# **Chapter-IV**

# **Monitoring & Quality Assurance Mechanism**

# **Monitoring and Supervision**

**4.1** Monitoring and supervision of implementation of the Scheme was to be done at different levels. DDUGJY guidelines provided a single tier monitoring mechanism.

DISCOMs Level

- •DISCOMs shall create a dedicated team for implementation of projects to ensure smooth implementation, monitoring and to redress grievance of public and public representatives of the project areas.
- An officer of the rank of Chief Engineer will be designated as Nodal Officer from the dedicated team who will be responsible for implementation of the scheme in accordance with the prescribed guidelines, providing all necessary information including physical & financial progress related to the projects, will arrange to get relevant orders/clearances from the State Government, enhance level of awareness and redress grievances of public & public representatives in the project areas.

State Level

•State shall constitute SLSC for Monitoring progress, ensuring quality control and to resolve issues relating to implementation of sanctioned projects viz. allocation of land for sub stations, right of way, forest clearance, railway clearance, safety clearance *etc*.

National Level

- •REC shall monitor physical and financial progress of the projects including quality of works.
- •REC shall deploy Third Party services of outside agencies/manpower for concurrent evaluation of project implementation.

The shortcomings noticed in monitoring and supervision of implementation of DDUGJY in the State are discussed below:

#### Involvement of District Electricity Committee

**4.2** Pursuant to the MoP order dated 1 April 2015, to institutionalize the system of consultation with public representatives, GoR notified (15 May 2015) District Electricity Committee<sup>59</sup> (DEC) for each district in the State to review

Senior most Sitting Member of Parliament (MP) in the District- Chairperson, Other Sitting MP- Co-chairperson, District Collector/Magistrate- Convenor, District Panchayat President/ Sabhapati- Member, Sitting MLAs of the district- Member, Senior most representative of CPSUs of Power, Coal and NRE Ministry if located in the concerned district- Member and Chief Engineer/Superintending Engineer DISCOM- Member Secretary.

and monitor the implication of all Central Schemes in the power sector. The main objective of formulation of DEC was to actively engage public

representatives throughout the life cycle of the project from its formulation to execution and monitoring. Further, DEC was required to be consulted in preparation of DPR and to monitor the implementation of scheme *i.e.* review of quality of power supply, consumer satisfaction, promote energy efficiency and energy conservation in the district. It was to be ensured by the Member Secretary that requisite meetings take place and a quarterly report of the holding of the meeting was also required to be sent to REC.

Audit noticed that Jaipur and Jodhpur DISCOMs did not consult DEC before formulation of original DPRs (Jaipur DISCOM- nine projects, Jodhpur DISCOM- one project). Further, DEC was not consulted in the preparation of 13 revised DPRs (Jaipur DISCOM- one project, Ajmer- two projects and Jodhpur DISCOM- 10 projects). Besides, Jaipur and Ajmer DISCOMs did not conduct any subsequent quarterly meeting whereas in Jodhpur DISCOM only five meetings (four in Jaisalmer project and one in Bikaner project) were conducted between March 2017 and July 2018.

Thus, due to these infrequent meetings of DECs, the very purpose of constituting the DEC *i.e.* involvement of public representative throughout the life cycle of the project from formulation to execution and monitoring was defeated. Further, all the three DISCOMs violated the directions of the MoP, GoI by not conducting the quarterly meetings of DEC regularly.

The Government accepted that DEC meetings were not convened as per the prescribed schedule. It further stated that involvement of administrative authorities and public representatives was ensured through periodic/monthly meetings held by the concerned District Collectors at circle level. Further, progress of works was also apprised to the public representatives during their field visits.

The reply was not acceptable as the DISCOMs did not ensure holding of quarterly meetings of DEC separately which was violation of the DDUGJY guidelines. Hence, the very purpose of constituting the DEC was defeated.

## Non-submission of physical progress to SLSC

**4.3** As per the DDUGJY guidelines, SLSC were required to monitor the progress of the sanctioned works. Audit noticed that initially, the DISCOMs reported (between June 2017 and October 2018) the physical progress of the works executed under DDUGJY to SLSC. Thereafter, the physical progress of the works was not found submitted to the SLSC. As a result, the very purpose of constituting the SLSC *i.e.* to monitor the progress and to ensure quality of the works executed was defeated.

The Government accepted the fact that physical progress of works was not submitted regularly to SLSC.

Audit is of the view that non-submission of regular progress reports defeated the very purpose of constituting the SLSC. Further, deliberations/directions of SLSC could have helped the DISCOMs in taking up prompt and effective measures for addressing the constraints in execution of the scheme.

Shortcomings noticed in execution of works have been discussed in **Chapter-II and III** whereas lapses in monitoring and supervision are discussed below:

# **Quality Assurance Mechanism**

**4.4** The guidelines for quality assurance provide the following mechanism:

• Sole responsibility and accountability for assuring quality of the works executed under DDUGJY.

- •Formulation of a detailed comprehensive Quality Assurance (QA) plan for the works to be carried out under DDUGJY with an objective to create quality infrastructure works.
- •QA and Inspection Plan shall be integral part of the contract agreement with turnkey contractor or equipment supplier and erection agency.
- •Ensuring the quality of materials/equipment's supplied at site and execution of works carried out at field in accordance with Manufacturing Quality Plan (MQP)/Guaranteed Technical Particulars (GTP) and Field Quality Plan (FQP)/Approved Drawings/Data Sheets respectively.
- Quality Assurance documentation

REC

**DISCOMs** 

- Outsource independent agency(ies) designated as REC Quality Monitors (RQM) to ensure quality of materials procured.
- Verify quality of works carried out under the DDUGJY.
- RQM shall carry out pre-dispatch inspection of six materials randomly in a single lot containing minimum 10% materials at manufacturer works.
- RQM shall also verify quality of works carried out in the Project.

## Performance of DISCOMs in quality assurance

**4.5** As per the quality assurance guidelines issued by MoP, DISCOMs (Project Implementation Agency) were solely responsible and accountable for assuring quality of the works to be carried out under the Scheme.

The shortcomings noticed in evolving an effective and efficient quality assurance mechanism by DISCOMs are discussed below:

#### Quality Assurance Plan

**4.6** For an effective and efficient quality assurance mechanism, DISCOMs were required to formulate a detailed comprehensive Quality Assurance (QA) Plan with an objective to create quality infrastructure works.

Audit noticed that DISCOMs instead of preparing QA Plan themselves before awarding the works, outsourced (March/May 2017) the work of QA Plan to the PMAs appointed by them. Audit further noticed that PMA of Ajmer and Jodhpur DISCOMs submitted the QA Plan in May 2017 and October 2017 whereas PMA of Jaipur DISCOM submitted the QA Plan in December 2017. QA Plans submitted by these PMAs *inter-alia* included quality control mechanism, quality control methodology by PMA, guidelines for quality control during construction, Check List for Quality Assurance and Formats for inspection *i.e.* for field quality inspection as well as for Monthly Progress Report.

Audit observed that DISCOMs could not ensure effective implementation of quality assurance plan as regards quality assurance checks and testing of material used in works execution, as several deficiencies in this respect were noticed, as discussed in subsequent paragraphs:

### Quality Assurance Checks

4.7 Guidelines of Quality Assurance (QA) stressed upon strict compliance of QA checks i.e. 100 per cent pre-dispatch inspections of all materials, verification of villages with all infrastructure and quality of material as well as erection of works in the field relating to all 66/11 or 33/11 kV sub stations (New & Augmented) as per Manufacturing Quality Plan (MQP)/Approved Drawings/Technical Specifications/ Datasheet/ Guaranteed Technical Particulars (GTP)/Field Quality Plan (FQP)/ approved survey drawings/layout. Further, 100 per cent verification of all released connections to BPL HHs, all the created feeders and material utilised as well as works done in metering, villages under Saansad Adarsh Gram Yojana and system strengthening was to be done under the scheme.

Audit noticed that the DISCOMs and the concerned turnkey contractors of the projects were responsible to ensure strict compliance of the quality checks during day to day course of project execution.

Audit observed that the PMAs, in their monthly progress reports, pointed out huge number of non-conformities in execution of the works. These defects mainly included not using earthing rod, loose stay wire on distribution transformer pole, improper filling of pits of poles, erection of poles at lesser depth, not using galvanised insulated wire, fixing of cable without clamps *etc*. Further, instances of poor quality of material used in releasing electricity connection to BPL beneficiaries were also noticed as few items of the kit were either not provided or the kit items were found in broken condition as discussed in **paragraph 6.5.** This indicated that the DISCOMs and the concerned turnkey contractors did not adhere to the QA guidelines of 100 *per cent* verification of village infrastructure adequately to ensure quality of works executed under DDUGJY as per MQP/ Datasheet/ GTP/ Approved Drawings/Technical Specifications and FQP.

The Government stated that 100 per cent pre-dispatch inspections of material were carried out and infrastructure was created as per GTP/ specifications/ drawings. The new electricity connections to BPL beneficiaries released and material used were also checked and defective material was replaced by the firms. Further, all the non-conformities observed by PMA had already been rectified.

The reply did not address the issue highlighted in audit as PMAs pointed out huge number of non-conformities which reflected that verification of village infrastructure was not done as per the QA guidelines.

## Testing of material used in implementation of DDUGJY

**4.8** In addition to the condition of 100 *per cent* quality check during predispatch inspections, Clause 21A of General Conditions of Contract (GCC) provide for sample test of the material received in store at Central Testing Laboratory (CTL) of each DISCOM. Further, Clause 21C of GCC provides for random sample test of the material taken from site at CTL. Besides, the technical

specifications of items of material, defined in Volume-III of the Bidding Document, also provides testing of material at CTL. The payment of supply/erection was to be made only after receipt of successful test report from CTL on the samples selected from the material received at the stores.

#### Audit observed that:

(i) DISCOMs waived (September/October 2017) the requirement of CTL testing for all the materials except three items (DT, AB cable, 2C x 4 cable) required for release of connections under the Scheme on the plea that RHH connections were required to be released expeditiously to achieve the target of power to all latest by March 2018 and quality assurance of material was already being done by the inspecting officers at the vendor's works.

The shortcomings noticed in release of connections to un-electrified RHHs are discussed in **paragraph 2.15**. Audit observed that the orders issued by DISCOMs were ambiguous as the items, wherein the relaxation of CTL testing was waived, were not specified. Due to this ambiguity, the Circle offices of the Jaipur DISCOM had taken different interpretation and hence there was variation in the items picked for not conducting test in CTL. In two selected projects (Bharatpur and Tonk) of Jaipur DISCOM, Audit found that Bharatpur circle did not conduct testing of seven<sup>60</sup> items and nine<sup>61</sup> items upto March 2018 and after March 2018 respectively whereas Tonk circle did not conduct testing of 35 items. Audit also observed that the relaxation was continued even after March 2018 in Jaipur DISCOM.

Further on the request of Bharatpur circle, Turnkey Works (TW) wing waived (August/September 2018) the requirement of testing of items utilised by M/s Voltas Limited under TN-384 *i.e.* 2C x 4 mm sq. XLPE cable (76.327 kMs), AB cable (72.395 kMs) and 16 kVA single phase DTs (200Nos.) in CTL ignoring the fact that no exemption was to be given to these three items as per the prevailing orders. Audit also observed that one of these three items *i.e.* 2C x 4 mm sq. XLPE cable (38 kMs), utilised by M/s Voltas had failed earlier (14 May 2018) during the course of testing in CTL and hence the same was rejected (November 2018). Jaipur DISCOM failed to assure quality monitor checks of QA Plan as it ignored the vital fact of failure of material in testing and waived the requirement of testing in violation of the conditions stipulated in its own order. Thus, Jaipur DISCOM compromised on the quality of material used in execution of works.

Audit further noticed that Ajmer DISCOM did not relax CTL testing even after issue of waiver order and also specified (February 2018) the items for CTL waiver in subsequent order. However, no waiver order specifying the items for CTL testing was found on record of Jodhpur DISOM.

(ii) Moreover, the random samples of material from site were not obtained for testing at CTL in any of the nine selected projects. This indicated that the

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Suspension clamp with Bracket, Dead end clamps with Bracket Piercing Connector NFCT type A, Piercing Connectors NFC type B, GI Stay set 16 mm, 11 kV VCB Kiosk and 11 kV CT PT set (200/5 Amp.)

Suspension clamp with Bracket, Dead end clamps with Bracket, Piercing Connector NFCT type A, Piercing Connectors NFC type B, 11 kV Drop out cum Isolator, ACSR Weasel Conductor, LT Pin Insulator, Weasel PG Clamp and 11 kV End Termination Kit.

DISCOMs did not observe compliance with the provisions of Clause 21C of GCC. Resultantly, the purpose of inserting this clause as an additional check for ensuring quality of material was defeated.

The Government stated that in order to expedite the RHH electrification work and to ensure power for all by March 2018, Jaipur DISCOM waived the requirement of CTL testing for all the materials required for RHH electrification. However, the material was jointly inspected with REC at manufacturers work before dispatch.

The fact remained that Jaipur DISCOM did not comply with the conditions of contract regarding sample testing of material in store at CTL and thus, compromised with the quality of the material used in executing the projects. Further, the reply was silent on the issue of ambiguity in the order issued by Jaipur DISCOM which led to misinterpretation of the orders by its different circle offices. Besides, the Government did not respond on the issue of not ensuring compliance with the provisions of clause 21C of GCC.

## Use of material failed at Central Testing Laboratory

4.9 (i) Scrutiny of the records of one of the selected project (Sikar Circle) of Ajmer DISCOM disclosed that M/s Swastika Infra Private Limited (Contractor formerly known as Swastika Electricals & Fertilizers) used the material tabulated below, for which dispatch instructions (DI) have been issued by the circle office but subsequently declared as failed during testing in CTL.

Table No. 4.1 Details of items failed during testing in CTL

Sl. No.	Item Name	Date on which DI issued	Quantity for which DI issued (Nos.)	Date of CTL testing	Quantity failed in CTL testing	Date of intimating contractor of rejection/replacement	Running Bill	Month of claim passed
1	Disc H/W Fittings type 45KN	06.12.18	514	18.02.19	514	03.04.19	RA 11 & 12	March 2019
2	GI Stay set 20*2400 mm	06.12.18	166	18.02.19	166	03.04.19	RA 15 & 17	January & April 2020

Source: CTL Reports and stock register

Audit observed that the Sikar Circle office took 44 days to intimate the Contractor about failure of material in testing at CTL. Meanwhile, the Contractor utilised these items between March 2019 and April 2020 and claimed the same in running bills submitted during this period. This material could not pass the test in CTL as it could not withstand the load. Despite this, the Sikar Circle office instead of initiating action against the contractor, passed (between March 2019 and April 2020) all the running bills and accordingly, released the payment.

The Government stated (June 2021) that the matter will be investigated and corrective measures will be taken by the DISCOMs under intimation to audit. However, further response on the issue has not been furnished till November 2021.

(ii) Similarly, in one of the selected projects (Barmer Lot-II TN-360) of Jodhpur DISCOM, the Circle office issued (21 March 2018) dispatch instructions for supply of 500 Nos. set of 16mm diameter 2 meter long MS type earthing rods. After receipt of the material (April 2018), M/s Star Rising Energy Private Limited (Contractor) utilised the same for electrification work and claimed (March 2019) it in the running bill. Audit noticed that the Engineer-in-Charge verified the bill and sent (March 2019) it to CPC for payment with remarks that the material has passed the CTL test. Audit observed that the Engineer-in-charge put in incorrect remarks on the running bill as the material had already been declared (September 2018) failed in testing at CTL.

The Government stated that Jodhpur DISCOM had investigated the matter and recovered ₹ 1.46 lakh from the contractor.

The reply did not contain documents in support of investigation carried out against the Engineer-in-Charge as well as recovery effected by Jodhpur DISCOM.

Thus, both the DISCOMs failed to ensure quality of material used in system strengthening works carried out under the Scheme.

#### Performance of Project Management Agency

**4.10** As defined in the guidelines of Project Management Agency (PMA), PMA was responsible for monitoring and coordination of bidding process; project planning and implementation; quality monitoring and MIS & Web Portal updation.

As per the scope of work stipulated in the work order of PMAs, PMAs were required to monitor the DPR wise monthly physical and financial progress of the scheme, prepare a consolidated report and submit it to DISCOMs for onward submission to REC. The performance of PMAs as regards monitoring of projects implementation physically/financially and monthly reporting thereof is discussed below:

#### (i) Physical implementation of projects

Scrutiny of records related to tasks assigned to PMAs disclosed that PMA of all the three DISCOMs submitted monthly progress reports (MPR) of the works executed under DDUGJY. Audit analysis of MPRs furnished by M/s Medhaj (PMA appointed in Ajmer and Jodhpur DISCOMs) contain various details as regard to physical progress of works executed, status of material supply and erection, achievement of BPL and APL connections *etc*. Besides this, PMA also submitted status of non-conformities observed by it during verification of DDUGJY works. The updated status of project-wise non-conformities noticed by PMA and their rectification by Ajmer and Jodhpur DISCOMs/ respective turnkey contractors is tabulated below:

 ${\bf Table\ No.\ 4.2}$  Project-wise status of non-conformities observed and rectified as on 30 November 2020

DISCOM	Project Name		No. of non- conformities rectified by turnkey contractors	Non- conformities pending rectification	Percentage of non- conformities pending rectification
Ajmer	Ajmer	1968	155	1813	92.12
DISCOM	Bhilwara	914	0	914	100
	Nagaur	683	0	683	100

	Jhunjhunu	1433	663	770	53.73
	Sikar	1144	602	542	47.38
	Dungarpur	716	37	679	94.83
	Banswara	1984	183	1801	90.78
	Chittorgarh	1528	113	1415	92.60
	Rajsamand	1234	0	1234	100
	Pratapgarh	1205	171	1034	85.81
	Udaipur	1658	0	1658	100
	AVVNL	14467	1924	12543	86.70
Jodhpur	Jaisalmer	535	436	99	18.50
DISCOM	Barmer	547	547	0	0
	Jodhpur	816	779	37	4.53
	Bikaner	84	10	74	88.10
	Sriganganagar	73	69	4	5.48
	Hanumangarh	2596	79	2517	96.96
	Churu	594	357	237	39.90
	Sirohi	4672	4130	542	11.60
	Pali	180	93	87	48.33
	Jalore	2188	1	2187	99.95
	JdVVNL	12285	6501	5784	47.08

Source: Monthly Progress Reports of PMAs

Audit noticed that the nature of non-conformities reported by PMA included:

- Not providing danger board and lightening arrester on DTR;
- Missing lightening arrester/D.O. set on DTR/Pole and PG clamp not used in jumpering on DTR;
- Bolt not provided to fix isolator base channel and isolator mounted on guarding angle instead of MS channel;
- Earthing clamp not provided for connection to each rod, earthing spike used for VCB not inserted up to required depth in ground and studs not provided to hold VCB structure;
- Lightening arrester not connected, improper erection of pole/conductor, broken/ tilting pole and loose stay wire; and
- Safety norms not followed by turnkey contractors *etc*.

Audit observed that all such non-conformities were reported by PMA in MPRs during October 2017 to November 2020. However, both Ajmer and Jodhpur DISCOMs did not take adequate measures to get these non-conformities rectified through respective turnkey contractors. The performance of both the DISCOMs was extremely poor in rectifying the non-conformities which is evident from the fact that 86.70 *per cent* and 47 *per cent* non-conformities were pending rectification for a period ranging between five months and 35 months (30 November 2020).

Audit also observed that M/s Feedback (PMA of Jaipur DISCOM) only reported the physical progress of works executed under DDUGJY (in soft copy excel format). Detail MPR containing various detail such as status of material supply and erection, achievement of BPL and APL connections, non-conformities in executed works *etc.* was not found on records. In the absence of such details, audit could not vouchsafe the performance of the PMA in carrying out the field inspection for the purpose of verifying and monitoring the quality of works executed under DDUGJY. Further, the performance of Jaipur DISCOM as well

as concerned turnkey contractors as regards rectifying the non-conformities could also not be ascertained.

The Government stated that all the non-conformities observed by PMA of Ajmer and Jodhpur DISCOMs had been rectified. However, non-conformities like installation of Danger plate, lightening arrester etc., were not included in the scope of contractors and hence, these were referred to REC for waiver. It further stated that PMA of Jaipur DISCOM updated the physical progress of works on weekly/fortnightly/Monthly basis on MIS portal of DDUGJY and also provided all the required details in soft copy as well as in hard copy.

The fact remained that Ajmer and Jodhpur DISCOMs did not rectify the defects which were not in the scope of contractors. Further, in case of Jaipur DISCOM, the reply was not convincing as physical progress furnished by PMA did not contain the requisite details as pointed out by Audit.

#### Financial progress of works executed (ii)

As per the terms and conditions of the work order, the PMAs were also required to recommend the DISCOMs claim for release of fund duly supported by a report on expenditure, progress and constraints, if any, for timely completion of project. Besides, a report to REC, regarding Project Completion and expenditure incurred along with recommendation in accordance with the guidelines was also required to be submitted.

Scrutiny of records disclosed that the status of project-wise expenditure incurred on monthly basis only was uploaded on DDUGJY portal by the PMAs whereas recommendations of PMAs as regards project-wise and item-wise expenditure, constraints in timely completion of projects etc., to be submitted with DISCOM's claims for release of fund were not found on records. Audit observed that PMA of Jodhpur and Jaipur DISCOM did not submit their report on the completed projects and expenditure thereon despite the fact that all projects of Jodhpur DISCOM and nine projects of Jaipur DISCOM were completed between March 2020 and September 2020.

### Compliance of RQM by DISCOMs/PMAs

4.11 Under Quality Assurance Mechanism, the compliance of DDUGJY guidelines and adherence to system procedures etc. were verified by RQM. DISCOMs were required to carry out compliance of observations raised by RQM and the compliance along with site photographs was to be uploaded on DDUGJY web portal (subsequently on Sakshya portal with effect from September 2019).

#### *(i)* Compliance of Inspection Reports

The designated agencies<sup>62</sup> of REC for quality monitors (RQM) carried out inspections time and again with a view to verify the quality of works carried out by DISCOMs under DDUGJY. RQM also submitted the inspection reports for compliance of the shortcomings noticed during field inspections. The status of inspection reports submitted and compliances made by DISCOMs as on 31 December 2020 is depicted in the table below:

62 Jaipur DISCOM-Voyants, Ajmer DISCOM-RECPDCL, Jodhpur DISCOM-RECPDCL.

Table No. 4.3
Status of inspection reports submitted and compliances made by DISCOMs as on 31
December 2020

DISCOM	Category	No. of inspection reports	Date of submission of report ranged between	No. of compliance made	Date of compliance of report ranged between	Time taken for compliance in days ranged between
Jaipur	Village	4	8.1.2020 to 27.1.2020	4	26.6.2020 to 27.8.2020	158 to 213 days
	SS	32	3.9.2019 to 25.2.2020	31	3.12.2019 to 27.8.2020	34 to 355 days
	Feeder	82	30.12.2019 to 8.6.2020	82	30.1.2020 to 8.12.2020	15 to 329 days
Ajmer	Village	424	11.9.2019 to 12.11.2020	303	17.12.2019 to 8.2.2021	25 to 500 days
	SS	70	6.9.2019 to 20.2.2020	70	16.5.2020 to 15.1.2021	115 to 477 days
	Feeder	32	14.10.2019 to 18.2.2020	25	12.2.2020 to 8.2.2021	30 to 484 days
Jodhpur	Village	424	15.7.2019 to 1.4.2020	424	18.11.2019 to 29.6.2020	44 to 334 days
	SS	9	9.1.2020 to 20.2.2020	5	22.2.2020 to 18.11.2020	44 to 297 days
	Feeder	15	13.1.2020 to 20.2.2020	15	3.3.2020 to 20.9.2020	25 to 250 days

Source: Sakshya portal

## (ii) Rectification of defects

The nature of defects mentioned in the inspection reports of RQM was categorised as 'Critical', 'Major' and 'Minor'. The faults categorised under 'Critical' and 'Major' in respect of village electrification, Sub-Station (SS) and Feeders as per REC inspection check list were given in **Annexure-4.** Number of defects observed, rectified and pending as per the latest status (January 2021) of Sakshya portal is given in the table below:

Table No. 4.4 Status of No. of defects observed, rectified, pending

DISCOM	Category	No. of defects	No. of defects	Defects not in the scope of	Pending defects
		observed	rectified	contractor	
Jaipur	Village	1188	40	14	1134
	SS	500	109	377	14
	Feeder	1255	914	341	0
Ajmer	Village	12170	3525	1665	6980
	SS	1720	262	1143	315
	Feeder	687	292	142	253
Jodhpur	Village	6720	4940	1186	594
	SS	221	27	63	131
	Feeder	90	70	20	0

Source: Sakshya portal

Further, the category-wise position of defects observed and rectified was as under:

Table No. 4.5
Category-wise position of defects observed and rectified

(Figure: in numbers)

	(Figure, in numbers)											
Category of defect	Jaip	our DISC	OM	Ajm	er DISC	OM	Jodh	pur DISC	COM		Total	
	Village	SS	Feeder	Village	SS	Feeder	Village	SS	Feeder	Village	SS	Feeder
Critical	303	110	570	4048	251	248	2119	35	38	6470	396	856
Major	793	245	579	6898	897	372	3982	119	49	11673	1261	1000
Minor	92	145	106	1224	572	67	619	67	3	1935	784	176
<b>Total Defects</b>	1188	500	1255	12170	1720	687	6720	221	90	20078	2441	2032
Critical	15	45	350	1145	34	92	1486	8	24	2646	87	466
Major	19	45	472	1908	134	165	2962	12	43	4889	191	680
Minor	6	19	92	472	94	35	492	7	3	970	120	130
Total defects	40	109	914	3525	262	292	4940	27	70	8505	398	1276
rectified												
Critical	288	65	220	2903	217	156	633	27	14	3824	309	390
Major	774	200	107	4990	763	207	1020	107	6	6784	1070	320
Minor	86	126	14	752	478	32	127	60	0	965	664	46
Total Pending	1148	391	341	8645	1458	395	1780	194	20	11573	2043	756
Defects												
% of defects rectified	3.37	21.80	73.07	28.96	15.23	42.50	73.51	12.22	77.78	42.36	16.30	62.80
Defects not in the	14	377	341	1665	1143	142	1186	63	20	2865	1583	503
scope of work of												
the Contractor												
% of defects not	1.18	75.40	27.17	13.68	66.45	20.67	17.65	28.51	22.22	14.27	64.85	24.75
in the scope of												
work of the												
contractor												

Source: Sakshya portal

Audit observed that the shortcomings highlighted in the inspection reports of RQM were rectified with significant delay ranging between 15 days and 500 days. Further, there were large number of defects in each type of work *viz;* village electrification, strengthening/creation of SS and segregation/construction of feeders during inspections by RQM. This also indicated that the performance of DISCOMs/PMAs, who were responsible and accountable for assuring quality of works executed under DDUGJY, was not satisfactory. Further analysis of defects disclosed that the defects observed in village electrification, strengthening/ creation of SS and segregation/construction of feeder mainly fall under critical<sup>63</sup> and major<sup>64</sup> category. The results of beneficiary survey conducted during the course of Audit also revealed that more than 90 *per cent* surveyed beneficiaries mentioned at least one or more deficiencies in execution of work.

Further, DISCOMs also failed to define the scope of work of the contractors which is evident from the fact that the contractors refused to rectify 4951 defects<sup>65</sup> on the plea that these were not in the scope of work awarded. Audit

63 'Earth terminal as per RE Rules', 'Earthing on every 5th pole' and 'Lightening Arrester'; 'Cradle guard at road/river/line crossing', and 'Type of foundation used not as per scope of work'.

<sup>64 &#</sup>x27;Pole numbering', 'Distribution Box', 'Meter Board', 'Depth of poles', 'Battery terminals not firmly tightened and crimped with lugs'; and 'Indoor cable not properly covered' *etc*.

<sup>(</sup>i) In case of substations, battery, exhaust fan and control panels at control rooms; working platform of 33 KV VCB, substation board, Power supply points, yard gravelling and partition wall feeder breaker panels, transformer breaker panels *etc.*, (ii) in case of feeders, Low Tension Distribution Box (LTDB) and (iii) in case of village level infrastructure, foundation and earthing for all the poles *etc.* 

observed that all these defects were still pending rectification and DISCOMs would have to incur extra expenditure on rectifying these defects. Besides, the nature of few works like 'depth of pole', 'type of foundation used' *etc.* cannot be rectified after execution of the works.

Thus, improper monitoring of project implementation activities, insufficient field quality inspections of ongoing projects at the level of PMA and absence of monitoring mechanism at each DISCOM level severely affected the quality of works executed under DDUGJY.

The Government accepted the facts and stated that DISCOMs are in the process of complying with all the observations of RQM which will be uploaded on SAKSHYA portal. It further assured that the RQM observations will be complied with before closure of the contracts.

The fact remained that improper monitoring and inspections affected the quality of project works executed under the Scheme. Further, the reply was silent on the issue of rectifying the defects which were not in the scope of work of the contractors.

## Creation of Fixed Assets Register

**4.12** The format of Fixed Assets Register prescribed by DISCOMs contains various details such as Circle name, Fixed Assets Group, Assets code, Assets head, Assets name, Division, Sub-division, location, construction year, quantity, gross amount, addition during the year, interest during construction, overhead, Gross book value, quantity deduction, deduction amount, quantity and amount at the end of the Financial Year. Further, as per the PMA guidelines for DDUGJY as well as terms and conditions of the work order, PMAs of all the three DISCOMs were mandatorily required to assist DISCOMs in the addition of the created assets to their asset register.

Audit observed that PMAs of all the three DISCOMs overlooked this mandatory requirement as PMAs did not help the DISCOMs to maintain vital details of the assets created under DDUGJY in the format prescribed for Fixed Assets Register by DISCOMs. In selected projects, Audit observed that the concerned O&M Circle offices maintained the assets creation information in different manner as shown below:

Table No. 4.6
Details of assets created under DDUGJY maintained in selected projects

DISCOM	Project Name	Details of assets maintained	Remarks
Jaipur	Bharatpur	Number of infra items <i>viz;</i> SS and lines for two FY 2018-19 and 2019-20	Details such as assets code, assets
	Bundi	Assets report contains details of infra items <i>i.e.</i> conductor, cable, pole, transformer and other miscellaneous hardware used in creation of village infra for three FY 2017-18, 2018-19 and 2019-20.	head, construction year, overhead, gross block value and quantity and value at the end of
	Tonk	Number of infra items <i>viz;</i> SS and lines for two FY 2017-18, 2018-19 and 2019-20.	FY were missing.

Ajmer	Ajmer	Details of village-wise infrastructure	Details such as
	Banswara	created <i>i.e.</i> village/ block/ gram panchayat/	assets code, assets
	Sikar	habitation name, census code, line length,	head, construction
		number of poles, number of DTs.	year, overhead,
			gross block value
			and quantity and
			value at the end of
			FY were missing.
Jodhpur	Barmer	Details of village-wise infrastructure	Details such as
		created <i>i.e.</i> village/ block/ gram	assets code, assets
			head,
	Jalore	panchayat/ habitation name, census code,	construction year,
	Pali	line length, number of poles, number of	overhead, gross
		DTs.	block value and
			quantity and value
			at the end of FY
			were missing.

Source: Village infra details maintained at selected projects

Thus, in the absence of vital details, the exact detail and location of assets created under DDUGJY coupled with their value could not be identified. Audit also observed that none of the three DISCOMs maintained Fixed Assets Register for assets other than those created under DDUGJY and this aspect was persistently being qualified by the Statutory Auditors in their Audit Reports in several years in the past. In response to the observation, DISCOMs stated that the assets were voluminous, scattered in field and Fixed Assets Register were under preparation.

The Government accepted the facts and stated that the work of preparing the fixed assets register was under progress and relevant information was being collected from field offices of the DISCOMs.

## **Conclusion**

- DISCOMs did not adhere to the prescribed parameters of monitoring and supervision as meetings of DEC were not conducted to monitor the implementation of the scheme. Further, the progress of works executed was not submitted to SLSC, though envisaged under the scheme.
- DISCOMs could not ensure effective implementation of quality assurance plan as regards quality assurance checks, testing of material used in works execution and also failed in ensuring timely compliance of non-conformities observed by PMAs.
- The performance of DISCOMs/PMAs was not satisfactory as RQM detected large number of defects categorised as critical and major in each type of work executed.
- Improper monitoring of project implementation activities, insufficient field
  quality inspections of ongoing projects at the level of PMA and absence of
  monitoring mechanism at each DISCOM level affected the quality of works
  executed under DDUGJY.

## Recommendations

# **DISCOMs** may

- Critically examine the existing monitoring mechanism and take suitable steps to strengthen it.
- Ensure that there is sufficient deterrence, by fixing accountability and responsibility at each level, more specifically for grave lapses like use of CTL failed material.
- Evolve a mechanism to ensure rectification of deficiencies in executed works in time.