Chapter 4

Programme Implementation

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4 Chapter

The R-APDRP scheme was to be implemented through the execution of Part A and Part B projects as brought out in the preceding Chapters. The Utilities were required to formulate DPRs, on their own or through empanelled consultants, for each of these projects and forward the same to the PFC through Distribution Reforms Committee (DRC). PFC was to present the DPRs to the Steering Committee and get the projects executed through turnkey contracting. Power Finance Corporation (PFC) was required to empanel IT consultants and IT implementing agencies for Part A projects for selection by the Utilities through competitive bidding. The findings of Audit with respect to the implementation of the projects (Part A and B projects) are presented in the following paragraphs.

4.1 Preparatory activities

In the first meeting of the Steering Committee held on 20 October 2008, a schedule was drawn up for carrying out basic activities relating to formulation and implementation of the projects under the Scheme. The completion of these activities as per the decided timelines was important for the timely implementation of the project and the success of the R-APDRP scheme. Delay in the completion of these activities would lead to a cascading delay in the completion of the projects and the realization of the envisaged benefits of the projects.

The schedule for the activities and achievement of targets against the projected schedule are given as under:

Table 5 : **Projected schedule of basic activities and achievement thereagainst for formulation and implementation of the projects**

Activity	Scheduled date	Actual date of completion
Empanelment of IT Consultants for Part A projects	28 November 2008	9 January 2009
Empanelment of implementing agencies (ITIA)	15 January 2009	20 March 2009

Preparation of Model DPRs for Part A projects	30 November 2008	9 January 2009
Preparation of Model DPRs for Part B projects	30 January 2009	29 June 2009
Empanelment of SCADA consultant	31 March 2009	22 December 2009
Preparation of Model DPRs for SCADA projects	30 September 2009	14 July 2010
Empanelment of Third Party Independent Evaluation Agencies	15 January 2009	30 November 2009
Appointment of consultant for preparation of capacity building programme of distribution personnel	15 April 2009	9 September 2009
Empanelment of Partner Training Institutes	30 September 2010	18 October 2011

There were delays ranging up to 13 months in finalization of preparatory activities for implementation of the programme. The delays in preparatory activities had a cascading effect on the actual implementation of the scheme.

MOP stated (March 2016) that most of the preparatory activities were carried out by PFC with the help of a Process Consultant as R-APDRP was first of its kind of IT enablement initiative by GOI in the urban distribution sector and detailed deliberations and due diligence were required in empanelment of consultants/agencies and preparation of bid documents/ model DPR formats etc. As the IT intervention in distribution was being taken up on a large scale for the first time in the country, delays in implementation of the programme could mainly be attributed to delay in finalization of tenders by utilities; disputes and court cases; difficulty faced in various activities due to complex technical problems as well as skilled manpower constraints etc. and not the preparatory activities for the implementation.

The reply of MOP needs to be viewed in light of the fact that the delays pointed out by Audit were with reference to the target dates fixed by the Steering Committee for various activities to be carried out under the Scheme taking into consideration the nature, scope and quantum of work involved in these activities.

4.2 Appraisal of DPRs

As per clauses 4.0, 10.0 and 10.2 of the R-APDRP Scheme, the Utilities were to prepare the DPRs for the projects either by themselves or through IT consultants appointed for the purpose. The DPRs were then to be presented to the Distribution Reforms Committee (DRC), under the Chairmanship of the Chief Secretary/Principal Secretary/Secretary Power/ Energy, of the respective states for approval. The approved DPRs were to be forwarded to PFC, which was to appraise the DPRs techno-economically before presenting them to the Steering Committee for approval. The Steering Committee under the Chairmanship of the Secretary (Power) would sanction the projects, including modifications or revision of estimates, monitor and review the implementation of the Scheme.

In the CAG's Report No. 16 of 2007, it was observed that an average of 71 projects were sanctioned per meeting of the Steering Committee and it was recommended that the Ministry take steps to ensure critical examination of all the DPRs by the Steering Committee for technical and financial feasibility before approval. Audit noticed that the average number of projects sanctioned per Steering Committee meeting for R-APDRP scheme, had, in-fact, increased to 121 with 2,774 projects costing ₹ 37,427.08 crores being sanctioned in 23 meetings of the Steering Committee held during February 2009 to February 2014 as detailed in ***Annexure - VI***.

The observations of Audit with regard to the appraisal of DPRs are presented in the following paragraphs.

4.2.1 Sanctioning of projects not recommended by State DRCs

Audit observed that 553 projects under the Scheme were sanctioned without prior scrutiny/ approval by the State DRCs, as required. The details of the projects so approved are presented as ***Annexure - VI***.

MOP stated (March 2016) that the projects were sanctioned by the Steering Committee even when there was no prior scrutiny by DRCs to expedite project implementation and added that the project sanction letters were issued only after submission of DRC recommendations. It was further added in the exit conference (May 2016) that no funds were released for any of the projects without receiving the formal approval of the DRC.

The reply of the Ministry needs to be considered in light of the fact that once the projects were approved by the Steering Committee, approval of DRCs became a mere formality. Audit could not draw an assurance that project proposals were critically examined at DRC/Steering Committee level.

4.2.2 Non – preparation of DPRs as per the Model DPR

Clause 3.4 of the QA stipulated that PFC would prepare model DPR formats for Part-A and Part-B projects. The model DPRs indicated, *inter alia,* items of work which could be included in the individual projects.

It was, however, noticed that:

- In five[3] out of 29 States, DPRs had included inadmissible items of work and excluded required items of work from the scope of the project as indicated in ***Annexure - VII.***
- DPRs in respect of three[4] states did not indicate implementation schedule required as per the Model DPR.

Audit also noticed in the test checked projects that instead of vetting the facts and figures independently before recommending the projects for approval of Steering Committee, PFC had made certain assumptions such as Utility had followed the DPR Guidelines while preparing the DPRs, Utility had considered approved benchmark prices/scheduled rates in DPR, benchmark cost had been derived (in the absence of awarded cost) based on market data, feedback from Utilities etc.

MOP stated (March 2016) that all Utilities are following R-APDRP guidelines for implementation of Part A projects and that detailed appraisal procedure was followed by PFC and formats/DPRs were standardised. PFC in its reply (November 2015 and February 2016) stated that these were not assumptions but declarations.

The reply of Ministry does not address the anomalies noticed in Audit. Further, the 'Executive Summary' in respect of the DPRs, submitted to the Ministry of Power by the PFC specifically mentioned that PFC had made these assumptions.

4.2.3 Projects under APDRP continued under R-APDRP without being completed / short closed

Clause 2.3 of the R-APDRP guidelines provided for sanction of projects only after completion or short closure of ongoing APDRP projects. The Utilities were required to

[3] Assam, Gujarat, Rajasthan, Tripura and Uttar Pradesh
[4] Meghalaya, Rajasthan and Sikkim

submit completion certificates for the works executed under X Plan APDRP projects which were under implementation.

It was observed that in Jharkhand, Part A projects in 30 towns were sanctioned (September 2009) by MOP after Jharkhand State Electricity Board (JSEB) intimated (February 2009) that all the packages of previous APDRP scheme in respect of the R-APDRP towns have already been completed / short closed. It was, however, observed in Audit that 14 projects undertaken under APDRP were under various stages of completion. Moreover, DPRs for the Part B projects in respect of these towns were approved by MOP in September 2013 although closure plan of the ongoing APDRP projects were not submitted**.**

MOP stated (March 2016) that R-APDRP projects have been sanctioned based on the certificate given by the Utility that X Plan projects in the concerned project area have been completed/ short closed.

Thus, it is clear that MOP had no independent mechanism to ensure that X Plan APDRP projects were completed/short closed before taking them under R-APDRP although APDRP projects were also sanctioned and implemented under their guidance.

4.3 Delay in calling of tenders and award of work

Audit noticed cases where Part A project DPRs were submitted for approval three years after inception of the scheme, even as the schedule of completion of Part A projects was three years. Delays up to 52 months in calling of tenders and award of work by the Utilities have been noticed in 16 States in Part A and Part B projects. Even DPRs were formulated late. The delay in these activities resulted in delayed completion of projects under the Scheme. The cases of delays noticed in various States are presented as ***Annexure - VIII***.

MOP stated (March 2016) that there is no timeline for DPR formulation and that delay in calling of tenders and award of work by the utilities etc. were brought to the Utilities' notice regularly through correspondence/meetings/workshops etc. for expeditious implementation of the programme. PFC conducts monthly review meetings with the representatives of utilities for speedy implementation of the programme. It was further stated that keeping in view the delays faced by the Utilities due to size and complexities involved in the implementation of the programme, an extension in completion period from 3 to 5 years was accorded by CCEA, which also authorised Steering Committee for grant of further extensions on case to case basis.

While MOP may have taken steps to ensure prompt appraisal of DPRs and the timely completion of project, the fact remains that there were delays of up to 52 months in the formulation of DPRs, calling of tenders and award of work by the Utilities and the projects were not complete even after six years of implementation of the Scheme.

4.4 Non – prioritisation of projects

Para 4 of the scheme guidelines required that the order of priority of the projects was to be indicated by the Utilities while forwarding the DPRs to PFC. However, the basis on which the projects were to be prioritised was not stipulated in the guidelines.

It was observed in audit that in 11 States[5], priority of the projects was not indicated. Further Audit noticed that in **Jharkhand**, though priority was decided, it was not followed in the execution of the works.

MOP stated (March 2016) that DPRs, as and when received by PFC from the Utilities, were appraised and submitted to the Steering Committee for sanction. Prioritisation was done at the Utilities' end.

While it may be true that the prioritisation of projects is the responsibility of the Utilities, the fact remains that PFC being the Nodal Agency should have ensured the prioritisation of projects as stipulated in the scheme guidelines to ensure optimal utilisation of the scheme funds.

4.5 Non-adherence to the approved DPR (Change in project area)

Audit noticed that one project in Tripura and two projects in Uttar Pradesh were not executed in line with the approved DPR as detailed below:

Table 6 : **Projects not executed as per approved DPR**

S.No.	State	Proposed Project in DPR	Executed Project
1	Tripura	Augmentation of transformer capacity at Rampur Sub-Station	Augmentation of transformer capacity at Khayerpur sub-station
2	Uttar Pradesh	Construction of Sub-Station at Vikram Colony, Aligarh	Construction of Sub-Station at Lal Diggi, Aligarh
		Augmentation of transformer capacity at Town hall, Hapur town	Augmentation of transformer capacity at Delhi Road, Hapur town

[5] Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, J&K, Madhya Pradesh (Eastern DISCOM), Maharashtra, Manipur, Kerala and West Bengal

MOP stated (May 2016) that the change in location of a project should not be objected to so long as the project area is the same.

While the project area may be the same, the fact remains that the projects were not executed in line with the approved DPR.

4.6 Delay in start of projects due to non – provision of infrastructure to the contractors

In 11[6] out of 29 States, works were not started in time as the Utilities did not provide basic infrastructure like land / building required for execution of the projects to the contractor. This had contributed to delay in completion of the projects.

MOP stated (March 2016) that for this reason, the CCEA/Steering Committee granted further extension for completion of these projects.

In view of the significant delays in scheme implementation, MOP should take appropriate steps to ensure minimisation of the delays.

4.7 Revision of costs without the approval of the Steering Committee

The maximum limits for variations in the pre – award stage and the post – award stage under different circumstances and the procedure to be followed in each of the cases were prescribed vide guidelines approved by the Steering Committee in its 14th Meeting held on 26 November 2009. The same are presented as ***Annexure - IX***.

However, it was observed in Audit that in seven States[7], there was variation in excess of prescribed limits in the DPR costs approved by the PFC. The details of these works are given in ***Annexure - X***.

MOP stated (March 2016) that they were restricting the release of funds to the sanctioned cost or revised awarded cost whichever is lower and that the Integrated Power Development Scheme[8] (IPDS) guidelines allowed no further cost escalation/enhancement. As regards the additional quantities approved for implementation, MOP stated that distribution system being dynamic in nature, the

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6 Andhra Pradesh, Assam, Chhattisgarh, Goa, Jammu & Kashmir, Himachal Pradesh, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and Uttarakhand.

7 Assam, Bihar, Gujarat, Jharkhand, Kerala, Manipur and Uttar Pradesh.

8 Government of India had launched a new Scheme 'Integrated Power Development Scheme' (IPDS) in December 2014 and R-APDRP scheme, as approved by CCEA for continuation in XII and XIII Plans, was subsumed in this scheme as a separate component relating to IT enablement of distribution sector and strengthening of distribution network.

requirement of meters / modems etc. varies, depending upon the expansion of the system.

The assurance of MOP regarding correction in IPDS guidelines is noted. While requirements of distribution systems could indeed be dynamic, the limits of such variations had been laid down in the R-APDRP guidelines which ought to have been adhered to.

4.8 Data Centre and Disaster Recovery Centre

In the eighth meeting of Steering Committee held on 13 February 2009, it was decided that each state will have one data centre (DC) for all the Utilities in the state and also one Disaster Recovery Centre (DRC). The DC and DRC were required to be located in different seismic zones to ensure safety of the data in at least one place in case of natural disasters like earthquakes etc. In the 14th meeting of the Steering Committee held on 26 November 2009, it was decided that States falling entirely in one seismic zone may be allowed to have both the DC and the DRC in the same seismic zone provided DRC is hosted in an earthquake resistant building. It was seen that these guidelines were not followed in some states as indicated below:

- The initial proposal was for setting up DRC for **Assam** at Kolkata in a different seismic zone. However, during actual execution, the location of DRC was shifted from Kolkata to Agartala which was in the same seismic zone as the DC (Guwahati). The reason for shifting the location of DRC from Zone-III to Zone-V was not available on record. Further, the capability of the DRC building to withstand the earthquakes was not verified/ certified.

  MOP stated (March 2016) that common DC and DRC for NER region are located at Guwahati and Agartala respectively. It was added that the Utility has confirmed to the PFC that the DRC building is structurally sound and would assess the earth quake resistance parameter of the DRC building in consultation with the State Public Works Department (PWD) and take remedial measures as per their suggestions.

- In **Jharkhand,** the DC and DRC were in the same seismic zone. Further, the absence of proper maintenance and deficiency in the infrastructure may impede continuous operation of the DC and DRC.

MOP accepted the facts and stated (March 2016) that the issue may be taken up with the Utility.

4.9 Non – adoption of turnkey contracting

Para 4.3 of the QA envisaged that the Utility shall implement Part A projects sanctioned under this programme on turnkey basis by appointing the IT implementing agency (ITIA). Para 4.4 of the QA envisaged that Part B projects would also be implemented on turnkey basis.

It was, however, observed that in seven States[9], the Utilities did not award contracts on turnkey basis or got the works executed on partial turnkey basis, thereby negating the purpose of turnkey contracting, viz., identification of single point responsibility. The State wise deficiencies noticed during audit examination are given in ***Annexure - XI***. It is pertinent to mention here that non- adoption of turnkey contracting was highlighted in the CAG's Report no. 16 of 2007 on APDRP scheme and the Public Accounts Committee in its 77th Report (14th Lok Sabha) had also recommended that during XI Plan period, the projects should be awarded only on turnkey basis.

MOP, while accepting the observation, stated (March 2016) that under R-APDRP guidelines, Part B projects were to be implemented preferably on turnkey basis. It was added that Utilities decide the mode of implementation of projects based on their experiences/expertise/field conditions/ packaging.

The reply of MOP is not acceptable as Para 4.4 of the Model Quadripartite Agreement clearly stipulated that 'Utility shall prepare DPRs of Part B projects in-house or by appointing the Consultant from the panel prepared by the Nodal Agency and implement the same on turnkey basis'.

4.10 Additional expenditure due to re-tendering

Additional expenditure had to be incurred in three States to the tune of ₹ 61.31 crores due to re-tendering as detailed below:

[9] Assam, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Telangana and Sikkim

Table 7 : **Cases of extra expenditure due to re-tendering**

(₹ in crore)

State	Excess expenditure	Reason for re – tendering
Haryana	55.59	Non – finalisation of tender within the bid validity period due to seeking of clarification on negotiation with L-1 from PFC by DISCOM .
Karnataka	4.70	Earlier tender cancelled by Board of Directors without documenting any reason and same work was awarded on single tender basis.
Tripura	1.02	Utility had erroneously invited restricted tenders which were cancelled on the instructions of Board of Directors.

MOP stated (March 2016) that PFC is restricting release of funds to sanctioned cost or awarded cost, whichever is lower.

While the assurance of MOP is noted, it does not address situations where inefficiency on part of the contracting Utilities has resulted in additional costs though the sanctioned cost for the project has not been breached.

4.11 Different rates for same items

It was seen during Audit that the works were awarded to contractors at different rates for same items of work being executed in the same State at the same time as detailed below:

Table 8 : **Extra Expenditure due to different rates for same items**

(₹ in crore)

Sl. No.	State	Work	Extra Expenditure
1	Assam	Dibrugarh and Mangaldoi Electrical Circles (4 project areas each)	3.94
2	Bihar	Part B works of Patna town (Package B & C)	7.07
3	Punjab	Cost of transformers in Ludhiana East and Ludhiana West	4.83
4	Tamil Nadu	Distribution strengthening works for Chennai (North) and Chennai (South)	1.52

MOP stated (March 2016) that PFC had not prescribed any Standard Bidding Documents for Part B works. Utilities are adopting their own Bidding Documents for award of Part B Projects.

The reply needs to be considered in the context of lack of due diligence on part of the Utility before tendering of work. This aspect needs to be adequately identified through the mechanisms laid down by MOP.

4.12 Shortcomings in contract entered into by Utilities

In following cases, the conditions of the contract were not adhered to:

Assam

In Nagaon Electrical Circle, the Utility awarded the work on the basis of lump sum prices. However, during actual execution, material worth ₹ 0.63 crore was not supplied by the Contractor and had to be arranged by the Utility at its own cost. Since, the tenders were evaluated based on the lump sum prices for the entire scope, the decision of the Utility to supply material at its own cost was not justified and resulted in extension of undue benefit to the contractor.

Sikkim

- Energy and Power Department (EPD) had appointed National Power Training Institute (NPTI) for preparation of DPRs for Part B project. The agreement prohibited the transfer or assignment of work either wholly or in part, by any party without the written consent of the other party. However, NPTI assigned the contract to M/s. Feedback Ventures Private Limited.
- EPD awarded the installation of feeder panels at 66/11 KV Switch Yard at 5th Mile and 11/11 KV Switch Yard at Deorali to Sinhal Infrastructure. However, physical verification at Upper Tadong indicated that the work had been done by a contractor, M/s Pema Thutem Sherpa instead of Sinhal Infrastructure in violation of the Agreement.

Tamil Nadu

The strengthening of distribution works at Dindigul, Pudukottai and Aranthangi was awarded to IVRCL Limited for a gross value of ₹ 38.71 crore to be completed by 27 June 2013. As the contractor failed to show any progress even after nine months from the scheduled date of completion, the contract was terminated in November 2014. Subsequently the work was awarded to M/s. Herodex Power System Private Limited, Nasik for ₹ 42.98 crore. However the contract with IVRCL Limited did not provide for recovery of the differential cost from the defaulting contractor and as such, the extra cost incurred by the Utility could not be recovered.

Tripura

The work pertaining to implementation of Part B project under Indranagar Project Area was awarded (14 October 2014) to M/s Horizon Hi-tech Engicon Limited at a cost of ₹ 1.62 crore. The agreement provided that the contractor could not assign or sub-let the contract without obtaining written approval of the Engineer in charge. A scrutiny of the records revealed that some materials were issued to M/s JMP technical services who was the sub-contractor of M/s Horizon Hi-tech Engicon Limited. However, the Utility was unable to produce any document where approval was given to the contractor to sub-let the contract.

MOP (March 2016) did not offer any comments on these observations and stated that they are issues between the Utilities and the Contractor.

The reply of MOP needs to be seen in light of the fact that the breach of contract conditions may lead to cost escalations which would adversely impact the R-APDRP programme. This needs to be monitored by the MOP to ensure effective implementation of the scheme.

4.13 Quality Control

The observations of Audit with respect to the quality of material used in the projects executed under the R-APDRP are presented below:

4.13.1 Concerns regarding procurement of material by Utilities

In the following instances, Audit noticed procurement of material by Utilities which were not as per approved DPR specifications:

- In **Andhra Pradesh**, against the requirement of 92 Category B meters (Boundary Meters) 7,350 Category B meters were procured (July & September 2011). Subsequently it was decided (December 2012) to convert them into Category C meters (HT consumer meters) resulting in avoidable additional cost of ₹ 0.40 crore.
- In **Meghalaya**, Meghalaya Energy Corporation Limited (MeECL) procured Category B meters instead of Category C meters resulting in unfruitful expenditure of ₹ 0.50 crore.
- In **Bihar**, the Utility awarded a contract for supply of 10 MVA power transformers at a cost of ₹ 8.05 crore on the basis of test report of Central Power Research Institute (CPRI) which was found to have been manipulated by the contractor.

- In **Punjab**, for execution of Part B project on turnkey basis, Punjab State Power Corporation Limited (PSPCL) had, inter alia, issued (May 2013) four work orders to M/s L&T Limited which required radiators in the transformers to be Electric Resistance Welded (ERW) elliptical "tube type". However, at the request of the contractor, the type of radiators of the 500 KVA and 200 KVA transformers were changed from ERW elliptical "tube type" to "fin type" despite the fact that PSPCL had itself stopped purchase of distribution transformers with "fin type" radiators due to oil leakage problems.

MOP did not offer any comments on the audit observations.

4.13.2 Failure of the items/systems leading to delay in completion of the projects

Instances of failure of items/systems leading to delay in completion of projects were noticed in following States as indicated below.

- In **Karnataka**, as per Request For Proposal (RFP), a total of 59,520 GPRS modems had to be supplied by the ITIA for all Electricity Supply Companies (ESCOMs), which increased to 84,640 during survey. After installation of modems, problems were noticed in communication of information through the modems and there was a high failure rate. The matter was referred to Central Power Research Institute by Bangalore Electricity Supply Company (BESCOM) to identify the reasons for failure of modems. Though the Utility followed up the issue of poor quality of modems, the entire process took one year and nine months for new modems to be installed, thereby delaying the Scheme and delaying analysis of the results of meter readings including analyzing AT&C losses.

- In **Meghalaya**, out of 1,467 modems installed, 745 modems were not functioning. Five out of 19 Data Collection Units (DCUs) installed were not sending data to the Data Centre. This has resulted in delay in completion of the project.

- In **Madhya Pradesh**, at selected towns, materials such as distribution transformers (DT), cables, meters, polymer pin insulators etc., valuing ₹ 1.87 crore, installed under Part B works were found to be defective but were not replaced.

- In **Tripura**, in Part B Schemes for three project areas, the distribution transformers (DTs) were guaranteed for a period of 18 months from the date of receipt of materials in stores or 12 months from the date of installation. Out of the 80 DTs supplied under the agreement, six DTs were found damaged within the guarantee period. However, DTs were not repaired by the supplier (October 2015).

- In **Uttar Pradesh**, several incidents of poor performance of CCB Server had been reported in October 2014, January 2015 and February 2015. By March 2015, the problem had escalated but no Root Cause Analysis (RCA)[10] was done despite recommendation of IT Consultant (ITC).

MOP did not offer any comments on the audit observations.

4.14 Non-obtaining of suitable guarantees

It was seen that suitable guarantees were not obtained from the contractor for satisfactory functioning of the system after completion of the work in three States[11].

Manipur

- Letters of Awards (LOAs) for implementation of Part-B projects were issued (September 2013) to nine Turn Key Firms (TKFs) at total contract value of ₹ 357.16 crore, which, *inter alia*, stipulated that 15 *per cent* Contract Performance Guarantee (CPG) were required[12] to be furnished by the executing firms before commencement of work. However, the TKFs were allowed to execute the works without furnishing the required performance guarantee in violation of the terms of LOAs.

- Para 11 of LOA issued to M/s TCS for implementation of Part A projects stipulated that the firm should furnish bank guarantee from any Scheduled Commercial Bank towards performance guarantee at the rate of 10 *per cent* of the contract price. However, M/s TCS did not submit the required bank guarantee.

  Utility stated that the TKFs were asked to submit the performance guarantee, failing which an amount equivalent to 15 *per cent* of the contract price will be retained up

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[10] Root cause analysis (RCA) is a method of problem solving used for identifying the root causes of faults or problems.

[11] Manipur, Rajasthan and Tripura.

[12] Para 7.4 of LOAs for implementation of R-APDRP (Part-B projects) also provides that Contract Performance Guarantee (CPG) at the rate of 15 *per cent* of the contract price shall be furnished by the Turn Key Firms (TKFs) and the guarantee shall be valid up to 90 days after the end of Warranty period as specified in the bidding document.

to 90 days after the end of the warranty period. The reply is not acceptable as the company was required to collect the performance guarantee before commencement of work.

Rajasthan

Jaipur Vidyut Vitran Nigam Limited (JVVNL) in four turnkey contracts and Ajmer Vidyut Vitran Nigam Limited (AVVNL) in two turnkey contracts, accepted a lower composite bank guarantee than the *10 per cent* performance bank guarantee mandated in the model DPR. JVVNL and the Jodhpur Vidyut Vitran Nigam Limited (JdVVNL) also awarded Part B projects on turnkey/ Central Labour Rate Contract (CLRC) basis with work order value of ₹ 78.67 crore where performance guarantee at the rate of five *per cent* of the value of work order was obtained instead of 10 *per cent*.

Tripura

- The Utility did not obtain suitable guarantee from the contractors, for satisfactory functioning of the system after completion of the work, as detailed below:
  - Contracts for supply of 6 sq. mm Polyvinyl chloride (PVC) Cable for implementation of Part-B works were awarded (June 2014) to two contractors. Though the Utility allowed its contractors to submit 50 *per cent* of the performance guarantee in the form of Bank Guarantee and the balance 50 *per cent* as deductions from running bills; the same were not adhered to and these contractors were permitted to remit the entire amount of Contract Performance Guarantee (CPG) by way of pro-rata deductions from their running bills. As the contractors did not supply any material, the Utility did not have any scope for taking action on the contractors.
  - Further, the LOA issued to the contractors for implementation of various works under R-APDRP scheme stipulated, *inter alia*, that the successful bidder has to furnish CPG which was to be kept valid for 12 calendar months commencing immediately upon the satisfactory commissioning. It was observed that in nine out of the 16 project areas, the Bank Guarantees (BG) of ₹ 0.48 crore provided by the contractors expired before completion of the commissioning work.

MOP did not offer (March 2016) any comments on the observations but stated that implementation of Part A projects shall be treated as complete after verification by TPIEA-IT as per guidelines and accordingly conversion of loan into grant will depend upon satisfactory completion as verified by TPIEA-IT. Hence, all the issues related with Part A shall have to be addressed by Utilities before/during verification by TPIEA-IT so as to enable them to avail the benefit of conversion of loan into grant. In respect of Part B projects, it was stated that the conversion of loan into grant will depend upon Utilities achieving the AT&C loss reduction as per guidelines which will be duly verified by the Third Party Independent Evaluation Agency -Energy Accounting (TPIEA-EA) one year after completion of Part A IT and completion of Part B. Therefore, all the issues related with Part B shall have to be addressed by Utilities so as to enable them to avail the benefit of conversion of loan into grant.

The reply of MOP should be seen in light of the fact that bank guarantee was required to be obtained to ensure satisfactory completion of work by the contractors which is necessary for the achievement of the objectives of the scheme.

4.15 Inadequate Training to Employees of State Utilities as Capacity Building measures

As a part of Capacity Building measures, PFC empanelled 10 Partner Training Institutes (PTI) for imparting training to Level A&B employees of State Utilities (SUs) and 24 PTIs for imparting training to Level C&D employees of various SUs on different training themes. Specific themes of training were earmarked for each level of employees.

PFC incurred ₹4.56 crore on training of Level A & B employees and ₹ 17.47 crore on imparting training to Level C & D employees till March 2015. Audit observed that:

- No training was imparted to any Level A & B employee on the theme ‘Disaster Management, Electrical Safety Procedures and Accident Prevention’.
- Similarly, training on ‘Metering technology & Automatic Meter Reading (AMR) Application’ was not imparted to any Level C&D grade employees; and
- In **Gujarat** and **Uttar Pradesh** no Level C&D employees were imparted any training and no training was provided to any of the employees of Level A&B in **Manipur** and **Sikkim**.

Lack of trained employees would affect smooth implementation of the Scheme in the States.

PFC stated (October 2015) that no training was imparted as two PTIs empanelled for the above themes had not shown interest in conducting the programme and also for want of nominations from Utilities. PFC further stated (February 2016) that PFC identified various themes in a holistic manner that would be useful for the personnel of the SU engaged in implementation of scheme. It should be appreciated that themes were identified without taking into account IT capabilities of Utilities which varied from State to State depending upon their existing IT preparedness. It was added that within these identified themes, Utilities decided about their training needs based on their IT preparedness and sought training of their personnel accordingly from PFC. That these programmes helped in implementation of the scheme is visible by the fact that 1,121 towns (in 25 States) out of 1,409 across States have been declared 'Go-Live' under Part-A and 19 out of 21 data centres and 297 out of 1,258 towns have been declared completed under Part-B. Moreover, 14 States (including **Andhra Pradesh** and **Maharashtra**) have since declared 'Go Live' for all their towns which are communicating with Data Centres.

This does not address the concern that trainings which were identified were not imparted. Further, 1,121 towns were declared 'Go-Live' by state Utilities without any TPIEA verification which is still pending and thus the accuracy of the claims cannot be assured.

4.16 'Go Live' projects

Audit noticed that State Utilities had declared a number of Part A projects 'Go Live' though as per the project details available with MOP, none of them had yet been verified by TPIEA which was a pre-requisite for project completion. Of 1,412 towns where Part A projects were implemented, 1,121 towns (79 *per cent*), had been declared 'Go Live' as on November 2015.

Audit noticed the following in the context of declaration of 'Go Live' in these projects on the basis of a test check:

- MOP/ PFC had not set any benchmarks for declaration of 'Go Live' for the towns. In the absence of such benchmarks or verification by TPIEAs, the basis for declaration of 'Go Live' remained unclear.

- Audit noticed that even projects where expenditure incurred has been lower than 30 *per cent* have been declared 'Go Live'. The accuracy of the declaration needs to be viewed against the meagre expenditure on the projects.

- The installation of meters was not complete (as elaborated in Para 5.5.1 of the report) in the towns declared 'Go Live'.

- The percentage of communication of data by meters was found to be less than 85 *per cent* in eight States[13].

- As per the letter sent by **Telangana** and **Andhra Pradesh** Utilities to PFC intimating the declaration of towns as 'Go Live', it was mentioned that they were fine tuning the consumer indexing and handling, rectifying the meter side issues and that the energy audit reports were gradually being streamlined.

MOP stated (March 2016) that as per guidelines, completion of Part A project will be verified by Third Party Independent Evaluation Agency (TPIEA-IT) for declaring completion of Part A projects. The completion of Part A project declaration will have to be done for the whole State by the TPIEA-IT after completion of all towns within a State. Currently, verification process by TPIEA-IT is going-on in various States wherever 100 *per cent* towns have been declared Go-Live. Go-Live declaration made by the Utilities is an intermediate stage towards project completion. Utility being the owner of the project are declaring Go-live to their satisfaction. Payment schedule of ITIAs implementing Part A projects in various States is back loaded to the extent of about 40 *per cent* of contract value, due to which there is a mismatch between physical completion of projects and payments made to ITIA in many States.

The reply of MOP only confirms that neither MOP nor PFC have verified the 'Go Live' status in the part A projects but have depended entirely on the statement furnished by the Utility, which does not appear to be reliable as brought out above. Further, though

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[13] Andhra Pradesh, Bihar, Jharkhand, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Telangana.

nearly 79 *per cent* of the projects have been declared as 'Go Live', it was seen that in a number of projects, the AT&C losses have not been generated or have increased as brought out in the subsequent chapters. Even considering that payments to ITIAs were back loaded up to 40 *per cent*, the actual expenditure in some of the projects declared 'Go Live' were as low as 3-19 *per cent* (in 6 projects) and 20-30 *per cent* (183 projects) as detailed in ***Annexure – XII***.

Recommendation

3. Ministry should consider evolving a mechanism of reporting of achievement of milestones vis-à-vis targets by state utilities along with reasons for non-achievement and action taken.