Guidelines for Quality Assurance Mechanism of DDG projects under Deendayal Upadhyaya Gram Jyoti Yojana

The Project Implementation Agency (PIA) shall be solely responsible & accountable for assuring quality in DDG projects under Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) works. Project Implementing Agency (PIA) shall formulate a detailed comprehensive Quality Assurance (QA) plan for the works to be carried out under DDUGJY scheme with an objective to create quality infrastructure works. The QA and Inspection Plan shall be integral part of the contract agreement with turnkey contractor or equipment supplier and erection agency as the case may be in case of turnkey/partial turnkey/ or departmental execution of works. PIA has to ensure that the quality of materials/equipment's supplied at site and execution of works carried out at field in DDG projects under DDUGJY scheme is in accordance to Manufacturing Quality Plan (MQP)/Guaranteed Technical Particulars (GTP) and Field Quality Plan (FQP)/Approved Drawings/Data Sheets respectively.

Quality checks to be ensured by PIA/Turnkey Contractor: PIA & Turnkey Contractor shall strictly ensure QA checks during the day to day course of project execution, which are as follows:

a. 100% pre-dispatch inspections of all materials viz. as per MQP/ Approved Drawings/ Technical Specifications/Datasheet/GTP/applicable national & international standards.

b. 100% villages with all infrastructures are to be verified for quality as per MQP/Datasheet/GTP/ Approved Drawings/Technical Specifications and FQP.

c. 100% verification of BPL HHs connections released.

d. 100% verification of materials utilised under the scheme.

Vendor approval: All the materials procured for DDG works shall be purchased from the authorised vendors approved by their Quality Assurance Department of PIA. Approved vendors list is to be uploaded periodically (monthly) on the PIA web portal.

New vendors/suppliers may be approved by PIAs, provided capability of manufacturer's is assessed suitably by visiting the factory premises and checking the testing facility available before accepting it as approved vendor. If required, State Electricity Board/Power Department/ Distribution Companies may adopt vendors already approved by CPSUs.

Material Inspection: All four materials of LT electrical network like Poles, conductor, cable, meter (wherever used) and materials of solar plant like Panel, Battery, and Inverter shall be inspected at manufacturer works/premises before dispatch at site. The materials to be used under the scheme shall be as per Technical Specification attached with Standard Bidding Document of DDUGJY scheme or as per latest relevant Indian Standards/approved Datasheet/drawings/GTP/MQP.
FQP for testing & commissioning: PIA shall prepare a comprehensive FQP for testing & commissioning of solar mini-grid system, etc. as well as infrastructure created during electrification of villages/habitations. The electrical system shall be energized only after performing all tests as described in the FQP. Proper records in this regard, including tests on earth resistance, insulation resistance of LT line etc. shall be maintained, jointly signed by PIA and turnkey contractor representatives.

QA documentation: All the quality assurance checks shall be conducted in the field as per approved Field Quality Plan (FQP) and shall be documented properly and signed by the quality engineer of the turnkey contractor & countersigned by PIA’s representative and shall be kept for future reference. These documents shall be maintained by PIAs in proper order and shall be made available at site for verification by Quality Monitors during inspection.

Quality Assurance Mechanism to be envisaged by REC/MoP for DDG Projects

DDG Projects shall have a single tier Quality Assurance Mechanism (QAM). The single tier QAM shall exclude the in-house process quality checks followed by the Project Implementation Agency (PIA) during the physical execution of the project.

Rural Electrification Corporation (REC), the nodal agency for the DDG scheme shall operate for Quality Assurance Mechanism. REC shall designate a senior officer (ZM/CPM of the state) as REC State Quality Assurance Coordinator (RSQAC) at its State level Zonal/Project office. REC corporate office shall designate a senior officer not below the level of AGM/GM as RQAC.

Under this mechanism, RQM/consultant shall oversee the compliance of DDG guidelines, adherence to system procedures etc. shall be verified by an independent inspecting agency.

REC shall outsource independent agency(ies)/consultants designated as REC Quality Monitors (RQM)/consultant to ensure quality of materials procured and shall also verify quality of works carried out under the DDG scheme. RQM/CONSULTANT shall carry out pre-dispatch inspection of materials randomly in a single lot containing minimum 10% materials at manufacturer works. RQM/CONSULTANT shall also verify quality of works carried out in the Project, which are as follows:

- 10% of the Un-electrified villages where electrification works has been carried out (Note: Villages includes Habitations/Dhani/Majra/Tolas/Thandas etc.)
- LT electrical infrastructures
- 10% Households,

Material Inspection: Four LT electrical infrastructure materials i.e. pole, conductors, cables, and meter (wherever used) including solar plant materials like panels, inverters, battery to be used for off-grid village electrification shall be inspected at manufacturer premises before dispatch.
1.1. Villages' inspections are to be done as per approved FQP/Drawings/Technical Specifications/Datasheet/survey report. The villages inspection that shall be carried out by REC Quality Monitors, which are as hereunder:

1.1.1. 100% Un-Electrified (UE) villages are to be inspected

1.1.2. Inspection of RQM/CONSULTANT shall commence in a project when 50% of UE villages are completed in all respect.

1.2. In 100% UE villages of the project; 100% verification of BPL connections, 100% verification of LT Lines, verification of village energisation & BPL beneficiaries, installation of service connections in public places, hours of supply in the village.