STANDARD OPERATING PROCEDURE(SOP)
FOR
QUALITY & QUANTITY ASSURANCE AND CONTROL

Comprehensive Technical Framework for Infrastructure Excellence

PURPOSE OF SOP

- Verification framework
  Establish a robust, end-to-end, cross-departmental Verification Framework ensuring no project is energized without formal clearance.
- Assurance & validation
  Reinforce quality assurance, validate executed quantities, and ensure seamless documentation flow with comprehensive field inspections.
- Transparency
  Enhance transparent reporting and strengthen departmental accountability throughout the project lifecycle.

ROLES: (PD CONSTRUCTION, PD GSC, SE (Ops) All, Manager Civil, XENs All)

- Execute works strictly as per approved BOQ, drawings, and specifications.
- Prepare comprehensive Completion Report including photos, deviations, and material consumption.
- Compile and sign A-90 Measurement Report with accurate executed quantities.
- Submit all records (As-built drawings, test reports) to relevant office for forwarding to Chief Technical Officer (CTO) Office.
- Provide on-site representatives during inspections.

ROLES: Chief Technical Officer (CTO)

- Desk review and planning

  Receive reports from all relevant Heads i.e CE (P&E)/Opr/PMU/O&M(T&G)/CSCMO and conduct desk reviews verifying BOQ vs A-90, design compliance, and safety tests. Schedule field inspections

- Inspection and certification

  Lead field inspections using standardized checklists. Prepare Technical observation reports and issue either the Technical Clearance Certificate or return for mitigation of discrepancies.

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CTO OFFICE FIELD INSPECTION TEAM

- Physical Inspection: Verify pole foundations, earthing, conductor sag, clearances, and civil work quality.
- Quantity Validation: Validate measurements on-site against A-90 quantities.
- Safety Compliance: Check for danger plates, proper grounding of all equipment, and safety gear.
- Reporting: Submit signed Inspection Reports to Chief Technical Officer (CTO).

CE (P&E), CE (PMU), CE (Ops), CSCMO, CE O&M (T&G)

- Ensure all executed schemes are accepted only after formal CTO Office clearance. Route all works through the CTO Office review process for endorsement and standard alignment.
- Energize schemes only after obtaining the CTO Office clearance certificate. Maintain energization records and report non-compliance to the concerned Chief Engineer, with intimation to CTO and other relevant departmental heads.

MANDATORY DOCUMENTATION FLOW

- SUBMISSIONS BY RELEVANT DEPARTMENT
  - Completion Report & A-90 Measurement Report
  - As-built Drawings
  - Applicable Test Reports
  - Photographic Proofs & Execution Records
  - Safety Compliance Checklist (if any)

- Chief Technical Officer (CTO) OUTPUT
  - Technical Clearance Certificate OR Technical Observations

INSPECTION PROCESS: STEPS 1 & 2

- **STEP 1: DOCUMENTATION VERIFICATION (3 WORKING DAYS)**

- BOQ vs A-90 verification
- Approved vs executed design checks
- Review of technical specs and test reports

- **STEP 2: FIELD INSPECTION (5 WORKING DAYS)**

- Verification of pole/tower/Civil Work
- Check conductor sag and clearances
- Compare span's length vs approved drawings
- Inspection of earthing systems of equipment
- Any other inspection as deemed suitable
- Etc

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INSPECTION PROCESS: STEPS 3, 4 & 5

- **STEP 3: QUANTITY VERIFICATION (SAME AS FIELD INSPECTION'S WORKING DAYS)**

➢ Cross-check HT/LT poles , PMTs, stay, studs, span length, conductor lengths, hardware fittings, civil quantities, stays, and earthing etc against A-90.

- **STEP 4: NON-COMPLIANCE (2 WORKING DAYS)**

➢ Schemes with discrepancies will be returned to the concerned office within 2 working days.
➢ The concerned office must resolve the discrepancies and resubmit the scheme to CTO within 5 working days.
➢ CTO will conduct a field inspection again within 3 working days of resubmission.
➢ Schemes with no discrepancies will skip STEP 4 and proceed directly to STEP 5.

- **STEP 5: CERTIFICATION (2 working days)**

➢ CTO issues the Technical Clearance Certificate, mandatory for energization, handover, and further closure of scheme/project.

COMPLIANCE ENFORCEMENT

- ZERO TOLERANCE POLICY—
  - ➢ NO Energization without CTO Certificate.
  - ➢ NO Completion Report accepted without CTO routing.
  - ➢ Non-compliance immediately escalated to CEO.
  - ➢ Project blocking for bypassing CTO Office protocols.
  - ➢ Routing Protocol: All executor to their Heads, routed to CTO.

- WORKFLOW LOGIC
  - ➢ Concerned Manager initiates
  - ➢ Concerned Chief Engineer reviews & forwards
  - ➢ CTO Inspects & Clears
  - ➢ Concerned SE Operations Energizes

MONITORING & DATA MANAGEMENT

- CTO DASHBOARD
  - ➢ Monthly dashboard tracking received, cleared, pending, and non-compliant schemes to identify departmental delays and trends.
  - ➢ Key Performance Indicators (KPIs) focus on Average Turn Around Time (TAT) for project.

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EXPECTED IMPACT

- Improved infrastructure quality & aesthetic image
- Accurate verification & reduced overpayments.
- Enhanced safety & reduced post-energization faults.
- Reduced technical losses & enhanced revenue.
- Transparent workflows & accountability.

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