also report to the Quality Assurance & Control Cell stationed at UPPCL HQ.

General Quality Assurance and Control Methodology:

- Quality Assurance & control involves parallel quality control checks by the Discoms and Contractors. Discom Quality Cell (DQC) & UPPCL Quality Cell (UQC) / Third party inspection agency (TPIA) on behalf of UPPCL and also executing Contractors.

- The Discoms shall be responsible for quality checks through executing contractor & TPIA. DQC. Discoms shall also be responsible for ensuring implementation of all quality control checks under its jurisdiction. DQC shall be the nodal officer for any information regarding inspection, testing and quality control under its jurisdiction.
- DQC shall ensure inspection of material to be supplied by various sub-vendors, at their works, in line with Manufacturing Quality Plans (MQP) as finalized & agreed by Discoms with executing contractor. It shall inform the third party inspection agency & UQC coordinator of all the programs of testing of equipment at sub-vendors works so that UQC can also depute their teams for pre-dispatch inspection at the manufacturer's works. In exceptional cases, where due to non-availability of inspector from any of the above cells, witnessing of testing may be waived by Discoms and inform to UQC. However, testing shall be carried out as per approved GTPs/Drawings, in line with MQP/IS/Specification and report shall be submitted to DQC for approval.
- Quality in the field shall be controlled in line with the Field quality plans (FQP) to be finalized & agreed by Discoms with executing contractor.
- DQC shall be the custodian of all manufacturing and field-quality plans. It shall ensure that field-quality plan is available at all project sites, so that Discoms/ contractor/TPIA shall carryout testing and checks as per field quality plan. The site personnel shall maintain proper records of testing and checks made by them. The same shall be made available to UQC whenever required. The DQC shall ensure that Quality Control Manual and all the guidelines are strictly followed.
- Wherever Discoms have not formulated manufacturing and field quality plans with the contractors/manufacturers, Standard quality plans which are enclosed in this manual shall be used as guidance and MQP/FQP shall be finalized broadly based on these standard MQP/FQP.
- Checklist for procurement and construction shall be prepared by DQC with the help of UPPCL quality Cell.
- IT based systems for ratings of performance of TKC's/Sub vendors/Suppliers & other agencies, involved in procurement & erection.
- Keeping records of failure & performance of equipments/material supplied and updation in ERP systems (which will be a guiding report for procurement plan).

Supplier's/ Turnkey Contractor's set up for Quality Assurance and Control:

- The Supplier/ turnkey contractor shall be primarily responsible for ensuring the quality of material supplied & quality of works at site.
- It shall submit all MQP and FQP to DQC for approval and establish a proper procedure to ensure checks as indicated in MQP & FQP for the respective materials (test sheet to be prepared for each material/ Item separately based on GTP & data sheets) & works.
- Supplier/ Turnkey contractor shall designate an experienced & qualified engineer as Quality Engineer (QE) who shall be responsible for ensuring that all the quality checks

required are carried-out and shall ensure to keep proper records for quality maintained at site.

- Quality Assurance shall be undertaken in the following areas of the project implementation:-
 - a) Quality of material/equipment being supplied.
 - b) Quality of works in the field.

Material Quality Plan:-

For ensuring quality of material/equipment, the following system/procedure shall be adopted:-

- A standard manufacturing quality plan shall be agreed with the turnkey contractor for every equipment/material (To be prepared and annexed separately for each items as Appendix) which shall include the process of manufacturing, sourcing of raw-materials, quality checks of raw-material, stages of manufacturing, testing of final product – both type tests and routine/acceptance tests.
- The turnkey contractor shall select the sub-vendors of various equipment based on a process, which ensures quality material in the project. Regular & reputed Sub-vendors of items listed in Appendix shall be approved by Discoms
- QE shall ensure the presence of their qualified representative during type tests and routine/acceptance tests, either at manufacturer's premises or at independent laboratories.
- The type tests of materials/equipment's shall be carried out only at Govt. testing laboratories such as CPRI, ERTL or ERDA Laboratories (Type test conducted at accredited lab shall not be considered), as detailed herein under:-
 - Power & Distribution Transformer - CPRI/ERDA
 - Power Transformer Oil - CPRI/ERDA
 - Energy Meters - CPRI/ERDA/ERTL
 - LT & HT AB Cable - CPRI/ERDA
 - HT Cable - CPRI/ERDA
 - LT Cable & ACSR/AAC Conductor - CPRI/ERDA.
 - Insulators - CPRI/ERDA.
 - 11 & 33 Kv Switchgears - CPRI/ERDA

Since 1st October 2019, all the manufacturer/sub-vendors of above material shall submit type test reports from the above testing labs., only.

Manufacturers may carry out routine type tests at their works however in such cases testing shall be carried out in presence of representative of UQC/TPIA/DQC.

- All materials shall be tested/inspected before dispatch as per approved GTPs/Drawings in line with MQP/Drawings/Technical Specifications.

Sample Testing of Supplied/Erected Material:-

- The Discom Quality Cell shall be responsible for checking quality of materials/equipments supplied by manufacturer/sub-vendors.

- The Discom Quality cell shall prepare the list of major materials (viz. Power & Distribution Transformer/HT & LT Cable/LT & HT AB Cable & Fittings/Hardware Fittings/PCC & STP Pole/Conductors/Single & Three Phase Meter) supplied during every month, either through TKCs or Material Management unit.
- DQC with the due approval of Managing Director-Discom/Director (Technical)-Discom will constitute a team for sealing of the sample for testing. The DQC will also issue notices to the material manufacturer to depute their nominee to be present at the time of sealing of the sample, failing which the sample will be selected & sealed in presence of Discom team, only. The sample of distribution transformer, will be picked from the site/Store center/Works whereas the samples of other material like HT & LT AB Cable & fittings, HT & LT cable, Insulators, PCC poles etc. will be selected either from store/erected at site.
- The DQC will constitute a team of following person for sealing & dispatch of sample:-
 - i. Superintending Engineer of concerned EDC/EUDC or CE/SE of Discom (hq.).
 - ii. One Nominee from Store Circle not below the AE-Store Center.
 - iii. One representative of manufacturer/sub-vendor or TKC.
- The above team will get the sample sealed in their presence and concerned store center will be nodal agency for get the sample tested from a approved testing lab.
- After testing of sample by the testing lab., the DQC will also submit its report to UPPCL quality cell in MIS Format.
- If sample of Material fails/not found as per specification in the testing as above, the Discom Quality Cell will direct "Engineer of Contract" to take action against the firm as per rules.

Quality Plan of Material/Equipment based on Field Performance:-

- On the basis of records keeping by DQC regarding failure of materials erected at site, the maximum permissible limit of failures is as under, against the material/equipment supplied against each lot/order (in case the supply is completed):-

| Name of Material/Equipment | Maximum permissible failure in a supplied lot/ordered quantity (in case the supply is completed) within Guarantee Period. | Probable action for failure more than the permissible limit |
|----------------------------|---|--|
| Power Transformer | NIL | Upto 10% - debarring from participation in next three tenders or 3 years (whichever is later) of Power/Distribution Transformer in all UP Discom. More than 10% - Debarring/Blacklisting for three years. |
| Distribution Transformer | 5% | |
| Energy Meter | 2% | Upto 5% - debarring from participation in next three tenders of Energy Meters or 3 years (whichever is later) in All UP Discom. More than 5% - Debarring/Blacklisting for three years. |

THE DISCOM QUALITY CELL, WITH THE CONSULTATION OF UPPCL QUALITY CELL, WILL ALSO FIX THE MAXIMUM PERMISSIBLE LIMITES FOR FAILURES OF OTHER MAJOR MATERIAL ALONGWITH ACTION IF MATERIAL FAILS/FOUND NOT AS PER SPECIFICATION AND ALSO ENSURE TO INCORPORATE QUALITY PLAN IN ALL TENDER SPECIFICATIONS.

Field Quality Plan:

The turnkey contractor shall establish a procedure for quality checks during execution of the project by finalizing field quality plans (FQP) with the Discom. The detailed field quality plan shall be made available and the same shall be explained to all the field engineers & supervisors of the Turnkey contractor. The field quality plan document shall clearly describe requirements for various raw materials used like steel, cement and sand etc.

The Turnkey contractor shall submit quality audit reports, on periodic basis to the Discom Quality Cell.

Following checks shall be carried out in the field:

- All HT & LT feeder network execution to be inspected as per FQP
- All 33/11kV sub-stations for quality material as per MQP/Drawings/Technical Specifications and works in the field as per FQP.
- 100% verification of meters and service cables installed in consumer premises as per standard practice.

The DQC shall be responsible for submitting monthly MIS reports to UPPCL.

Discom's set up for Quality Assurance and Control:

DQC on behalf of Discom shall also undertake quality audit for material and field execution. Discom shall be fully responsible for ensuring the quality of material supplied & quality of works at site. It shall put in place a proper procedure to ensure checks as per MQP & FQP. DQC shall be responsible for ensuring that all the quality checks are carried-out and shall ensure to keep proper records for quality maintained at site.

Third-party inspection agency, and UQC shall be given free access to all technical records by Discom through DQC. Quality Assurance shall be undertaken in the following areas of the project implementation:-

- a) Quality of material/equipment being supplied.
- b) Quality of works in the field.