

2 *Planning*

2.1 Deficiencies in planning by the Department and JBVNL

Deficient planning for feeder separation

JBVNL prepared DPRs without taking into consideration details such as feeders with mixed load where feeder separation was required, total number of existing and prospective agriculture consumers, total area and location of cultivated land and catchment area from where consumers may draw water for irrigation etc. SLSC also did not verify whether these issues were factored into the DPR and simply forwarded the DPRs proposed by JBVNL to REC for approval as discussed in **paragraph 4.1**.

Deficient planning in construction of PSSs

JBVNL delayed providing land to Turn Key Contractors (TKCs), changed locations due to handing over of unsuitable or rocky land earlier and did not ensure availability of approach roads to PSSs sites for periods ranging between four and 19 months from the date of issue of Letter of Intent (LoI) in the test-checked districts. Department failed to provide suitable land for construction of PSSs which led to delay in construction and de-scoping of three PSSs of Ranchi district as discussed in **paragraphs 5.1 and 5.8**.

Delay in obtaining statutory clearances and other activities in Construction of 33 KV line

There were delays on the part of JBVNL in initiating forest clearances, delays in finalisation of drawings and technical parameters of Power Transformers (PTRs), delays in finalisation of deviation in BoQs and delays in resolving hindrance by locals regarding RoW (Right of Way). Department also failed to obtain timely forest clearances and resolve RoW issues as discussed in **paragraph 5.3**.

District Electric Committees

DPRs for DDUGJY were prepared prior to notification of District Electric Committees (DECs) even though DPRs were to be prepared in consultation with the DECs in order to obtain local inputs. Further, GoJ/SLSC recommended forwarding of DPRs of all the 24 districts to REC without obtaining recommendations of DECs on DPRs of 19 districts which were sanctioned by REC as discussed in **paragraph 8.1**.

2.2 Lack of comprehensive database and multitude of schemes

JBVNL does not have a comprehensive database of all eligible beneficiaries under the multiple electrification schemes. JBVNL has never carried out any survey on its own to prepare a database which would cater to the requirements and criteria of the different schemes in operation in the State. JBVNL only has details of consumers who have been given connections as discussed in **paragraph 2.4.3**. Hence, determination of number and location of prospective consumers under the different schemes have been left to the TKCs. This problem is compounded by the multitude of schemes running simultaneously.

Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA)

JBVNL did not carry out assessment of beneficiaries eligible for free connections under Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) through a proper survey. As a result, they did not have a database covering all eligible beneficiaries prior to placing orders to vendors. Instead, vendors were arbitrarily given targets of connections against which they released connections as per their own assessment as discussed in **paragraph 3.2.3**.

Atal Gram Jyoti Yojana (AGJY)

JBVNL was to prepare list of beneficiaries on the recommendations of respective MLAs. JBVNL failed to do so and hence could not provide list of beneficiaries to the Turn-Key Contractors (TKCs). As a result, AGJY was fore-closed after providing free electric connections to 1.86 lakh APL households against the target of 3.64 lakh APL households as discussed in **paragraph 3.2.4**.

2.3 Preparation of DPR without validation of Need Assessment Document (NAD) by REC

As per guidelines of DDUGJY, JBVNL was to prepare a Need Assessment Document (NAD) containing information about consumers, consumption pattern, voltage regulation, AT&C loss level, HT & LT ratio, optimum load of transformers & feeders/lines etc., with load flow study to substantiate the proposed scope of work and cost estimates after identifying the need of feeder separation and critical gaps in the sub-transmission and distribution network. NAD was to be examined and validated by REC to finalise the scope and cost of work in consultation with JBVNL. Based on the broad scope of work validated by REC, JBVNL was to formulate district/circle/zone-wise DPRs based on detailed field survey and latest schedule of rates.

Audit did not find details on record based on which NAD was prepared to ascertain that there was sufficient relevant information to substantiate the proposed scope of work and cost estimates after identifying critical gaps in

the sub-transmission and distribution network. JBVNL also accepted (October 2019) that load flow study for preparing NAD of ₹ 11,266.58 crore was not conducted. Though the NAD was sent (February 2015) to REC, approval was awaited (October 2020). Ultimately, the DPRs were prepared without NAD and were approved (August 2015) by the Monitoring Committee of MoP, GoI. Shortcomings in the DPRs have been discussed in the succeeding sub-paragraphs.

The Management/Department stated (May/October 2021) that format for preparation of NAD was to be provided by REC. However, it was not provided and JBVNL prepared NAD in its own format based on available data. The Management/Department also accepted that DPRs have been prepared without approval of NAD.

2.4 Preparation of DPRs for Rural Electrification

Audit observed that prior to extension (September 2013) of RGGVY and launching (December 2014) of DDUGJY, JBVNL invited (March 2012) tender for detailed field survey¹⁴ and preparation of district-wise DPRs for revamping rural electrification in the State. JBVNL issued (February 2013) Electric Supply Area (ESA) wise Letter of Intent (LoI) to three agencies¹⁵ for preparation of DPRs for 24 districts at a contract price¹⁶ ranging between 0.89 *per cent* and 1.56 *per cent* of the sanctioned cost of projects as per approved DPRs. Sixty *per cent* of the awarded cost¹⁷ was to be paid on submission of DPRs duly verified by field offices, 30 *per cent* upon approval of DPRs by GoI/ GoJ and remaining 10 *per cent* on award of works.

After extension of RGGVY, JBVNL directed (July 2013) the agencies to prepare DPRs in two parts *viz.*, one for those works that could be covered under the RGGVY (XII FYP) (called Part-B) and another for all remaining works in accordance with the contract (called Part-A). LoIs were issued in March 2014 and Letters of Award (LoA) were issued between October 2014 and January 2015.

The agencies submitted (December 2013 to January 2014) all DPRs (Part B) for 24 districts with project cost of ₹ 4,879.16 crore which were recommended (January -February 2014) by SLSC for further submission to REC. Of these, JBVNL uploaded DPRs of only 23 districts (except Simdega) with project cost of ₹ 4,714.71 crore on the web portal of REC for

¹⁴ GPS/GIS survey, evaluation of distribution system, existing APL and BPL connection and expected APL and BPL connection to be provided.

¹⁵ MECON- ESAs Ranchi and Palamu, RECPDCL- ESA Dhanbad, Jamshedpur and Dumka and AKS- ESA Hazaribagh.

¹⁶ 1.54 *per cent* for ESA Ranchi, 1.56 *per cent* for ESA Palamu, 0.99 *per cent* for ESA Dhanbad, Jamshedpur and Dumka and 0.89 *per cent* for ESA Hazaribagh (excluding service tax)

¹⁷ JBVNL calculated amount of contract value for interim payment which was finally to be linked with the approved cost of DPR.

approval by GoI. Against these, GoI approved the projects of only 17 districts for ₹ 1,260.92 crore (38.32 *per cent*) against the SLSC recommendation of ₹ 3,290.07 crore for these districts. Projects of the remaining six¹⁸ districts with project cost of ₹ 1,424.63 crore were not approved for reasons discussed in **paragraph 2.4.1**.

Upon introduction of DDUGJY, JBVNL requested (December 2014) all the three agencies for collection of data regarding requirement of infrastructure for all existing and prospective agricultural consumers so that the same may be used for preparing separate DPR for ensuring easy financing of projects under DDUGJY. The agencies submitted (July 2014 to September 2016) data and DPRs (Part A) worth ₹ 6,333.77 crore¹⁹ to JBVNL. However, on the request of JBVNL to submit separate DPRs for DDUGJY, two agencies (MECON and RECPDCL) did not respond and ultimately M/s AKS submitted (March 2015) separate DPRs worth ₹ 5,813.87 crore for DDUGJY of all 24 districts on verbal request of JBVNL. Of these, GoI sanctioned projects worth ₹ 3,722.12 crore for financial assistance under DDUGJY for all 24 districts.

Scrutiny of DPRs, contract documents, contractor bills and other related records revealed the following deficiencies:

2.4.1 GoJ deprived of GoI grant under RGGVY (XII FYP)

As discussed above, DPRs of four districts (Garhwa, Palamu, Latehar and Chatra) worth ₹ 1,418.20 crore were submitted (February 2014) to GoI but were not approved on the ground that works of RGGVY(X FYP) were not complete in these districts. DPRs (₹ 233.68 crore) of two districts (West Singhbhum and Dumka) were not sanctioned by GoI as REC had evaluated that all BPL households were electrified and no additional infrastructure was required in these districts though proposal for electric connection to 75,995 and 30,108 BPL consumers respectively was included in the DPRs. DPR of Simdega was not uploaded on the web portal of REC, as required, for reasons not available on record.

Thus, due to non-completion of works of RGGVY (X FYP) in four districts, inability of JBVNL to convince REC regarding electrification of left-out BPL households in two districts and failure to upload DPR of one district, GoJ was deprived of GoI grant equivalent to 90 *per cent* of the sanctioned cost as admissible under RGGVY. Later on, DPRs of these seven districts were approved (August 2015) along with the other 17 districts under DDUGJY where admissible GoI grant was 60 *per cent* only.

¹⁸ Garhwa, Palamu, Latehar, Chatra, West Singhbhum and Dumka

¹⁹ ₹ 1,724.24 crore for ESA Ranchi, ₹ 1,427.68 crore for ESA Medninar, ₹ 2,302.00 crore for ESA Hazaribagh, ₹ 137.40 crore for ESA Dhanbad, ₹ 262.15 crore for ESA East Singhbhum and ₹ 480.31 crore for ESA Dumka.

GoJ failed to obtain GoI grant of ₹ 182.68 crore²⁰ on DPR value of ₹ 1,589.08 crore of seven districts, due to non-sanction of projects under RGGVY (XII FYP) considering 38.32 *per cent* of value of DPRs as was sanctioned in 17 districts. Further, expenditure of ₹ 4.86 crore incurred on preparation of DPRs of these seven districts became unfruitful.

The Management/Department stated (March/October 2021) that JBVNL had prepared and submitted the DPRs to REC and had no control over the sanction of the projects.

The facts remains that DPRs of seven districts were not sanctioned as JBVNL (i) had not completed works under RGGVY (X FYP) (4 districts), (ii) could not convince REC regarding left-out BPL consumers (2 districts) and (iii) failed to upload DPRs (one district).

2.4.2 Expenditure on preparation of DPRs

REC Power Development and Consultancy Ltd (RECPDCL): RECPDCL submitted (July 2014) incomplete DPRs (Part A) for 11 districts as it did not contain complete details and documents. JBVNL paid (September 2016 to November 2016) ₹ 1.37 crore (14.89 *per cent*) against claim of 60 *per cent* (₹ 5.46 crore) of draft DPR cost (₹ 919.72 crore). The payment was made on request of the RECPDCL as encouragement to rectify shortcomings observed by JBVNL which had no relevance since the DPRs of these 11 districts were already submitted (March 2015) by M/s AKS on verbal instruction of JBVNL.

Thus, JBVNL paid ₹ 1.37 crore to RECPDCL even though it was privy to the information that DPRs had already been submitted by M/s AKS six to eight months before the payment and resulted in infructuous expenditure.

MECON and M/s AKS: MECON and M/s AKS submitted DPRs of Part A for ₹ 5,453.92 crore²¹. From these DPRs, M/s AKS prepared DPRs of DDUGJY and JSBAY which were sanctioned (August 2015 and March 2017) for projects worth ₹ 4,794.80 crore²². However, against the claim of ₹ 61.37 crore²³ by both agencies, JBVNL accepted (January 2019) admissible claim of only ₹ 16.57 crore²⁴ curtailing the claim on account of non-conducting of survey and non-sanction of DPRs of four districts under

²⁰ ₹ 1,589.09 crore x 38.32 *per cent* x (90-60) *per cent* = ₹ 182.68 crore

²¹ ₹ 1,724.24 Crore for ESA Ranchi and ₹ 1,427.68 crore for ESA Medininagar and ₹ 2,302 crore for ESA Hazaribagh.

²² ₹ 816.78 crore under DDUGJY and ₹ 858.46 crore under JSBAY for ESA Ranchi, ₹ 714.83 crore under DDUGJY and ₹ 512.64 crore under JSBAY for ESA Medininagar and ₹ 772.98 crore under DDUGJY and ₹ 1,119.11 crore under JSBAY for ESA Hazaribagh.

²³ Mecon - ₹ 45.3 crore and M/s AKS - ₹ 16.07 crore

²⁴ Mecon - ₹ 6.93 crore and M/s AKS ₹ 9.64 crore

RGGVY (XII FYP)²⁵. However, M/s AKS was paid (October 2017) only ₹ 4.83 crore while no payment was made to MECON (October 2020).

It was further seen that M/s AKS prepared DPRs for DDUGJY and JSBAY as additional work on the verbal request of JBVNL but the modified work order was not issued as of July 2020. As such liability of JBVNL towards M/s AKS on account of this additional work was not ascertainable though projects of DDUGJY and JSBAY had been sanctioned and were under progress. However, M/s AKS had also submitted (January and March 2017) claim of ₹ 18.45 crore.

Further, AKS being an MSME enterprise, JBVNL was liable to pay interest of ₹ 3.52 crore on dues as per section 16 of the MSME Act, 2006 which stipulates that delay in payment beyond 45 days of submission of bill shall attract compound interest at the rate of three times of the bank rate notified by RBI on monthly outstanding dues for the period during October 2017 to October 2020

While accepting the audit observation, the Management/Department stated (May/October 2021) that part payment was made to comply the short comings in the DPRs as the data of RECPDCL was not in accordance with the requirement of LOA. Further, Management/Department accepted that work order for preparation of DPRs of DDUGJY by M/s AKS was not issued and stated that payment is still under consideration.

The reply of Management/Department regarding part payment to RECPDCL is not acceptable as there was no valid reason for payment to RECPDCL as DPR was already prepared by M/s AKS prior to payment and JBVNL itself has recognised that there were several shortcomings in the DPR prepared by RECPDCL.

2.4.3 Preparation of DPRs without field survey

As per guidelines of DDUGJY, the utility (PIA) was to formulate district/circle/zone wise DPRs based on detailed field survey and latest approved schedule of rates (SoR). DPRs were to be forwarded to SLSC or Monitoring Committee (MC) with an undertaking by the JBVNL that the DPRs were based on field surveys and updated SoR.

Audit observed that JBVNL did not maintain any database regarding status of electrification of villages except consumer database. Data and DPRs submitted by the agencies were scrutinised and approved by JBVNL and forwarded to SLSC/ MC for approval under GoI schemes. However, scrutiny of records in the test-checked districts revealed discrepancies in number of villages proposed in the DPRs for approval by GoI (also approved) and

²⁵ On the perception that in preparation of DPRs, survey and remaining components would be 50 *per cent* each, thereby deducting 40 *per cent* of survey component.

number of villages proposed by TKCs engaged for executing the rural electrification projects after field survey as shown in **Table 2.1**:

Table 2.1: Discrepancies in number of villages proposed in DPRs and found in field survey

| Name of the district | Name of the scheme | Villages to be electrified as per DPRs | Villages to be electrified as per field survey by TKCs | Villages proposed for electrification in DPR but found otherwise by TKCs | |
|----------------------|--------------------|--|--|--|-----------------------------|
| | | | | Villages found already electrified | Villages found non-existent |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Dhanbad | DDUGJY | 277 | 339 | 0 | 0 |
| | RGGVY (XII FYP) | 1,010 | 619 | 41 | 172 |
| Giridih | DDUGJY | 1,329 | 1,665 | 0 | 0 |
| | RGGVY (XII FYP) | 2,234 | 954 | 18 | 0 |
| Deoghar | RGGVY (XII FYP) | 1,793 | 1,686 | 49 | 32 |
| | DDUGJY | 470 | 543 | 33 | 03 |
| Palamu | DDUGJY | 1,244 | 1,711 | 9 | 159 |
| Dumka | DDUGJY | 714 | 2,633 | 61 | 231 |
| Pakur | DDUGJY | 243 | 506 | 49 | 81 |
| | RGGVY (XII FYP) | 1,158 | 615 | 0 | 0 |
| Ranchi | DDUGJY | 832 | 528 | 0 | 0 |
| | RGGVY (XII FYP) | 1,269 | 741 | 0 | 0 |
| Total | | 12,573 | 12,540 | 260 | 678 |

(Source: Compiled from DPRs and from data furnished by ESCs of JBVNL)

From **Table 2.1**, it can be seen that in the seven test-checked districts, 938 villages (seven per cent) were found either electrified (260) or non-existent (678) by TKCs though these villages were proposed for electrification by JBVNL and recommended by SLSC to REC.

Thus, DPRs were prepared without conducting actual surveys which led to discrepancies in the actual number of unelectrified villages. SLSC also did not analyse the DPR in detail before forwarding it to REC.

Further, JBVNL did not conduct any field survey to identify the beneficiaries eligible for free connection under SAUBHAGYA.

While accepting the audit observation, Management/Department stated (May/October 2021) that data had been prepared by agency during preparation of DPRs of RGGVY (XII FYP) and DDUGJY. Management/Department, further, stated that villages were not included in DPR due to reduced sanctioned cost and reduced recasted quantity and subsequent decision to cover villages/habitations in saturation mode to meet the goal of MoP to provide connection to each and every households.

The reply is not acceptable as even after reduced sanctioned cost and recasted quantity the number of villages as per survey by TKC under DDUGJY were found excess in six out of seven test-checked districts than those to be electrified as per DPR. Further, reply was silent on villages already electrified and non-existent villages found during survey by TKC.

Proper field surveys and maintenance of comprehensive database is the backbone of project planning. JBVNL failed to conduct proper field surveys or maintain a database which was fraught with the risk of ineligible beneficiaries getting connections and wasteful expenditure. Responsibility needs to be fixed on erring officials for this failure.

To sum up, JBVNL never conducted field surveys to identify beneficiaries nor did they create a validated database of unelectrified villages/households. While conducting field survey in the seven test-checked districts before commencing electrification works, the Turnkey Contractors (TKCs) found that 260 electrified villages and 678 non-existent villages were included in the DPRs. JBVNL was deprived of GoI grant amounting to ₹ 182.68 crore due to non-completion of RGGVY (X FYP) in Chatra, Garhwa, Latehar and Palamu districts, failure to pursue issue of left out BPL households in Dumka and West Singhbhum districts with REC and non-uploading of DPR of Simdega district. JBVNL paid ₹ 1.37 crore to RECPDCL to rectify shortcomings in DPRs even though DPRs of these 11 districts had already been submitted by another agency six to eight months earlier resulting in infructuous expenditure.