FIFTEENTH KERALA LEGISLATIVE ASSEMBLY

COMMITTEE

ON

PUBLIC UNDERTAKINGS
(2023-26)

TWENTY NINETH REPORT

(Presented on 8th July, 2024)

SECRETARIAT OF THE KERALA LEGISLATURE

THIRUVANANTHAPURAM

2024

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On

Kerala State Electricity Board Limited

(Based on the Report of the Comptroller and Auditor General of India for the year ended 31st March, 2015)

CONTENTS

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(2023-26)

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INTRODUCTION

I, the Chairman, Committee on Public Undertakings (2023-26) having been authorised by the Committee to present the Report on its behalf, present this 29th Report on Kerala State Electricity Board Limited based on the report of the Comptroller and Auditor General of India for the year ended 31st March, 2015 relating to the Public Sector Undertakings of the State of Kerala.

The aforesaid Report of the Comptroller and Auditor General of India was laid on the Table of the House on 28-06-2016. The consideration of the audit paragraphs included in this report and examination of the departmental witness in connection thereto were made by the Committee on Public Undertakings (2021-2023) at its meeting held on 09.09.2021.

This Report was considered and approved by the Committee (2023-26) at its meeting held on 04.07.2024.

The Committee place on record its appreciation for the assistance rendered to them by the Accountant General (Audit), Kerala in the examination of the Audit paragraphs included in this Report.

The Committee wishes to express thanks to the officials of the Power Department of the Secretariat and the Kerala State Electricity Board Limited for placing the materials and information solicited in connection with the examination of the subject. The Committee also wishes to thank in particular the Secretaries to Government, Power Department and Finance Department and the officials of the Kerala State Electricity Board Limited who appeared for evidence and assisted the Committee by placing their views before the Committee.

E. CHANDRASEKHARAN,
Chairman,
Committee on Public Undertakings.

Thiruvananthapuram,
8th July, 2024.

REPORT
ON
KERALA STATE ELECTRICITY BOARD LIMITED

Audit Para 2.3(2014-15)

Implementation of Restructured Accelerated Power Development and Reforms Programme by Kerala State Electricity Board Limited.

Executive Summary

Introduction

Government of India (GoI), Ministry of Power (MoP) approved (September 2008) 'Restructured Accelerated Power Development and Reforms Programme' (RAPDRP) with the aim of restoring commercial viability of power distribution sector by putting in place appropriate mechanism so as to substantially reduce Aggregate Technical and Commercial (AT&C) loss.

Physical progress of projects

MoP sanctioned 43 projects each under Part A and Part B and three Supervisory Control and Data Acquisition (SCADA) projects for implementation in the State. As per the original guidelines, Part A and Part B were to be completed within three years. GoI extended the completion period to five years. However, the projects could not be completed within five years and was further extended by one more year.

Project formulation and planning

Implementation of RAPDRP was to be preceded by policy initiatives like undertaking measures for prevention of theft of power, constitution of Special Courts to deal with cases of power theft, etc. Action taken by KSEBL was, however, inadequate to supplement efforts under RAPDRP to bring down AT & C loss to 15 percent.

Fund Management

Non-opening of project-wise bank account and non-maintenance of project wise separate accounts led to diversion of funds and ineffective monitoring of the projects. KSEBL made irregular interest free advance payment of ₹14.50 crore to the turnkey contractor

Implementation of the projects

Delay in appointment of IT implementing Agency, problems in implementation of Meter Data Acquisition System, slow progress of Geographic information System and partial accomplishment of Customer Care Service Centre led to time overrun for more than three years. Erroneous price loading resulted in extra expenditure in implementation of Part A Project to the extent of ₹27 crore.

Delay in submission of DPRs and financial tie-up, delay in completion of work due to non-procurement of material like ABC, UG cables, deviation from DPR, delay and extra expenditure incurred in awarding and implementation of turnkey contract, constituted time overrun for more than three years and cost overrun to the extent of ₹129 crore, None of the SCADA project could be completed due to delay in completion of Part B projects.

Undue delay in completion of RAPDRP projects led to non-realisation of envisaged benefit of ₹202.70 crore by way of reduction AT & C loss

Introduction

2.3.1 Government of India (GoI), Ministry of Power (MoP) approved (September 2008) 'Restructured Accelerated Power Development and Reforms Programme' (RAPDRP) with the aim of restoring commercial viability of power distribution sector by putting in place appropriate mechanism so as to reduce Aggregate Technical and Commercial (AT&C) loss substantially. AT & C loss was planned to be reduced by plugging pilferage points, supply of quality power, faster identification of faults and early restoration of power, proper metering, strategic placement of capacitor banks and switches and proper planning and design of distribution network.

Coverage of area under RAPDRP was urban area-towns and cities with a population of more than 30,000. Projects under RAPDRP were to be taken up in two parts, Part A and Part B. Under Part A, Supervisory Control and Data Acquisition (SCADA) or Distribution Management System (DMS) shall also be installed in eligible towns and cities with population of more than four lakh and annual imput energy of 350 million units (MUs). The activities involved in Part A and Part B projects were as shown in Table below.

Table2.28: Activities under Part A and B projects

Activities under Part A project	
a	Implementation of Information Technology (IT) modules for collection of base line data to capture AT&C loss in a precise manner without manual intervention and also to plan and implement corrective measures in Part B.
b	Energy accounting and audit
c	Redressal of consumer grievances and establishment of IT enabled cosumer service centres, etc.
d	Implementation of SCADA or DMS, GIS based Consumer Indexing and asset mapping, etc.
Activities under Part B project	
a	Renovation, modernisation and strengthening of 11 kV[93] level substations, transformers/ transformer centres, re-conductoring of lines at 11 kV level and below, Load Bifurcation, Feeder segregation, Load Balancing, Aerial Bunched Conductoring in thickly populated areas, HVDS, installation of capacitor banks and mobile service centres, etc. In exceptional cases, where sub-transmission system is weak, strengthening at 33 kV or 66 kV levels may also be considered.

Execution of quadripartite agreement between power utility, GoI, PFC and State Government was a pre-requisite for release of funds under RAPDRP. Accordingly, a quadripartite agreement (MoA) was executed (August 2009) for implementation of RAPDRP in Kerala.

93 Kilovolt

In Kerala, 43 towns were eligible for implementation of RAPDRP, All the 43 projects submitted by Kerala State Electricity Board Limited (KSEBL) under Part A were sanctioned (November 2009) by GoI and 43 projects under Part B were sanctioned on various dates between 2010 and 2012, Further, SCADA was sanctioned by GoI for three eligible towns (Thiruvananthapuram, Ernakulam and Kozhikode)under Part A.

The main objectives of RAPDRP were to :

- reduce AT &C loss to 15 percent
- bring about commercial viability in the power sector
- reduce outages and interruptions.
- Increase consumer satisfaction.

Scope of Audit

2.3.2 The Performance Audit was conducted with a view to assess the performance of KSEBL in conceptualisation and implementation of RAPDRP with reference to the objectives set for the programme covering all 43 part A projects, three SCADA projects and 25 Part B projects from 1 April 2009 to 31 March 2015 on the basis of the documents/information maintained by Government of Kerala (GoK) and KSEBL.

Audit Objectives

2.3.3 The Main audit objectives were to assess whether:

- policy initiative and planning required for implementation of the programme were appropriate and adequate; and
- the programme has been implemented in an efficient effective and economical manner

Audit Criteria

2.3.4 The audit criteria has been taken from following sources:

- National Electricity Policy formulated under Electricity Act,2003;
- Memorandum of Agreement /Quadripartite Agreement;
- Guidelines issues by PFC/MoP;
- General Financial Rules;
- Detailed Project Reports;

- Work Orders;
- Minutes of Steering Committee meetings: and
- Orders and circulars issues by KSEBL and the Government

Audit Methodology

2.3.5 The methodology adopted for attaining the audit objectives with reference to audit criteria consisted of explaining the audit objectives to top management of the KSEBL and the Government, scrutiny of records of the audited entity, analysis of data with reference to criteria, issue of audit queries, and discussion of audit findings with Management and issue of Draft performance Audit Report. The audit objectives, audit criteria and scope of the performance audit were explanied to the Management in an Entry Conference (23 June 2015). Audit findings were also discussed in the Exit conference held on 3 December 2015.

Views expressed by the Management and GoK have been duly considered while finalising the Performance Audit Report

Audit Findings

2.3.6 Audit findings are discussed in the succeeding paragraphs

Physcial progress of projects

2.3.7 MoP sanctioned 43 projects each under Part A and Part B and three SCADA projects for implementation in the State. As per the original guidelines, Part A and Part B projects were to be completed within three years from the date of sanction. Later, GoI extended the completion period to five years for both Part A (November 2014) and Part B (between June/December 2015). However, the project could not be completed within five years and was further extended by one more year.

Status of the projects as of September 2015 was as given below

Table 2.29: Status of the projects as of September 2015

Items	Part A	SCADA	PartB
Projects sanctioned	43	3	43
Sanctioned projects cost (₹in crore)	214.38	83.15	1078.30
Date of approval by PFC	November 2009	February-June 2011	June 2010 - August 2012
Scheduled completion date[94]	November 2014	November 2014	June2015(11 Nos.) August 2015 (21 Nos.) December 2015 (8Nos.) February 2016 (2 turnkey) March 2017 (1 turnkey)
Name of the contractor	Korea Electric Power Data Network Company Limited(KDN)	Schneider Electric India Private Limited	40 projects by KSEBL and three projects through turnkey contracts
Projects completed	31	Nil	Nil
Loan released by GoI up to 31.03.2015 (₹in crore)	64.31	24.95	161.74
Counter part loan from REC up to 31.03.2015 (₹in crore)	N/A	N/A	205.81
Amount utilised up to 31.03.2015 (₹in crore)	59.00	4.94	377.81
Projects selected for audit (Number)	43	3	25

As evident from the *Table*, while only 31 projects had gone-live out of 43 Part A projects, none of the SCADA projects, and Part B projects

94 Scheduled completion date was five years from the date of sanction. All projects were further extended by one more year except one Part B project for which completion date is March 2017

could be completed as of September 2015.

The main reasons for delay in completion of the Part A and Part B projects were poor fund management, deficient implementation of the project and inadequate monitoring. Policy formulation and planning required for attainment of objectives of RAPDRP was also deficient. These are discussed in succeeding paragraphs.

Policy Formulation and Planning

2.3.8 Implementation of RAPDRP in the State was to be preceded by certain

policy initiatives like preparation of DPR, putting in place necessary systems and undertaking measures for prevention of theft of power, constitution of

Special Courts to deal with cases of power theft, etc. Compliance of KSEBL to these pre-requisites is discussed below.

Faulty preparation of DPR

2.3.9 Detailed Project Reports(DPRs) of 43 Part B projects of RAPDRP were approved by GoI on various dates between June 2010 and August 2012. Audit scrutiny of 25 town schemes revealed that there was faulty preparation of DPR as evident from a few instances cited in **Appendix 5**.

Measures for prevention of theft

2.3.10 The main objective RAPDRP was to bring down AT &C loss to 15 percent. Any illegal consumption of power, which is not correctly metered, billed and revenue collected, causes commercial loss to the utilities. As per Section 135 of Electricity Act, 2003, illegal consumption of energy shall be punishable with imprisonment for a term which may extend to three years or with fine or with both.

14 Anti Power Theft Squads (APTS) were constituted by KSEBL exclusively to detect cases of theft of energy. Besides, the division and section squad also conducted surprise inspections to detect theft of energy. During 2010-11 to 2014-15, APTS and division and section squads detected 2390 cases of theft of energy and ₹15.66 crore was realised as penalty as detailed in *Table 2.30*.

Table 2.30: Details of detection of theft of energy

Sl. No	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	Total
1	Number of consumers (in crore)	1.01	1.05	1.08	1.10	1.10[95]	
2	Number of inspections conducted	23479	24090	21609	21758	31369	
3	Percentage of checking (2/1)*100	0.23	0.23	0.20	0.20	0.28	
4	Total irregularities detected in Sl.No.2	2980	3167	3036	3392	4446	17021
5	Number of theft cases in Sl.No.4	386	336	386	386	896	2390
6	Total amount realised (₹in crore)	2.53	2.16	2.58	2.78	5.61	15.66
7	Number of cases pending	3	4	4	9	33	53

- No target was fixed by APTS to the units for conducting inspection of premises of consumers.
- The percentage of checking of consumers on an average was between 0.23 and 0.28 during 2010-11 to 2014-15.
- Theft cases were detected in large commercial and industrial consumers like restaurants and hotels, shopping malls, etc., on

95 As figures for 2014-15 were not available, figures of 2013-14 were adopted

inspection by APTS. The percentage of checking by APTS wing was less than five percent in these cases also.

- Analysis of eight pending cases involving recovery of ₹21.82 lakh revealed that no follow up action was taken by KSEBL.
- The surge in detection of theft cases in 2014-15 when number of inspection increased points to the need for strengthening the APTS Wing further.

GoK replied (January 2016) that for increasing the percentage of inspection, huge manpower is required as consumer base in KSEBL is 1.16 crore. Standing instructions were, however, issued to conduct a minimum of 100 inspections in a month and the units were conducting 200 inspections in a month.

The reply was not acceptable since the inspection conducted was inadequate to supplement efforts under RAPDRP to bring down AT&C loss to 15 percent.

Non-constitution of Special Courts

2.3.11 The National Electricity Policy lays special emphasis on time bound reduction of transmission and distribution loss and speedy implementation of stringent measures against theft of energy. As per Section 153 of the Electricity Act, 2003. GoK was to constitute Special Courts for speedy trial of offences relating the theft of energy.

Instead of constituting Special Courts, GoK designated 43 existing District and Session Courts, Additional District Courts and Section Courts as Special Courts with the concurrence (July 2007) of the High Court of Kerala thereby defeating the objective of constituting Special Courts and denying speedy trail of offences relating to theft of energy. Due to non-setting up of Special Courts as envisaged in the National Electricity Policy, none of the 53 cases of theft of energy could be disposed.

The Government did not give any reply about formation of these Special Courts.

Recommendation No.1 : Inspection by APTS should be strengthened to bring down AT&C loss to 15 percent. GoK should form Special Courts to ensure disposal of theft cases.

Fund Management

Non-opening of project-wise bank account

2.3.12 As per Memorandum of Agreement (MoA), KSEBL was to open project-wise escrow bank account for Part A and Part B projects to ensure debt servicing of principal, interest and other charges during pendency of the loan to the satisfaction of the nodal agency. Funds provided shall not also be diverted for any other scheme or purpose.

KSEBL opened a separate bank account for the implementation of the 43 Part A and B projects and three SCADA projects. First instalment of loan amounting to ₹251 crore received during January 2010 to December 2012 for Part A and B projects and SCADA projects were deposited in the bank account. Violating the guidelines of RAPDRP, the amounts were transferred to routine account of KSEBL within five days of receipt.

Non-maintenance of project-wise accounts

2.3.13 As per MoA, KSEBL was also to open separate project-wise accounts and sub-accounts immediately, for separate accounting classification, both on the receipt and expenditure side for enabling proper audit certification.

CE (Corporate Planning) directed (December 2009) section offices, sub-division offices and division offices to maintain serparate project-wise register. Expenditure was also to be booked under RAPDRP head and

RAPDRP bills bound separately.

Audit examined all Part A and Part B projects and noticed that:

- No separate register and separate bank account was maintained for these projects. Due to this, payment to contractors was effected through the normal account of the circle/division of the project area.
- Even though there was a full fledged Finance and Accounts Wing under Director(Finance), there was ineffective monitoring on the maintenance of project-wise separate account.
- In respect of 40 Part B projects executed departmentally, there was no separate purchase of material. The material required for RAPDRP work was issued and accounted under normal Material at Site Account (MASA) of the Division or Section concerned and RAPDRP material was clubbed with normal work material as illustrated below:

Table 2.31: Details of RAPDRP and Non-RAPDRP material clubbed under MASA

Month	Electrical Section	Material Consumption Statement Number	Nature of work
July 2014	Kilikolloor	48/14-15	Normal Work
		49/14-15	RAPDRP work
		50/14-15	Normal work

Due to clubbing, availability of material or diversion of material held for RAPDRP work at any point of time could not be determined and RAPDRP work bills were bound along with normal work bills.

As no separate account was maintained for RAPDRP work, financial progress of Part B projects was arrived at by simply multiplying the executed quantity or physical progress in km/numbers with the cost estimate as provided in DPR and had no connection with the actual expenditure incurred.

GoK replied (January2016) that for administrative convenience, project-wise accounts were not opened. Material were procured centrally for funded schemes and normal work and during emergency or natural calamities, material were diverted to restore power supply.

The reply was not acceptable as non-maintenance of project-wise separate account was a clear violation of guidelines/MoA which resulted in non availability of proper records for audit certification and for calculating the actual expenditure incurred for the scheme.

Recommendation No.2: Separate project-wise accounts should be opened for having better control over expenditure and project monitoring.

Irregular payment of interest free advance

2.3.14 As per clause 14.1 of special conditions of contract for execution of Part A projects, release of payments was performance based, where payments would be made for measured deliverables and outputs. As per the payment schedule, payment of 5 percent (on approval of design), 25 percent (installation of hardware), 20 percent (installation of software), 30 percent (approval of user acceptance test) were permissible on completion of prescribed milestone. There was no provision for payment of advance on delivery of materials.

Violating the above clause, based on the recommendation of the Chairman and Managing Director, Board of Directors decided (August 2014) to pay interest free advance of ₹14.50 crore to KDN, being 60 percent of payment against the security of material delivered and corporate guarantee executed by KDN. Thus, payment of interest free advance of ₹14.50 crore was not only against scheme guidelines but it also amounted to undue favour to the contractor.

Implementation of projects

2.3.15 Implementation of Part A projects under RAPDRP was aimed at capturing accurate figures of AT&C loss through installation of IT module for data acquisition in the project area along with establishment of IT enabled customer services. Part B projects aimed at strengthening transmission and distribution networks to bring down AT&C loss to 15 *percent.*

Even though all 43 Part A projects were to be completed by November 2014 and 40 Part B projects between June 2015 and March 2017, only 31 Part A projects had, however, been completed as of September 2015.

Non-completion of projects was due to delay in installation of IT module for data acquisition and delay in completion of IT enabled customer care services envisaged under Part A and delay in completion of distribution strengthening works under Part B. Non-completion of projects led to non-achievement of objectives of RAPDRP and cost escalation besides probable non-conversion of loan into grant as discussed in succeeding paragraphs.

Execution of Part A projects

2.3.16. IT modules for data acquisition included installation of Meter Data Acquisition System and Geographic Information System (GIS) solution in all 43 Part A projects. Out of 43 projects, seven projects were completed within the extended time of five years (November 2014), 24 projects after delays ranging from one to nine months, while balance 12 Part A projects remained to be completed as of September 2015.

Audit examined implementation of all 43 Part A projects and noticed that the reasons for non-completion of data acquisition module were delay in award of work, delay in commissioning of Data Recovery Centre and non-replacement of incompatible meters by KSEBL as discussed below.

Appointment of IT Implementing Agency (ITIA)

2.3.17 As per clause 21.7 of the terms and conditions of PFC for sanctioning loan, KSEBL was to award Part A projects to ITIA within three months from the date of sanction i.e. by 25 February 2010.

Scrutiny of records revealed that there was delay in tendering process for appointment of ITIA for the execution of Part A pojects and the contract was awarded to KDN belatedly in September 2010. Thereafter, GoK directed (December 2010) KSEBL to cancel the contract awarded to KDN and to invite fresh tender because of allegations of corruption. The decision was challenged by KDN in the Honble High Court of Kerala. Work was again awarded (September 2012) to KDN on the basis of the decision of the High Court for completion within 18 months i.e. March 2014. The work was in progress (November 2015). Installation of IT modules for collection of data and IT enabled customer care services envisaged under Part A of RAPDRP was pending. Thus, Audit observed that there was delay of two years in award of work due to intervention by the Government.

Implementation of Meter Data Acquisition System (MDAS)

2.3.18 Meter Data Acquisition System (MDAS), proposed under Part A projects, aimed to acquire meter data from system and selected High Tension (HT) consumer meters automatically avoiding any human intervention. It also aimed to monitor important distribution parameters for taking corrective action. All the feeder meters, DT meters and all HT consumers' meters in the entire utility area were to be covered in MDAS by installation of modem. The meter data from all DTs as well as HT consumers and data from feeder meters would be transmitted to central data centre server. As per the guidelines, meters were to be made DLMS[96]-compliant by KSEBL.

KDN was responsible to install 18526 modems in all border meters, feeder meters, DT meters and HT consumers' meters. The following works and issues were pending as of August 2015:

Table 2.32: Status of installation of MDAS

Item	Target	Installed/communicating	Reasons
	(In numbers)		
Installation of Modem	18,526	7,386	Replacement of DLMS non-compliant HT meters by KSEBL pending
Communicating with Central data server	7,386 installed	3,355 out of 7,386 modem	Compatibility issue as discussed below

Scrutiny of records in 43 Part A projects revealed that:

- KDN could not install modems in 4400 HT meters as these meters were DLMS non-compliant but were not replaced by KSEBL to make them DLMS-compatible. The existing HT meters were purchased by consumers and when modems were installed, meters were stuck or gave abnormal figures, wrong reading, etc. KSEBL directed (October 2014) KDN to stop installing modem on HT consumers' meter till new ones were installed by KSEBL. Action for procurement of new HT meters was, however, not initiated so far (August 2015).

96 DLMS- Device Language Message Specification is an object model to view the functionality of meter. DLMS is a transporting method to carry the information between the metering equipment and data collection system.

- Similarly, audit scrutiny in three Part A projects revealed that existing feeder meters, border meters and DT meters were either faulty or DLMS-non compliant but not replaced by KSEBL as shown in Table below:

Table 2.33: Details of faulty and DLMS-non compliant meters (In numbers)

Name of town	Feeder meters		Border meters		DTR meters	
	Total	**Faulty/ DLMS-non-complaint**	**Total**	**Faulty/ DLMS-non-complaint**	**Total**	**Faulty/ DLMS-non-complaint**
Kunnamkulam	11	0	15	14	316	0
Guruvayoor	11	0	16	15	535	33
Thrissur	37	24	25	20	1436	1336

Slow progress in completion of MDAS resulted in generation of inaccurate AT&C loss data from 31 towns declared go-live as discussed in *Paragraph 2.3.20*

GoK replied (January 2016) that during bid finalisation, it was assumed that, data could be retrieved from all these meters and sent to the server through modem. When modem was installed the meters were behaving abnormally. Since these meters belong to high value consumers of KSEBL, it was directed to stop the installation of modem.

The reply was not acceptable as improper field study conducted by CE (Corporate Planning) at DPR preparation stage was the reason for non-compatibility issue. No response was received in respect of DT meters.

Implementation of Geographic Information System (GIS)

2.3.19 Under Part A of RAPDRP, a Geographic Information System (GIS) solution consisting of a system for capturing, storing, checking, integrating. manipulating, analysing and displaying geo data related to positions on the earth's surface and data related to attributes of the entities or customers in a utility area was to be set up. Satellite images from National Remote Sensing Centre (NRSC) were obtained in respect of all 43 towns but GIS network survey and GIS consumer survey were yet to be completed due to inaction on the part of KDN. The GIS asset mapping included field visit to identify and locate the assets for mapping, painting each pole and numbering. KDN had not deputed adequate manpower for this work.

Timely completion of GIS based consumer indexing and asset mapping would have enabled KSEBL to locate a particular customer and the DT from which connection provided, location, etc., to identify the exact location of AT & C loss to take corrective measures. Due to delay in completion of GIS activity by KDN, the benefits envisaged under RAPDRP could not be availed as of September 2015.

GoK replied (January 2016) that the identified features reported as not having provided were already functional in GIS modules. Even though consumer survey was included in the implementation of Part A projects, during the pilot implementation in the initial town, it was revealed that no valuable additional information would be obtained from the survey other than the information already available with KSEBL in the billing database. Hence, KSEBL was actively considering exemption of consumer survey in the remaining towns. Consumer indexing data was already available with KSEBL. Indexing of the remaining towns will be completed during the stabilisation period.

The reply was not acceptable as no proper study was conducted at the DPR stage to address this issue.

Declaration of towns as go-live

2.3.20. Although Part A projects were to be completed in all 43 towns by November 2015, 31 towns were declared 'go-live' as of September 2015 though modem installation was completed in three[97] towns only. Due to declaration of towns as 'go-live' before completion of the entire Part A work, AT & C loss data gathered from nine towns displayed unrealistic figures, compared with base line data at the time of commencement of Part A projects, as shown below:

Table 2.34: Base line AT & C loss and current AT & C loss figures.

(Figures in percent)

Name of town	Base-line AT & C loss	AT &C loss for 2014-15	
		Third quarter	Fourth quarter
Chalakudy	23.77	55.33	56.47
Neyyattinkara	25.14	---	77.73
Ottappalam	28.01	64.55	61.00
Ponnani	22.25	56.03	39.80
Punalur	26.29	---	46.66
Shornur	25.36	48.60	32.89
Thiruvalla	27.86	42.41	38.58
Thodupuzha	27.47	41.13	51.54

Similarly, two internet connections were to be provided to DC in order to ensure uninterrupted network connectivity. BSNL network connectivity (primary) was delivered in all the 228 sections while Airtel connectivity (secondary) could be established in 170 sections only (August 2015).

Since all 43 towns had to be declared go-live before the stipulated completion date of November 2015 in order to be eligible for conversion of loan into grant, CE (IT) who was responsible for the implementation of Part A projects, declared towns go-live even before completion of work, which was not in order.

97 Changanassery, Palakkad, Punalur.

Commissioning of Data Centre (DC) and Data Recovery Centre (DRC)

2.3.21. As per the Guideline, for storage of data to capture AT&C loss from 43 project areas, Part A projects should have one common Data Centre (DC) at a location identified by Power Companies with common Data Recovery Centre (DRC) on a different seismic zone other than in which the DC is located. The purpose of establishing DRC is that in case a disaster strikes at the primary DC, the DRC site will take over and start functioning as the primary site. As per guidelines, DRC was to be commissioned after successful completion of at least 70 percent of Part A projects.

The Board of Directors decided (August 2012) to establish DC and DRC in the same seismic zone (Zone-III). DC was established at Thiruvananthapuram and started functioning from 21 January 2014 while the DRC at Infopark building, Cherthala was yet to be commissioned even after 31 Part A projects (72 percent) having been completed (August 2015). Slow progress in completion of several processes like hardware installation test, inspection, DC-DRC point to point link for data replication, infrastructure high level design and low level design document review, etc., were the reasons for delay in commissioning of DRC. Thus, the DC commissioned in January 2014 was vulnerable to high risk and loss of valuable data in the absence of DRC, for which Board of Directors of KSEBL was responsible.

GoK replied (January 2016) that DRC at Cherthala was specifically designed to take care of seismic impact and there were practical difficulties and hardships in maintaining such a facility outside Kerala.

The reply was not acceptable as data stored in DC was vulnerable to high risk and loss of valuable data in the absence of DRC in a different seismic zone.

Recommendation No. 3: Preparation of DPRS should be realistic in order to guard against technology related compatibility issues at the implementation stage.

Non-completion of Customer Care Services under Part A project

2.3.22. As per RAPDRP guidelines, a Centralised Customer Care Service Centre (CCC) was to be set up as part of Part A projects to improve the customer service by processing and resolving customer requests, queries and complaints in minimum possible time by taking up it at appropriate place and level. KDN was to link all 228 Electrical Sections falling under 43 Part A projects with the CCC and to impart end user training to the officials of electrical sections.

Scrutiny of records revealed that:

- although the CCC at Thiruvananthapuram was inaugurated on 12 November 2014, 60 Electrical Sections covered under RAPDRP could not be linked with CCC out of 228 Sections as end user training to the officials of KSEBL was not imparted by KDN. Thus, the facility of complaint redressal system was denied to the consumers of 60 Electrical Sections.

  It was also noticed that even in CCC-linked Sections, integration of system with billing module and Consumer Indexing was pending (September 2015).

  Gok replied (January 2016) that 192 Electrical Sections had now been Linked to CCC.

  The reply was not acceptable since the customer care services envisaged under RAPDRP could not be provided to the customers even after six years of sanctioning of projects.

- Spot Billing System (SBS) was intended to carry out spot billing for LT consumers. The Spot Billing System consisted of a Hand

Held Equipment (HHE) and a separate Portable Printer (PP). End user training was to be imparted by KDN to meter readers of the electrical section of the project area concerned for the operation of SBS.

Scrutiny revealed that KDN could not provide training to all the meter readers so far (September 2015). KSEBL, therefore, directed KDN to deliver SBS in phased manner so that SBS is delivered to trained meter readers only. Progress in installation of SBS is given in the following Table:

Table 2.35-Status of installation of SBS

Particulars	Sanctioned (Nos.)	Completed (Nos.)
Spot Billing Machine (SBM)	1335	430
SBM software	In all the 43 towns	20

GoK replied (January 2016) that KDN had deployed 520 machines in 32 towns. Since the SBMS were to be used for consumer billing, care was taken to implement the SBM in a phased manner after training the meter readers. The remaining SBMs would be implemented soon.

The reply was not acceptable as non-installation of SBM was due to delay on the part of KDN to impart training to the meter readers of KSEBL.

- As per G-3 of System Requirement Specification Document of Part A, Intelligent Display Management System (IDMS) was to be set up in six locations identified by KSEBL to provide comfort and easiness of operation to the customers. IDMS was to work as queue management system, making customer sit easily and comfortably instead of standing in a queue.

  Due to non-finalisation of locations by KSEBL because of demand from all districts for these facilities, as of August 2015, one token dispenser machine, one touch screen kiosk and one cash collection kiosk could only be installed at Centralised Customer Care Center at Corporate Office of KSEBL, as shown in Table below :

Table 2.36 - Status of implementation of IDMS

Item	Approved	Status of Implementation
	(Number)	
Automatic token dispenser machine and IDMS at customer care centre	1	1
Touch Panel based kiosk for furnishing information on billing, payment, duplicate bills. etc., at customer care centres.	6	1
Cash/cheque collection kiosk for automatically accepting cash and cheque payments from customers	6	1

Gok replied (January 2016) that out of six touch panel based kiosk and cash/cheque collection kiosk, one each was installed and commissioned in CCC. The remaining five numbers would be installed in various locations identified by KSEBL, within a couple of weeks

Thus, due to non-linking of all sections with CCC and non-installation of Spot Billing Machine and kiosk, the objective of consumer satisfaction envisaged under RAPDRP remained unachieved.

Extra expenditure in implementation of Part A projects

2.3.23 In the execution of Part A projects, KSEBL incurred extra expenditure of ₹27 crore as discussed below.

- As per the bid (March 2010) for appointment of ITIA, each bidder was to quote specifically the bandwidth connectivity charges for five years. As per clause 14.3 of instructions to bidders (ITB), if an item was not listed in the price schedule, price loading was to be made by taking highest of the prices quoted by other bidders for such missing item or component. If the price of item is available, then it shall be considered for price loading.

- L1 bidder (MIC Electronic Limited) quoted ₹195 crore including bandwidth connectivity charges of ₹26.54 crore for three years while L2 bidder (KDN) quoted ₹240 crore including bandwidth connectivity charges. KSEBL, instead of applying price loading proportionately for two more years (₹17.69 crore) on LI (MIC), applied clause 14.3 of ITB irregularly for price loading (₹47.46 crore) on L1 bidder (MIC) for two more years by taking the highest connectivity charges quoted by bidders. After price loading. L2 bidder (KDN) became LI bidder, leading to awarding contract at extra expenditure of ₹27 crore (₹240 crore - ₹213 crore).

  GoK replied (January 2016) that there is a specific method for arriving at LI in case the period quoted for bandwidth is less than five years and loading principle had to be applied only in respect of the vendor who quoted lowest price, but only for three years.

The reply was not acceptable due to the following reasons:

As per clause 14.3 of Instruction to Bidders of RFP, clause 14.3 is applicable only if the price of an item is not available in the price schedule. Further PFC has clarified that if the price of an item is available, then it shall be considered for price loading. The bandwidth charges quoted by L1 for three years was ₹26.54 crore. Even if this was proportionately taken for five years, the connectivity charges quoted by L1 would be ₹44.23 crore and the rate quoted by L1 would be ₹27 crore[98] less than L2.

- Feedback Ventures Private Limited was appointed as IT Consultant (ITC) of Part A projects for ₹35.74 lakh. Contract period was up to November 2013. As Part A projects were not completed within the

98 ₹240 crore (L2)-₹213 crore (L1)

stipulated time and extension was granted by PFC up to November 2015, ITC was retained at a monthly retainer fee of ₹1.5 lakh excluding taxes. The additional amount to be incurred up to the completion of Part A projects worked out to ₹36 lakh.

Execution of Part B projects

2.3.24. Work under Part B projects consisted of distribution strengthening process. On completion of Part B projects. AT&C loss was targeted to be brought down to 15 percent from the range of 19.78 percent to 29.17 percent existing at the time of approval of projects by MoP. Even though 32 Part B projects were due for completion as of August 2015, no project could be completed and PFC extended the completion period to six years.

Audit scrutiny of 43 Part B projects revealed that delay in submission of DPRs and award of work, delay in tying up loans, etc., were the reasons for non- completion of projects within scheduled time. Delay has led to extra expenditure and non-achievement of benefit envisaged under RAPDRP as discussed below.

Delay in submission of DPRS and financial tie-up

2.3.25. As per the guidelines of RAPDRP (December 2008), the sanction process and other formalities for execution of Part A and Part B projects should be taken up simultaneously and ring fencing was to be completed within 16 weeks of the sanction of DPR. Similarly, tie-up with Financial Institutions for counter part funding was to be firmed up within two months of sanction of the project.

Scrutiny of records in 43 Part B projects revealed that**:**

- Sanction process and other formalities for the execution of Part A and Part B projects were not taken up simultaneously by KSEBL and Distribution Reforms Committee (DRC). While the DPRs for 43 Part A projects were approved by DRC (September 2009) and approved by the Steering Committee of GoI (November 2009), the process for the preparation of DPR of 43 Part B projects was taken up by KSEBL belatedly in December 2009. The delay in preparation of DPR of 43 Part B projects by KSEBL and approval by DRC ranged from five months to 28 months.

- As per guidelines, ring fencing of the town was to be done by the utility by installing the system meters (import/ export meters, feeder meters, DT meters, boundary meters, etc.) on its own and shall be taken up immediately on approval of DPR.

Ring fencing through metering of all import/export metering points and segregation of agriculture feeders was to be completed by KSEBL within 16 weeks of the sanction of DPR of Part A projects i.e. by March 2010. There was, however, delay ranging from two months to one year in completion of ring fencing. The delay in ring fencing was due to excessive time taken in replacement of existing faulty meters.

The delay in submission of DPR of Part B projects to PFC and delay in ring fencing resulted in non- commencement of Part B projects simultaneously with Part A projects and consequent delay in completion of Part B projects.

GoK replied (January 2016) that delay was due to resubmission of DPR in many cases on the basis of the corrections done by PFC.

The reply was not acceptable as corrections in DPR were warranted due to non-adherence to RAPDRP guidelines on submission of DPR.

- As per clause 5.3 of MoA, 75 percent of the project cost of Part B was to be availed as counter part loan from Rural Electrification

Corporation (REC)/ Financial Institutions (Fls). Tie-up with FIs for counter part funding was to be firmed up within two months of sanction of the project.

In respect of 43 Part B projects sanctioned (June 2010 to August 2012)by PFC at a cost of 1078 core, KSEBL decided (April 2012) to avail 75 percent project cost (₹801 crore) as counter part fund from REC. Agreement for counter part funding of all 43 Part B projects was executed with REC on 5 July 2014 and funds were released from October 2014 onwards. Thus, there was delay ranging from two to four years in availing counter part funding after sanction of projects. Inaction and inadequate monitoring on the part of CE (CAP-S) to arrange counter part fund resulted in tardy implementation of Part B projects.

GoK replied (January 2016) that the delay in tying-up with REC for availing counter part funding was due to slow progress of Part B projects and consequent non utilisation of 15 percent of Gol loan already received as first instalment. It was also stated that projects were not delayed due to scarcity of funds but due to diversion of material for urgent normal work.

The reply was not acceptable since as per guidelines of RAPDRP, tying up counter part fund did not have any relation with progress of work and was to be firmed up within two months from sanction of projects.

Extra expenditure in execution of Part B projects

2.3.26 Out of 43 Part B projects, KSEBL decided to execute three city schemes on turnkey basis and as per guidelines, the contract was to be awarded within three months from date of sanctioning of the project. Audit examined all three projects and noticed that:

- there was delay of 17 to 30 months in awarding contract as shown in

Table below:

Table 2.37: Delay in awarding three turnkey contracts

SL. No.	Name of project	Date of Sanction by PFC	Invitation of tender	Date of opening price bid	Date of award of contract	Delay[99] from the date of sanction by PFC 17 months
1	Thiruvananthapuram	03.08.2012	27.03.2013	07.10.2013	03.04.2014	17 months
2	Ernakulam	22.02.2011	30.05.2012	29.01.2013	15.11.2013	30 months
3	Kozhikode	22.02.2011	10.05.2012	10.12.2012	24.07.2013	26 months

The delay in awarding the contract by Chief Engineer (Distribution) resulted in delay in execution of the projects and cost escalation of ₹126.49 crore as shown below:

Table 2.38: Details of cost escalation due to delay in awarding work

SL. No	Name of Town/ Project	Sanctioned Project cost[100]	Awarded project cost	Difference	Percentage change
1	Ernakulam	184.47	243.97 (NCC)	59.50	32.25
2	Kozhikode	158.81	198.74 (L&T)	39.93	25.14
3	Thiruvananthapuram	173.94	201.00 (Leena)	27.06	15.56
	Total	**517.22**	**643.71**	**126.49**	**24.46**

GoK replied (January 2016) that there was only procedural delay in awarding the work which did not affect completion of the scheme and it would be completed within the scheme period.

The reply was not acceptable as procedural delay ranging between 17 months to 30 months was extra ordinary and led to cost escalation of

99 After three months

100 Excluding project cost of transmission items.

₹126.49 crore.

- MoP approved (February 2011) Kozhikode Town Scheme under Part B at a total outlay of ₹160.78 crore (₹158.81 crore for distribution work and ₹1.97 crore for transmission work). KSEBL placed (July 2013) work order with Larsen & Toubro Limited (L&T) for execution of the above work at a total amount of ₹198.74 crore excluding the two items viz., work of supply and installation of 11 kV sectionalisers and the work of retrofitting of existing RMUs as the rate quoted were abnormally high. The project completion date was March 2015.
  - In this connection, it was observed that while evaluating the rates offered by L&T, Chief Engineer (Distribution North) (CE, DN) had noticed (March 2013) that L&T had quoted abnormally higher rates for many items. However, only two of such items were excluded from the scope of the work of L&T. The major items of work retained in the scope of work with L&T for which exorbitant rates quoted were the following:
    - ➢ CCV type RMU - The quoted rate was ₹6.9 lakh as against the estimated rate of ₹4.2 lakh which was arrived at based on the market rate and the PFC approved cost data in the DPR. The excess expenditure was ₹11 crore for 400 RMU.

➢ Replacement of single phase meter - Rate of ₹2124 per meter quoted by the contractor was 2.5 times the estimate rate prepared based on KSEBL approved cost data. Excess cost was ₹6.5 crore for the tendered quantity of 56023 items.

➢ Supply of distribution transformers - The rate quoted by the contractor for distribution transformers (total value

₹5.93 crore) was double the KSEBL's standard rate.

Awarding the above items of work to the contractor at exorbitant rates resulted in commitment of extra expenditure to the tune of ₹20.36 crore. This excess cost would have to be met by KSEBL since funding by PFC would depend on approved project cost.

- Wastage of UG cable provided in estimate in excess of norms of five percent in Thiruvananthapuram and Kozhikode Town Part B projects amounted to ₹ 2.49 crore.

Delay in completion of work due to non-procurement of material

2.3.27 In respect of 40 Part B projects being executed departmentally, KSEBL did not procure material for the works in time leading to delay in completion of work and consequent cost overrun as discussed below.

- Approved 40 Part B projects included reconductoring 77.40 km of 11 kV overhead (OH) line with Aerial Bunched Cables (ABC) and 1346 km of new ABC line in dense, theft prone and congested areas with the objective to minimise snapping of lines due to touching of trees or branches, reduction of commercial loss and increase consumer satisfaction by minimising frequent outage/supply failure. KSEBL could, however, draw seven km of new ABC as of August 2015 due to non-procurement of material as shown in Table below:

Table 2.39: Details of non-procurement of ABC material

Work	Target as per DPR	Proposed as per annual plan 2011-12	Quantity as per annual plan 2012-13	Annual plan 2013-14 and 2014-15
LT ABC (km)	989	191	890	Nil
HT ABC (km)	357	89	370	Nil

Audit examined ABC work in 25 Part B projects and noticed that in 22 projects ABC work had not commenced. In three projects, there was delay ranging between four to five years in commencement of ABC work due to non-procurement of ABC.

Delay also resulted in cost escalation of ₹2.82 crore in respect of Kollam project while in respect of Kannur and Kanhangad projects, length of proposed ABC laying was curtailed to compensate the cost escalation as shown in Table below:

Table 2.40: Details of execution of ABC work

Name of the project	As per DPR	Revised Proposal
Kanhangad	31 km for ₹1.66 crore	Length reduced to 9.138 Km
Kollam	44.40 km for ₹1.23 crore	Revised cost ₹ 4.05 crore
Kannur	126.90 km for 12.59 crore	Length reduced to 67.08 km for an estimate cost of ₹ 10.18 crore

GoK replied (January 2016) that KSEBL had no expertise in installation of ABC work and being a new technology they decided (February 2012) to execute the work on turnkey basis. However, participation by tenderers was very poor and the cost data of ABC was approved by KSERC only during July 2015.

The reply was not acceptable as installation of ABC work was proposed in the DPR by KSEBL itself.

- With the objective to minimise snapping of lines due to touching of trees, reduce commercial loss and to increase consumer satisfaction by minimising frequent outage and supply failure, laying of UG cable was approved under 40 Part B projects. Status of the work as of August 2015 was as given below:

Table 2.41: Status of work of UG cable (August 2015)

Item of work	Sanctioned	Completed
	(km)	
11 kV new UG cable	269	78
Replacing 11 kV line OH with UG cable	85	0
Replacing 11 kV UG with UG	5.30	4

Audit selected 25 Part B projects for analysing reasons for delay in completion of UG cabling work and noticed non-procurement of material and right of way issues as discussed below:

- Under Part B project of Kannur town, laying new UG cable (83.6 km) and reconductoring (84.43 km) were approved. Since the physical progress of laying new UG cable was only 25.41 km, KSEBL decided (April 2015) to complete the balance work on turnkey basis while the reconductoring work on 84.43 km was yet to commence due to non- procurement of UG cable.
- Part B project of Chokli-Peringathur town, included UG cable work for 2.02 km spread over Chokli Section and Kodiyeri Section. 1.95 km of UG cable work was completed (May 2014) by Chokli Section and the balance railway crossing work of 0.07 km was yet to be completed by Kodiyeri Section. The completed portion was yet to be energised.

GoK replied (January 2016) that fast progress could not be achieved for UG cable laying due to various issues outside the control of KSEBL like road cutting sanctions, road restoration charges, non-issue of permission for open trenching in BMBC roads/NHAI, etc. As the work has now been decided to be executed on turnkey basis, centralised purchase of UG cable was not relevant for the case.

The fact, however, remains that Part B projects were sanctioned from

June 2010 onwards, and it took four years to decide on executing the work on turnkey basis.

- As per the guidelines. High Voltage Distribution System (HVDS) was to be implemented in theft prone areas by improving HT:LT ratio. The DPR of approved Part B project included HVDS work of laying eight km OH line, three km UG cable, one km PVC cable and installation of 51 transformers at sanctioned project cost of ₹2.50 crore.

  HVDS work was yet to commence due to non-procurement of material. This resulted in non-achievement of objective of bringing down AT & C loss.

  GoK replied (January 2016) that all the essential works under the HVDS category were expected to be completed well within the extended period of RAPDRP.

- In order to improve power factor and to strengthen distribution network, approved 43 Part B projects targeted to install the following

Table 2.42: Details of work proposed

Item	Approved quantity (Number)
Installation of capacitors bank	6293
Installation of remote communicable Fault Passage Indicator	274
Installation of remote switchable breakers	955
Installation of sectionalisers	471
RMU installation	2340
Providing AB switches	205

CE(SCM) responsible for procurement of above material did not procure the above material and as a result envisaged distribution strengthening work was yet to commence in all 43 projects.

Recommendation No.4: Funding arrangements should be firmed up upfront, as envisaged in scheme guidelines, in order to avoid delay in procurement and consequent delay in execution of work.

Deviation from approved DPR

2.3.28 DPRS of 43 Part B projects of RAPDRP were approved by GoI after taking into consideration Internal Rate of Return (IRR) of 10 percent and reduction of AT & C loss from above 20 percent to 15 percent.

Audit scrutiny of 25 Part B projects revealed that there was deviation from the approved DPR like change of location, quantity variation, inclusion of new location in bid document, etc., as evident from a few instances cited in ***Appendix 6.***

Due to deviation from approved DPR, excess expenditure of ₹109.21 crore has to be borne by KSEBL if the revised DPR is not approved by PFC.

GoK replied (January 2016) that excess amount above the DPR would be borne by KSEBL.

The reply was not acceptable as deviation from the DPR resulted in loss of grant to the tune of 50 percent of excess expenditure.

Delay in completion of SCADA project

2.3.29 SCADA project was approved (February 2011 and June 2011) for three[101] eligible towns in Kerala at project cost of ₹83.15 crore. SCADA project was to be completed within three years of sanction. Completion of SCADA project in these three towns was dependent on completion of Part B projects in the towns. Works like compatibility of circuit breaker and switches, remote operable motors for SCADA compatibility in

101 Thiruvananthapuram (₹29.76 crore), Ernakulam (₹24.40 crore) and Kozhikode (₹28.99 crore).

existing Ring Main Units (RMUs), placement of RMUs and Fault Passage Indicator (FPIs), etc. under Part B were to be completed for the successful and timely completion of SCADA projects.

Non-commencement of SCADA compatible work under Part B had adversely affected the completion of SCADA project as discussed below:

- Works under SCADA were awarded (May 2013) to turnkey contractors with completion time of 18 months (November 2014), while Part B projects in these towns were awarded (July 2013-April 2014) on turnkey basis with completion time of 20 months. Scrutiny of records revealed that none of the SCADA project could be completed as of September 2015 due to delay in completion of Part B projects in these towns. As per the DPRS of Thiruvananthapuram, Ernakulam and Kozhikode city Part B projects, RMUs to be made SCADA compatible were 329, 320 and 155 respectively. However, the work was yet (August 2015) to commence in these towns.
- No prioritisation was done to execute these city schemes in sync with the progress of SCADA project. DPR for Thiruvananthapuram city project was approved in August 2012 but there was delay of 20 months in award of Thiruvananthapuram city project work. In respect of Ernakulam and Kozhikode Part B projects also, delay in award of work after approval by PFC was 32 months and 29 months respectively.
- Kalki Communication Technologies Limited (Kalkitech), Bangalore Was appointed as SCADA consultant (SDC) in the three cities of Thiruvananthapuram, Ernakulam and Kozhikode for a period of four years at a lump sum price of ₹49.95 lakh. The period of contract of the SDC expired in April 2014 but due to

non-completion of SCADA Project, the contract of SDC was extended for one more year at an Additional expenditure of ₹24 lakh per year.

The CEs(Distribution) of the project area concerned were responsible for awarding and execution of three turnkey Part B projects. Delay in completing SCADA project within the stipulated time would result in loss of grant of ₹52 crore (awarded cost), since PFC had not extended original completion time of three years.

GoK replied (January 2016) that the scheduled completion date of SCADA and Part B projects was June 2016 and February 2017 respectively.

The reply was not acceptable as extension of SCADA consultant was due to the extension of original contract.

Loss of envisaged benefit due to delay in completion

2.3.30 According to DPR of 43 Part B projects, energy saving in the range of 1.11 MUs to 80.92 MUs, totalling 506.74 MUs annually was envisaged on completion of these projects. Further, the conversion of loan ₹836.68 crore sanctioned by GoI into grant was contingent on timely completion of Part A and B projects. Therefore, proper monitoring of implementation of projects was of paramount importance.

As per the guidelines issued by GoI (MOP) and terms of MoA, a Distribution Reforms Committee (DRC) was to be constituted under RAPDRP at the State level under the Chairmanship of the Chief Secretary/Principal Secretary/Secretary Power/Energy. In the State, DRC constituted under APDRP scheme was allowed to continue to monitor the RAPDRP also. The DRC was to:

a) recommend the Project proposals to the MoP after ensuring that all the required formalities have been complied with;

b) monitor the compliance to conditionalities; and
c) monitor the achievement of milestones and targets under the scheme.

DRC, mandated to monitor progress of implementation of RAPDRP, held three meetings after sanction of the RAPDRP projects but did not discuss progress of implementation of RAPDRP at all.

As a result, Part A and Part B projects which were originally scheduled for completion within three years could not be completed even within the extended time of five years. Delay in completion of projects led to annual loss of envisaged benefit of ₹202.70[102] crore on 506.74 MUs of energy **(Appendix 7)** and probable non-conversion of loan of ₹836.68 crore into grant. Thus, DRC had failed in performing its duties.

KSEBL replied (November 2015) that the members of the DRC were high level officers in Government and availability of their time for close monitoring of the schemes was difficult. Monitoring by the CMD can be considered as Government level monitoring by virtue of his position as Secretary, Power Department.

The reply was not acceptable as the DRC consisted of representatives of PFC, MoP, CEA, ANERT and Energy Management Centre besides Power Secretary and four representatives from KSEBL.

Conclusion

The main objective of Restructured Accelerated Power Development and Reforms Programme was to bring down Aggregate Technical & Commercial loss to 15 percent. But there was no realistic approach in the preparation of Detailed Project Report to guard against technology related compatibility issues at the implementation stage.

102 Calculated at the average rate of ₹4 per unit.

Action taken in the policy initiative like measures for prevention of theft of power, constitution of Special Courts to deal with cases of theft of power, etc., were inadequate. Delay in preparation of DPRs and arrangement of funds led to delay in procurement of material and awarding of contracts. This has also resulted in time overrun of more than three years and cost overrun, which contributed to the non-materialisation of envisaged benefit of reduction in Aggregate Technical & Commercial loss.

[Audit paragraph 2.3 contained in the Report of the C&AG on Public Sector Undertakings for the year ended 31st March 2015]

The notes furnished by the Government on the audit paragraph are given in Appendix II

Discussion and findings of the Committee

Para 2.3.7- Physical progress of projects

Regarding the audit reference that the projects under RAPDRP could not be completed within the stipulated time, the Committee noticed that the projects under RAPDRP (projects under Part A&B and SCADA projects) were sanctioned on various dates between 2009, 2010 and 2012 and were to be completed within 5 years from the date of sanction but was completed only in March 2018 and enquired about the present position of the projects.

The witness informed that the original project approval was for three years and it was extended by PFC for a further period of two years. He added that based on the requests from various states the PFC further extended the time line for the completion of project up to 2017-18 and all the projects were completed within the approved time period.

The Committee approved the reply of witness.

Para 2.3.9 – Faulty preparation of DPR

The Committee sought clarification about the audit observation that there was faulty preparation of DPR (Detailed Project Report). The witness admitted the audit observation and informed that the Ministry of Power scrutinized the DPR and approved different components of work for sanctioned amount. He added that back and forth activities are involved during the finalisation of DPR of projects where informatics are frequently used and this cannot be considered or treated as faulty DPR preparation.

The Committee approved the reply of witness.

Para 2.3.10- Measures for prevention of theft

The Committee enquired about the audit para that the measures taken by KSEB to prevent power theft was inadequate and in-effective since the main objectives of RAPDRP were to bring down AT& C (Aggregate Technical and Commercial) loss to 15 percent. The witness admitted the audit objection and clarified that the objections were related to the year 2015 and in subsequent years KSEBL achieved the target of lowering of AT & C loss. He also informed that the Anti Power Theft Squads (APTS) are now functioning effectively.

The Committee directed to furnish a detailed report regarding the present status of the functioning of Anti Power Theft Squad.

The Committee further enquired whether the APTS had been given any instructions to achieve the target of inspections. The witness replied that each APTS had been given special instructions to achieve the target. Inspite of these, all the units were doing their best to conduct maximum number of inspections in a month. In order to increase the percentage of checking, additional monthly special drive inspections were also being carried out by all the units concentrating on large commercial and industrial consumers.

He added that the present mode of comprehensive inspections conducted after detailed analysis is sufficient.

The Committee approved the reply of witness.

Para 2.3.11 – Non – constitution of Special Courts

The Committee enquired about non-constituting of Special Courts for speedy trial of offences relating to theft of energy. The Senior Deputy A.G. informed that instead of constituting Special Courts, Government of Kerala had designated 43 existing Courts as Special Courts with the concurrence of the High Court of Kerala thereby defeating the objective of constituting Special Courts and denying speedy trial of offences relating to theft of energy. The witness agreed to the Sr.DAG's comment that Government has designated 43 nos. of existing Courts as Special Courts for the speedy disposal of energy theft cases but stated that the total no. of cases so far reported is only 53 and of the 53 nos. of pending cases reported, 15 nos. had already been disposed of and therefore there is no need to set up Special Courts in the present situation. Then the Sr.DAG stated that the reference of the need for Special Courts was made in accordance with the provisions of the Central Electricity Act, 2003.

The Committee opined that considering the total number of cases related to the power theft and the number of courts currently assigned to hear these cases, there was no need of constituting Special Courts and the present allotment of Courts to handle the cases was adequate.

The Committee approved the reply of witness.

Para 2.3.12 & 2.3.13 – Fund Management – Non opening of project-wise bank account & Non - maintenance of project – wise accounts

The Committee enquired about the audit objection relating to non-opening and non-maintenance of project wise bank account. The witness informed that KSEBL had opened seperate bank account for receipt of the funds of RAPDRP (Restructured Accelerated Power Development and Reformms Programme) and for expenditure. For administrative convenience, project wise accounts had not been opened in the initial stages and the functioning agency was satisfied with the accounting system which existed in KSEBL during that period. He also added that project wise bank accounts were opened and strictly maintained after the introduction of PFMS portal and KSEBL was able to satisfy the funding agency's requirements with its project wise bank account. For separate accounting classification, designated bank account and strict reconciliation started for enabling proper audit certification.

The Committee approved the reply of witness.

Para 2.3.14 – Irregular payment of interest free advance

The Committee sought clarification of paying interest free advance of ₹14.5 crore to KDN, being 60 percent of payment against the security of material delivered and corporate guarantee executed by KDN was against scheme guidelines and was an act of undue favour to the contractor.

The witness informed that payment of ₹14.5 crore to the IT implementing agency was out of the overdue payment of ₹64 crores as per the schedule of payment. He added that on account of this over due in payment the project implementation was almost in stalemate. The severe cash flow issue faced by ITIA was discussed during the Southern Regional Power Secretaries meeting on 17.11.2014 held at Chennai under the Chairmanship of Secretary(Power), Govt. of India. Based on this, the details of payment made outside the milestone and circumstances necessitated such a payment was forwarded to the Power Finance Corporation (PFC). In reply to this, PFC intimated advisory issued during

April 2014, which specifies that "Utility can utilize the provisions of the clause GCC14(9) available in the contract under REP Section – VIII, Special conditions of contract for making payment to ITIA for the project area / milestone where major portion of work has been completed and only minor portion of work or supply is pending / deficient and which does not affect the performance of the System". The specific payment of ₹14.5 crore, outside the scope of the milestone based payment was released against the equipment delivered and was deducted at the rate of 18% from subsequent invoices. Hence, this payment was treated as an advance payment. Also, interest on this advance payment was not imposed as it was released against 60 percent of the value of the equipments which were already delivered and handed over to KSEBL. The ITIA was still countinuing the work without cost overrun at their quoted price, which was quoted way back in April 2010. Hence, the payment made is totally justifiable for the progress of the project. Also, KSEBL Board of Directors had taken a policy decision sanctioning the specific payment of ₹14.5 crore. It is to be noted that precedence exists in General Contract Conditions for release of payment based on delivered material cost up to 70 percent. No undue favour was extended to ITIA and the contract with the firm had only smoothened the implemention of the project. The payment was given only for the items delivered / work progressed and also as per the discussions / approval of PFC.

The Committee approved the reply by the witness

Para 2.3.15 – Implementation of Projects

Regarding the Audit para, the witness replied that KSEBL had taken earnest attempts to complete the project within the time frame extended by PFC and added that as observed in the audit, the installation and data capturing could not be implemented wholly in 2015. But KSEBL streamlined the implementation and met all the objectives of the project within in the time limit.

The Committee approved the reply of witness.

Para 2.3.17-Appointment of IT Implementing Agency(ITIA)

The Committee enquired about the audit objection that installation of IT modules for collection of data and IT enabled customer care services envisaged under part A of RAPDRP was pending and there was a delay of two years in awarding work due to intervention by the Government. The witness informed that the work awarded to KDN had been cancelled as directed by the Government of Kerala and the company approached Hon. High Court against this. As the case was pending before Hon. High Court and work was awarded again after 18 months and hence there was delay in appointing IT implementing Agency.

The Committee approved the reply of witness

Para 2.3.18 – Implementation of Meter Data Acquisition System (MDAS)

The Committee sought explanation on the audit reference that the implemention of Meter Data Acquisition System (MDAS) was defective due to the improper field study at DPR preparation stage. The witness admitted the audit observation and informed that this project, which uses informatics in distribution system was implemented all over India as a new project. Short falls identified were rectified later. In the implementation of this project, there was no option for cross verification. Inspite of these problems KSEBL completed all the objectives within the time limit and is one among the states to complete this project early. He also informed that the Meter Data Acquisition System (MDAS) had been fully implemented at present and the expenditure for implementation of RAPDRP was admitted by PFC and majority of loans sanctioned was converted as grant by PFC.

The Committee approved the reply of witness.

Para 2.3.19 – Implementation of Geographic Information System (GIS)

The Committee sought explanation regarding the audit reference that Geographic Information System Network Survey and Geographic Information System Consumer Survey were yet to be completed due to inaction on the part of KDN. The witness admitted the audit observation and clarified that the GIS network survey was completed in all 43 towns and that the network was available in GIS system and that GIS asset mapping and consumer indexing were completed. He added that the effeciency of GIS application would be improved and updated under the RDSS scheme announced by Central Government.

The Committee approved the reply of witness.

Para 2.3.21 – Commissioning of Data Centre (DC) and Data Receovery Centre (DRC)

The Committee sought clarification about the audit objection that KSEBL has not followed the guidelines for setting up of Data Centre (DC) and Data Recovery Centre (DRC) in different seismic zones. The witness informed that the entire state of Kerala is under a single earthquake zone. The DRC at Cherthala was specifically designed to take care of seismic impact. DC was established at Thiruvananthapuram. DC and DRC were to be set up in a building which was designed and built considering the seismic resistant parameters.

The Committee approved the reply of the witness.

<u>Para 2.3.22 – Non-completion of Customer Care Services under Part A project</u>

Regarding the audit para the witness replied that Centralised Customer Care Service Centres were fully functional at present and all the section offices were connected to it and at the time of audits 228 section officers were not connected which was the reason for audit objection. Now that the customer care service centre is working 24x7 hours and upgradation is routinely done and the process can be monitored centrally, the customer care centres are effectively working.

The Committee approved the reply of the witness.

Paras 2.3.20, 2.3.23 to 2.3.30

The Committee approved the reply of the witness.

<u>Recommendations/ Conclusions</u>

1. ***The Committee observed that APTS was constituted in connection with RAPDRP to bring down AT&C loss to 15 percent. Besides APTS division, section squad also conducts surprise inspections to detect theft. But KSEBL is not enforcing measures in detected cases as per section 135 of Electricity Act 2003. The Committee suspect that KSEBL officials were colluding with high end consumers so that they become scott free. As the action of APTS was not making any significant changes in detection of theft cases, the Committee recommends that monthly inspections should be carried out by each division at the premises of high end consumers like restaurants, malls etc. and large industrial and commercial consumers in every month by***

engaging APTS, section squads etc. and the data collected should be recorded and monitored at State level. An action taken report in this regard should be furnished to the Committee without delay.

Thiruvananthapuram,
8th July, 2024.

E. Chandrasekharan,
Chairman,
Committee on Public Undertakings.

APPENDIX-I SUMMARY OF MAIN CONCLUSION/RECOMMENDATION			
Sl No.	Para No.	Department Concerned	Conclusion/Recommendation
(1)	(2)	(3)	(4)
1	1	Power Department	The Committee observed that APTS was constituted in connection with RAPDRP to bring down AT&C loss to 15 percent. Besides APTS division, section squad also conducts surprise inspections to detect theft. But KSEBL is not enforcing measures in detected cases as per section 135 of Electricity Act 2003. The Committee suspect that KSEBL officials were colluding with high end consumers so that they become scott free. As the action of APTS was not making any significant changes in detection of theft cases, the Committee recommends that monthly inspections should be carried out by each division at the premises of high end consumers like restaurants, malls etc. and large industrial and commercial consumers in every month by engaging APTS, section squads etc. and the data collected should be recorded and monitored at State level. An action taken report in this regard should be furnished to the Committee without delay.