CHAPTER-III

3. PERFORMANCE REVIEW RELATING TO STATUTORY CORPORATION

PERFORMANCE REVIEW ON IMPLEMENTATION OF ACCELERATED POWER DEVELOPMENT AND REFORM PROGRAMME BY ASSAM STATE ELECTRICITY BOARD

Highlights

Accelerated Power Development Programme (APDP) was launched by the Union Ministry of Power (MOP) in 2000-01. It was rechristened as Accelerated Power Development and Reform Programme (APDRP) in 2002-03. APDRP is being implemented with the main objective of up-gradation of sub-transmission and distribution system (33KV and below) including energy accounting and metering with the financial support of the MOP.

(Paragraph-3.1)

The MOP released funds on lump-sum basis for several projects irrespective of utilisation of funds. The State Government delayed releasing funds to the Board resulting in penal interest liability of Rs.13.43 crore. The Board also diverted funds amounting to Rs.6.98 crore for items not covered under APDRP scheme.

(Paragraph-3.8.1)

Due to failure to understand methodology/execution of turnkey projects, there was delay of two years in awarding contracts. This resulted in cost overrun of Rs.13.10 crore.

(Paragraph-3.9.3)

There was delay of two to 37 months in the completion of the projects under APDRP mainly due to lack of proper planning, monitoring and control.

(Paragraph-3.10.1)

The Board paid Rs.2.11 crore towards cost of 21,890 consumer meters not supplied by the contractors.

(Paragraph-3.10.5)

The Board incurred extra expenditure of Rs.3.10 crore on procurement of PSC poles from the turnkey contractors at higher rates.

(Paragraph-3.10.8)

The State Government and the Board failed to achieve most of the milestones/conditions set out in the MOU and the MOA respectively. The Transmission and Distribution losses ranged between 36.23 to 44.02 *per cent*.

(Paragraphs-3.11, 3.12 and 3.13.2)

Introduction

3.1 The Union Ministry of Power (MOP) launched (February 2001) the Accelerated Power Development Programme (APDP), which was later rechristened as Accelerated Power Development and Reform Programme (APDRP) in 2002-03 to accelerate the power reforms process through the State Governments. APDRP is being implemented by the Power Sector companies/Boards with the objective of upgradation of sub-transmission and distribution system (33 KV and below) including energy accounting and metering, for which financial support is being provided by the MOP. The MOP entered (July 2002) into a Memorandum of Agreement (MOA) with Assam State Electricity Board (Board) for implementation of APDRP by the three distribution companies (DISCOMs) under the Board. Funds from the MOP were to be released to the Board through the State Government. Power Grid Corporation of India Limited (PGCIL), the lead Advisor-cum-Consultants (AcCs), under the overall guidance of MOP, was to monitor the implementation of the programme in the State.

In order to oversee the implementation of the programme, the Chairman of the Board is assisted by an Additional Chief Engineer designated as Nodal Officer, APDRP Cell under the Chief Engineer (Distribution) of the Board and the Managing Directors of DISCOMs.

The main objectives of APDRP are to:

- reduce Transmission and Distribution (T&D) losses;
- improve financial viability of the power sector; and
- increase consumer satisfaction.

Scope of audit

3.2 The performance review was conducted during February to April 2007 with a view to assess the performance of the Board/DISCOMs in conceptualisation and implementation of APDRP and its achievements with reference to the objectives set for the programme covering the period 2000-01 to 2006-07 on the basis of the documents/information maintained in the Board/DISCOMs and findings of the surveys conducted through external agencies.

The records of six projects* (sanctioned cost: Rs.289.30 crore) out of 15 projects (sanctioned cost: Rs.650.73 crore) under implementation in three DISCOMs, were taken up for detailed examination by random selection of two projects from each of three DISCOMs.

Audit objectives

3.3 The performance review of implementation of APDRP in the State was conducted with a view to ascertain whether:

- detailed Project Reports (DPRs) were prepared realistically to achieve the programme objectives;
- requirement of funds was assessed realistically, funds were sanctioned and released in time at all levels and funds were utilised efficiently, economically and effectively;
- implementation of various schemes, sub-schemes was carried out as per the guidelines of the reform programme efficiently, economically and effectively;
- the programme had pro*vide*d for an effective and working monitoring mechanism at all levels;
- an effective and efficient system of evaluation was evolved for assessing the achievements with reference to the results envisaged in action plan; and
- transmission and distribution (T&D) losses were reduced in accordance with action plan and targets.

Audit criteria

3.4 The audit criteria adopted for assessing the achievement of audit objectives were:

- targets and benchmarks laid down in the Memorandum of Understanding (MOU) and MOA and guidelines issued by the MOP/State Government;
- terms and conditions set out by the MOP/State Government while releasing the funds;

* Sub Transmission and Distribution (ST&D) projects in (i) Guwahati Electrical Circle-II, (ii) Dibrugarh Electrical Circle, (iii) Jorhat Electrical Circle, (iv) Nagaon Electrical Circle, (v) Cachar Electrical Circle and (vi) Kokrajhar Electrical Circle

- projections/targets set out in the DPRs;
- terms and conditions stipulated in purchase orders, work orders and contracts, *etc.*

Audit methodology

3.5 The methodology adopted for attaining the audit objectives with reference to audit criteria were examination of:

- benchmark/condition of MOU and MOA and guidelines issued by MOP/State Government;
- policy formulated by the Board for the implementation of the programme;
- DPRs, Bid Documents, Tender Proposals, minutes of the meetings of the Technical and Commercial Evaluation Committee (TEC), records relating to implementation of projects;
- system of monitoring, internal control and MIS reports;
- issue of audit queries and interaction with the Management.

Audit findings

3.6 Audit findings arising from the performance review were reported (May 2007) to the Management/State Government and discussed (June 2007) in the meeting of the Audit Review Committee on Public Sector Enterprises (ARCPSE), which was attended by Joint Secretary, Power (Electricity) Department, Government of Assam, Chief Engineer (Distribution) and Nodal Officer, APDRP Cell from the Board. The views expressed by the members have been taken into consideration while finalising the review. The audit findings are discussed in the succeeding paragraphs.

Policy formulation and project planning

3.7 As per guidelines issued (11 June 2003) by MOP for implementation of APDRP Schemes/Programmes, utilities were required to prepare DPRs for each of the densely electrified zones in urban and industrial areas in order of priority. Scrutiny of DPRs by audit revealed that:

- low-density rural areas were also included in the DPRs in violation of guidelines;
- barring the DPR for Guwahati Electrical Circle-II, investments were not prioritised;
- the Board failed to complete metering on 11 KV and 33 KV system before preparation of DPRs. This resulted in the selection of high T&D loss making areas on normative basis instead of actual, for preparation of DPRs, which left room for inaccuracies.

Funding pattern

3.8.1 As per MOA, the funds for the projects were to be provided by the MOP in the form of 90 *per cent* grant (Assam being Special Category State) and 10 *per cent* loan. The loan component of 10 *per cent* was dispensed with (November 2005) by the MOP. The procedure for release of funds to the Board was as under:

- 50 *per cent* of the Central Government share would be released upfront and on approval of the APDRP project (or a part thereof);
- on utilisation of an amount equal to 25 *per cent* of the project cost, the balance 50 *per cent* would be released.

Both the State Government/MOP released funds on lump-sum basis for several projects irrespective of utilisation of funds

The MOP released (up to March 2007) Rs.414.37 crore, which in turn was released (up to March 2007) by the State Government along with Rs.47.08 crore, by way of loan, as its share. It was noticed that both MOP/State Government released the funds on lump-sum basis for several projects irrespective of utilisation of funds against these projects (***Annexure*-14).**

Audit scrutiny of records revealed that:

- as per MOA, the Board was to open a separate account in a scheduled/nationalised bank for depositing funds received from the MOP/State Government. Although, the Board had opened a separate bank account to comply MOP guidelines but no funds received under APDRP from time to time from the MOP/the State Government were deposited. These funds were, however, kept in the main account of the Board with other funds;

Due to delay in release of funds to the Board, the State Government was liable to pay penal interest of Rs.13.43 crore.

- as per APDRP guidelines (June 2003) issued by the MOP, the State Government is required to release the APDRP funds to the State Power Utility within a week of the said amount being credited to the State Government account and send confirmation to the MOP, otherwise it would be treated as diversion of funds. If any State Government/Power Utility diverts or is deemed to have diverted such funds for other purposes, the equivalent amount would be adjusted with 10 *per cent* penal interest against the next installment of the Central Plan Assistance (CPA) to be released to that State Government. As will be evident (***Annexure*-14),** due to delayed release of funds to the Board, the State Government was liable to pay penal interest of Rs.13.43 crore;
- the funding pattern of the APDRP provided for incentive, up to 50 *per cent* of the actual reduction in total loss by the State Electricity Boards/utility, as grant by taking 2000-01 as the base year. The Board preferred (December 2003) a claim of Rs.52.98 crore for incentive for reduction in losses during 2002-03; MOU thereagainst has been received so far (August 2007);
- the Board irregularly incurred an expenditure of Rs.6.98 crore on items

like purchase of transformer oil, repair of building, vehicle hiring charges, training expenses, *etc.*, which were not covered under the projects approved by the MOP.

Retention of funds

3.8.2 During test check of records of six projects selected for review, it was noticed that in the following cases, funds received for APDRP projects were retained by the Board by reducing the scope of work:

- as per approved DPR, the MOP sanctioned (June 2003 and April 2005) Rs.34.33 crore for execution of sub-transmission and distribution (ST&D) project under Kokrajhar Electrical Circle, the Board awarded (December 2004) the work for Rs.29.34 crore leaving an unspent balance of Rs.4.99 crore with the Board;

- against the DPR provision for replacement/installation of 0.55 lakh consumer meters in three circles*, at a total cost of Rs.8.88 crore; the Board took up (June 2003) replacement/installation of 0.34 lakh consumer meters at a total cost of Rs.3.87 crore, and purchased additional items like Common Meter Reading Instrument (CMRI) and Spot Billing Machine (SBM) not provided for in the DPR, at Rs.2.59 crore, leaving an unspent balance Rs.2.42 crore, {Rs.8.88 crore *minus* (Rs.3.87 crore *plus* Rs.2.59 crore)} with the Board.

Thus, non-utilisation of Rs.7.41 crore may result in non-achievement of intended benefits as envisaged in APDRP.

Non-receipt of incentives

3.8.3 In order to motivate the State Electricity Boards (SEB) to achieve commercial viability, an incentive component upto 50 *per cent* of actual cash loss reduction, reckoning 2000-01 as the base year, was to be given to SEBs.

The Board lodged (December 2003) interim claim of Rs.52.98 crore, being 25 *per cent* of reduction in cash loss by Rs.211.93 crore in 2002-03 (since the accounts for 2002-03 were under finalisation). The Board has neither revised the claim for 2002-03 based on the finalised accounts nor received any payment from MOP so far (August 2007).

Tendering process

Non-compliance of provision of MOA

Non-preparation of list of accredited contractors resulted in delay in implementation of projects

3.9.1 As per MOA, in order to expedite finalisation of tender, it was incumbent upon the Board to prepare a list of accredited contractors within five months of signing of MOA. It was, however, noticed that on every occasion, a project was taken up for execution, the Management invited

* Dibrugarh, Jorhat and Guwahati Electrical Circle-II

qualifying bids (technical) and price bids separately for empanelment of contractors. As the process often took considerable time for finalisation, this resulted in delay in execution of projects as discussed in para 3.10.1.

Non-standardisation of bid documents

3.9.2 The Board did not standardise the procedure for opening of bids as discussed below:

- bid opening procedure laid down in bid documents of different projects differed from one another *e.g.* in case of System Improvement (SI) work, price bids would be opened only when technical (qualifying) bids were found acceptable, whereas in case of consumer metering, no such terms were included in the bid documents;

- for similar nature of works, the bidders' qualifying requirements differed from project to project,. *e.g.* as per Clause-3.2 of the bid documents for Kokrajhar Electrical Circle, one of the qualifying requirements was that the bidder must have erected transformers of different ratings equivalent to 50 MVA capacity during the five years preceding the bid opening day. This criterion was, however, missing in the bid documents of Cachar Electrical Circle;

- quantum of works as per Bill of Quantities (BOQ) of bid documents differed from that of the approved DPRs. Quantum of works contracted for execution also differed from the BOQ indicating inadequate survey and improper planning before execution of work. The following cases would illustrate the point.

(Rupees in crore)

Sl. No.	Name of Package	Item/ Unit	As per the DPR		As per the BOQ		As per the Contract		Reduction of Scope	
			Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1	Consumer Metering in three circle (Jorhat, Dibrugarh and GEC-II)	Replacement/ Installation of Meters (Numbers)	55,000	8.88	34,000	3.87	34,000	3.87	21,000	5.01
		CMRI/SBM (Numbers)	-	-	-	2.59	-	2.59	-	(-) 2.59
2	SI Scheme (KANCH)	33/11 KV New Sub Station (Numbers)	4	3.71	3	2.78	3	2.78	1	0.93
		Changing of Copper conductor (Kilometers)	9	0.11	-	-	-	-	9	0.11
		11 KV auto reclosure (Numbers)	37	0.91	-	-	-	-	37	0.91
3	SI Scheme (Kokrajhar)	Construction of MTI LAB (Numbers)	1	1.64	1	1.64	-	-	1	1.64
		Mandatory Spares (Lot)	-	0.81	-	0.81	-	-	-	0.81
Total			-	**16.06**	-	**11.69**	-	**9.24**	-	**6.82**

Dilution of turnkey concept

3.9.3 As per Clause-6.1 (h) of MOA, for execution of APDRP and Non-APDRP works, the Board may adopt turnkey packaging concept or shall evolve a rate contract system. This provision was later modified (11 June 2003) whereby APDRP works were to be executed on turnkey basis only. It was noticed that while implementing the projects, the Board neither adopted rate contract nor turnkey system. The turnkey packaging was distorted by the Board as would be evident from the following:

- 15 projects approved (June 2002 to March 2005) by the MOP for execution under 14 circles was split-up in 23 packages (*viz*, system improvement, consumer metering, computerisation of billing, new sub-station, feeder augmentation *etc.*). In some cases, each package were covering more than one circle. In such cases, two separate contracts were entered into, one for supply of equipments and the other for erection;

- initially, three projects for improvement of ST&D of three circles (Guwahati Electrical Circle-II, Jorhat and Dibrugarh) were taken up (October 2002) on turnkey basis. Eventhough, the Board was not the direct purchaser in turnkey contracts, clause-3.6 of the NIT stipulated purchase strictly in accordance with the provisions of the Assam Preferential Stores Purchase Act, 1989 (APSP Act). Assam Conductors and Cable Manufacturers Association (ACCMA) filed (October 2002) a writ petition in the Guwahati High Court challenging the NIT on the ground that under APSP Act, 1989, PSC poles, cables, conductors, distribution transformers were reserved items for SSI units of Assam. On the assurance (December 2002) of the Board to follow the provisions of the aforesaid Act, the writ petition was disposed off (December 2002) with the direction that the Board shall make no deviation from the provision of the aforesaid Act, while making purchases of specified items mentioned above.

  After the said order, the Board recalled (January 2003) the earlier tender and issued (June 2003) fresh NIT for getting the work done again on turnkey basis. ACCMA again filed (2003) a writ petition alleging violation of the Court's directives to the Board. The case was disposed off (June 2004) in favour of the Board on the ground that in case of a turnkey contract, it was not the purchaser and hence, the provisions of APSP Act, 1989 were not applicable to such contract.

  Due to delay in finalisation of the tenders, there was a cost overrun of Rs.13.10 crore

  Thus, the Board was not clear about the methodology/execution of turnkey projects as the assurance given to the Court in 2002 was contrary to the spirit of turnkey projects. This resulted in delay of more than two years in finalisation of the tenders with consequent cost overrun of Rs.13.10 crore (Revised cost: Rs.73.29 crore *minus* original cost: Rs.60.19 crore) for these three projects.

Evaluation of tenders

3.9.4 As per pre-qualification of tenderers, the tenderers are required to submit two separate bids *viz,* technical bids (pre-qualifying bids) and price bids. If a tenderer is found to be technically qualified, only then his price bid is opened. Price bids of disqualified tenderers are not to be opened and returned as such.

Out of six projects selected for audit scrutiny, technical bid of the lone technically qualified bidder[*] in respect of System Improvement (SI) work under Kokrajhar Electrical Circle and technical bids of two disqualified bidders[**] in respect of SI work under Cachar Electrical Circle were not furnished to audit for scrutiny.

It was noticed that the Board did not follow any uniform procedure for selection of turnkey contractors as discussed below:

Non-selection of the lowest bidder resulted in extra liability of Rs.42.08 lakh.

- in respect of work of feeder augmentation for Jorhat, Dibrugarh and Guwahati Electrical Circle-II, bid value status of two participating bidders was assessed (September 2005) without taking into consideration different quantities quoted by them resulting in non-selection of the tenderer offering lowest rates. This has resulted in extra liability of Rs.42.08 lakh;

- in respect of work (consumer metering in nine circles[***]), price bids of technically disqualified bidders were opened (May 2003) on the ground that the competition would otherwise be limited to single bidder whereas in case of SI work in Cachar Electrical Circle and Kokrajhar Electrical Circle, the price bids of the lone technically qualified bidder only were opened (August 2004 and October 2004) and offers of technically disqualified bidders were not opened;

- three parties *viz*, Techno Electric and Engineering Company Limited (TEEC), Bharat Heavy Electricals Limited (BHEL) and Larsen & Toubro (L&T) participated (September 2002) in the bid for SI work of Cachar Electrical Circle. The Technical and Commercial Evaluation Committee selected (December 2004) TEEC as the only technically qualified bidder. BHEL was disqualified for non fulfillment of minimum qualifying requirement while L&T was disqualified for non submission of type test reports of the equipments to be supplied. Audit scrutiny, however, revealed that even though TEEC failed to fulfill the criterion of past supplies/performance of transformers of stipulated class, it was considered as the only technically qualified bidder. As per documents furnished by BHEL, it had fulfilled all the qualifying requirements {Erection (2003-04) of 50 kilometers of High Tension (HT) lines and 100 transformer of the stipulated class}, but the grounds on which BHEL was disqualified were not clear. Further, L&T had committed (October 2004) to furnish type test

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[*] Nagarjuna Construction Company Limited
[**] Bharat Heavy Electricals Limited and Larsen & Toubro
[***] Jorhat, Dibrugarh, Guwahati Electrical Circle-II, Nagaon, Bongaigaon, Tezpur, Rangia, Sibsagar and Guwahati Electrical Circle-I.

report after the award of work, which was in conformity with clause 1.2 of the bid documents, whereby the selected bidder was required to furnish type test report within one month of awarding of work. Therefore, the ground on which L&T was disqualified was also not valid;

- in response to NIT (June 2005) for execution of the SI work in Kanch Electrical Circle, only one bidder *viz.* North Eastern Cables and Conductors Private Limited (NECCPL), Jorhat participated (June 2005). Although, the bidder was not technically qualified, the Board on the request (August 2005) of the bidder, later allotted (November 2005) the work to NECCPL.

  Audit scrutiny revealed that the prices quoted by the contractor for different items of supply were two to three times higher than the Board's estimated rates of procurement of the same materials for its stores. Thus, acceptance of abnormally higher prices quoted by the lone bidder were not justified.

  A comparison of the two sets of prices in respect of only 13 items of supply made by the NECCPL revealed that the Board incurred excess liability of Rs.2.65 crore on procurement of these items for APDRP works as indicated in ***Annexure-15***.

Implementation

Execution of works

There was delay of two to 37 months in completion of projects under APDRP mainly due to lack of proper planning, monitoring and control

3.10.1 Statement showing details of work executed under APDRP during the period 2000-01 to 2006-07 is shown in ***Annexure*-16.** It would be noticed from the statement that against 23 packages (against 15 projects) due for completion by May 2007, one package (Sl. No. 9) was completed in time, two packages were completed (Sl. No. 5 & 7) with a delay of 11 months and the remaining 20 packages have not so far (July 2007) been completed even after expiry of two to 37 months from the stipulated date of completion. Thus, due to delay in completion of these works, the intended financial benefits *i.e.* increase in revenue due to reduction in T&D losses, improvement in billing and collection of revenue, *etc.*, could not be achieved.

From the minutes of discussion in review meetings held from time to time (February to December 2006), on the progress of APDRP works, it was noticed that main reason for delay was lack of proper planning, monitoring and control.

Audit scrutiny further revealed that:

- against standard period of 150 days set for issue of Letter of Award (LOA) of works from the date of approval of DPRs by MOP, there was abnormal delay in issue of LOA ranging from 442 to 818 days in all the cases;

- as per DPR, projects were to be completed within 11 months from the date of LOA. It was, however, noticed that works against nine SI packages were taken up in two phases. Although, works under both the phases were part of the same DPR and the composite agreement, the contractors were allowed 18 months for completion of each phase. The undue extension of time granted to the contractors were uncalled for and detrimental to the interest of the Board;

- during execution of work, frequent modifications were made in the scope of work as provided in the approved DPRs without obtaining prior or *post-facto* approval of MOP;

- revised BOQ based on such modifications have also not been finalised as yet (April 2007) nor the cost benefit analysis made for such revisions;

- supplies were made on piece-meal basis resulting in delay in completion of projects;

- the Chief Executive Officers (CEOs) of the circles have not furnished fortnightly reports, on progress of works achieved under the circles to the Board, on a regular basis. Thus, the Board did not exercise necessary control over the progress of work under the field level offices.

Physical targets and achievements

3.10.2 The Board did not maintain records showing details of year-wise physical and financial progress of APDRP works for the period 2000-01 to 2006-07. As such, audit was unable to vouchsafe the expenditure incurred, unspent balance or cost overrun in respect of APDRP work.

Deficiencies in performance of contracts

Computerisation of billing

3.10.3 As per DPRs of three circles (Jorhat, Dibrugarh and Guwahati Electrical Circle-II), the scope of work of computerisation of billing in these circles *inter alia* included:

- supply and installation of hardware and development of application software;

- establishment of Local Area Network connecting all workstations as well as interconnection of all locations;

- uploading of consumer data and operation of application package for one year after successful implementation of the package;

- imparting training to the Board’s staff within one year.

The above work was awarded (June 2003) at a total cost of Rs.3.01 crore (sanctioned cost: Rs.3.44 crore) to the Computer Maintenance Corporation

Private Limited (CMC), Kolkata. As per agreement, the work was to be completed by 2 June 2004. During the execution of work, the scope of work was, however, enhanced (November 2004) by including additional hardware and networking components for various locations under the above three circles*.

Eventhough, there were number of deficiencies as indicated below in performance of work (on which expenditure of Rs.5.26 crore has been incurred till March 2007), **the completion of computerised billing packages for the above three circles was being reported to the MOP from time to time, since March 2005.**

- Interconnecting of all locations has not been done by the contractor.
- The software developed by CMC did not include all the modules in the Computerised Monitoring and Tracking System.
- Personal computers, printers, monitors, *etc.*, had to be repaired several times. However, a consolidated detail of expenditure incurred on repairs was not available. In many cases, defective/damaged batteries, printers, D drives were not replaced by the contractors.
- Indexing was not completed in any location.
- The training being inadequate, the personnel have not acquired the expertise to handle the operation independently.

Further, as per the contract, the contractor was entitled to maintenance charges (software) at the rate of Rs.20,000 per month for one year after successful implementation of the package. Although, the work remained incomplete (March 2007), the Board paid Rs.19 lakh (Rs.20,000 x 95 man months) as maintenance charges for one year *i.e.* April 2005 to March 2006, which resulted in undue benefit to the contractor.

Thus, even after a lapse of more than three years from the stipulated date of completion, the package remained incomplete (July 2007).

Computerisation of billing and consumer indexing

3.10.4 The work of supplying hardware and networking in 11 circles** was awarded (September 2004) to HCL Infosystem Limited, Guwahati at total cost of Rs.6.14 crore (cost of supply: Rs.5.98 crore *plus* cost of erection: Rs.0.16 crore). Further, the work of implementation, customisation and maintenance of developed computerised system*** in these 11 circles was awarded (June 2005) to the joint consortium of HCL Infosystem Limited and Assam

* Jorhat, Dibrugarh and Guwahati Electrical Circle-II.
** GEC-I, Nagaon, Rangia, Mangoldoi, Bongaigaon, Kokrajhar, Cachar, Tezpur, North Lakhimpur, Kanch and Sibsagar.
*** Billing software, consumer survey and data entry of relevant consumer information and providing training to the Board's personnel.

Electronics Development Corporation Limited (AMTRON) at a total cost of Rs.3.09 crore. These works were to be completed by September 2005 and June 2006 respectively.

Scrutiny of the records revealed that, though, in many cases the hardware, equipment, accessories and furniture were damaged within a year of supply (2005), the same were not replaced by the supplier (August 2007). Further, computerisation of billing in nine[*] field sub-divisions was not taken up (July 2007) either due to non-completion of data entry by the contractor or lack of space for work. In certain cases[**], bills are still prepared manually due to errors shown in computerised bills. The packages of training to staff, to be completed by June 2006, has not been completed so far (July 2007).

Consumer metering

3.10.5 The work of metering unmetered consumers and replacement of defective and stopped meters under 12 circles at a total cost of Rs.18.91 crore (supply: Rs.15.07 crore *plus* erection: Rs.3.84 crore) was allotted (June 2003, April 2004 and September 2004) to three different contractors[***]. The works were to be completed by 2 June 2004, 11 April 2005 and 24 September 2005 respectively.

It was noticed in audit that:

The Board paid Rs. 2.11 crore in excess, being the value of 21,890 consumer meters not supplied by the contractors

- as against 1,04,602 consumer meters (cost: Rs.8.54 crore) of seven different ratings and specifications to be supplied to eight circles[****] by the contractors, only 82,712 consumer meters were actually supplied as detailed in ***Annexure*-17**. The Board is yet to recover Rs.2.11 crore, being the value of 21,890 consumer meters (1,04,602 *minus* 82,712) not supplied by the contractors;

- bills for supply of consumer meters were accepted by the CEOs without cross verification of receipt of the same with concerned sub-divisions under whose jurisdiction actual metering works were undertaken;

- 6,081 consumer meters (cost: Rs.0.51 crore), become defective within 18 months of erection, have not yet (July 2007) been replaced by the contractor;

Payment for erection charges for 41,862 consumer meters against actual erection of 32,921 consumer meters resulted in excess payment of Rs.21.44 lakh

- the contractor did not furnish soft copy of the erection reports (CMA-1 and CMA-2) as required under the contract for verification of exact number of consumer meters erected by the contractors. As the payments were to be released on the basis of these reports, excess payment to the contractors on

[*] Basugaon, Gosaigaon, Kokrajhar, Bilashipara, Fakiragram, Chapar, Lahorighat, Nagaon-III and Lowaipua.
[**] Morigaon, Dhaligaon.
[***] Genus Overseas Electronics Limited (Genus), Omni Agate Systems Private Limited (Omni), Allied Engineering Works (Allied).
[****] Cachar, Mangoldoi, Kokrajhar, Guwahati Electrical-I, Nagaon, Rangia, Guwahati Electrical-II and Jorhat.

this account could not be ruled out. Scrutiny of erection data furnished by sub-divisions under three circles (Jorhat, Cachar and Kokrajhar) revealed that the Board made payment (2003-04 to 2005-06) for erection of 41,862 consumer meters against actual erection of 32,921 consumer meters resulting in excess payment of Rs.21.44 lakh;

- Meter Testing and Inspection Wing of the Board is required to test five *per cent* of consumer meters supplied before acceptance and installation. It was noticed that inspite of the fact that 20.82 *per cent* of the sample consumer meters supplied by Omni Agate failed (February 2005 to November 2006) the test (the *percentage* of failure in respect of three-phase meter was as high as 39.2 *per cent)*, the contractor was allowed to install the meters;

- even though feedback regarding erection data furnished in the prescribed format (CMA 1&2) by the contractors was incomplete, the Board accepted the same and bills were prepared;

- the sub-divisional authorities[*] in 12 cases admitted (March 2007) that they had no knowledge about the quality specifications and make of the consumer meters to be supplied and installed under their jurisdiction;

- in Dibrugarh Electrical Circle, 41 consumer meters were installed in the premises of the permanently disconnected consumers;

Actual achievement in metering did not tally with the progress report furnished by SDO.

- progress of actual achievement in metering in respect of nine[**] circles furnished by the Nodal Officer did not tally with the progress report furnished by sub-divisional officers.

Infructuous expenditure on Spot Billing Machine (SBM)

3.10.6 The Board placed (August 2003, April 2004, October 2004 and November 2005) orders for procurement of 550 Spot Billing Machines (SBM) and 237 Common Meter Reading Instruments (CMRIs) at a total cost of Rs.1.91 crore[*] on three firms[**] for 14 circles. As per delivery schedule, the supplies were to be completed by October 2006.

Audit scrutiny revealed as under:

- as against agreement for supply of 237 SBMs and 80 CMRIs to five circles (Cachar, Kokrajhar, Nagaon, Jorhat and GEC-II), 92 SBMs and 38 CMRIs were actually supplied. This resulted in short supply of 145 SBMs and 42 CMRIs valued at Rs.47.14 lakh;

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[*] Boko, Agamani, Dhubri, Fakiragram, Bilashipara, Gosaigaon, Hojai, Lanka, Samaguri, Charaibari, Lahorighat and Raha.

[**] Nagaon, Rangiya, Mangaldoi, Bongaigaon, Kokrajhar, Tezpur, Dibrugarh, Jorhat and Guwahati Electrical Circle-II.

[*] SBMs: Rs.1.00 crore and CMRIs: Rs.0.91 crore.

[**] Genus Overseas Electronics Limited (Genus), Omni Agate Systems Private Limited (Omni), Allied Engineering Works (Allied).

Due to supply of defective and incompatible SBMs, expenditure of Rs.73.64 lakh proved infructuous.

- 405 SBMs supplied by the contractors were defective and incompatible with the Boards' billing software. Thus, expenditure of Rs.73.64 lakh on procurement of 405 SBMs proved infructuous;.
- twenty four CMRIs valuing Rs.9.22 lakh remained unused (July 2007) due to non-supply of optical cables and defects arising in batteries.

Avoidable expenditure on Management Information System (MIS) support

3.10.7 Contractors under Consumer Metering Packages were required to submit report on performance of five *per cent* of the meters installed (locations selected by the Board) as MIS support to the Board. The report was to be prepared by using CMRIs, SBMs and BCS (Base Computing Software) and the contractors were to be paid service charges at rates ranging from Rs.200 to Rs.4,451 per meter. On the other hand, the same type of reports for all the installed meters were also required to be prepared by the sub-divisions concerned.

Audit scrutiny revealed that:

- **the concerned Sub-Divisional Officers (SDO) were preparing MIS reports based on their own revenue records. The contractors, while claiming payment for MIS support, were simply attaching the report of SDOs. Hence, the payment of Rs.1.64 crore (*Annexure*-18) to the contractor for MIS support was totally infructuous;**
- for the same scope of work, Allied charged Rs.200 per consumer meter for meters of all ratings, Genus charged Rs.1,236 to Rs.2,940 (meters of different ratings) per consumer meter and Omni charged Rs.3,904 to Rs.4,451. The reasons for different rates being charged by three contractors are not on record;
- the Board allowed (19 December 2006 and 8 February 2007) payments of Rs.17.92 lakh as service tax at the rate of 12.24 *per cent*, which was irregular as the contractor had quoted the rates inclusive of all taxes and as per Service Tax Rules, works contract should not be vivisected for levy of service tax on any item of service to be provided under the contract.

Extra expenditure on purchase of PSC poles

3.10.8 As per Assam Preferential Stores Purchase Act, 1989 (APSP Act), PSC Pole is a reserved item to be procured by all Government Department/PSUs from approved SSI units of the State at a price to be fixed by the Technical Committee under APSP Board, constituted by the State Government.

Audit scrutiny of the contract for procurement of PSC poles in respect of eight circles revealed that the turnkey contractors quoted rates at two to three times higher than the rates charged by the local manufactures of PSC poles. The Board, however, did not negotiate with the lowest bidders to bring their rates to the level of those charged by the local manufacturers. It was further noticed that the turnkey contractors had procured these poles from the approved local manufacturers (SSI unit) only as per the instructions of the Board.

The Board incurred extra expenditure of Rs.3.10 crore on procurement of PSC poles from turnkey contractors at higher rates

Thus, the failure of the Board to negotiate with the lowest bidders resulted in extra expenditure of Rs.3.10 crore as detailed below:

Sl. No.	Name of circle	Name of turnkey contractor	Total price		Excess payment made
			As per Govt. approved rate*	As per price of turnkey contractor (excluding VAT)	
			(Rupees in lakh)		
1	Cachar	Techno	44.33	66.12	21.79
2	Nagaon	NCCL	102.64	250.80	148.16
3	Kokrajhar	NCCL	66.76	170.18	103.42
4	GEC-II	PSC Engineers	27.82	54.23	26.41
5	Dibrugarh				
6	Jorhat				
7	North Lakhimpur	Techno	7.50	10.95	3.45
8	GEC-I	Techno	18.74	25.12	6.38
		Total	**267.79**	**577.40**	**309.61**

Interestingly, in respect of SI packages awarded (October to December 2004) to three turnkey contractors**, two items of supply (Oil Filtration Pump and Oil Testing Kits) were withdrawn (October 2004) from the turnkey contractors' scope of work on the ground that the turnkey contractors quoted exorbitant rates. The Board subsequently procured (June 2006) these items from another firm at lower rates.

Non-compliance of MOU conditions

3.11 In pursuance of the Chief Ministers' conference (March 2001) on Power Sector Reforms, a MOU was signed (March 2001) between the MOP and the State Government as a joint commitment for implementation of reforms programme in power sector with identified milestones by March 2002.

Out of eight milestones set/commitments made, five conditions remained to be fulfilled.

Status of implementation of reforms programme against each commitment made in the MOU is given in ***Annexure*-20**. It would be noticed that out of eight milestones set/commitments made, five conditions *i.e.* installing of meter at 11 KV Feeders by July 2001, metering of all categories of consumers by December 2001, online billing through computerisation by March 2002, reduction in cost of supply of electricity in the State and level of receivables to be brought down equivalent to 60 days billing by March 2002 remained to be fulfilled (August 2007). As a result, the intended benefits as envisaged in the MOU could not be achieved.

* Excluding of taxes freight and insurance

** NCCL, L&T and TEEC

Non-compliance of MOA conditions

3.12 As per MOA signed (July 2002) between the MOP and the Board from time to time, it was specifically agreed that the Board shall fully undertake to comply with mandatory distribution reform oriented conditions in order to avail the APDRP funds from the MOP. Status of compliance of MOA is given in ***Annexure*-20**.

It would be seen from the ***Annexure*** that 18 out of 27 conditions remained unfulfilled till August 2007. In this connection, further observations are as follows:

- the State Level Distribution Reforms Committee (SLDRC) constituted (August 2002) to review the progress of implementation of APDRP projects, compliance of MOU/MOA conditions, performance against APDRP targets and benchmarks, was required to meet once in two months. It was noticed that the Committee met only on five occasions during August 2002 to May 2007. The Committee failed to evolve any concrete action plan to expedite the progress of implementation;

- as per MOA, suitable arrangement shall be made within six months of effectiveness of MOA for managing distribution system through management contract with local bodies, franchises, consumer co-operatives, local institutions, *etc.*, so as to enable the circle CEOs to promote bulk consumers. The Board formulated (October 2004) a policy for transfer of only 25 *per cent* of the distribution transformers upto 100 KVA capacity catering to the rural domestic consumers. As on 31 March 2007, out of 14,832 rural distribution transformers, only 1,497 (10.09 *per cent*) distribution transformers with capacities varying from 16 to 250 KVA were, however, handed over to 370 franchises. As a result, the billing and collection efficiency as envisaged could not be achieved;

- in violation of directives of MOA, despite having meters in the stock, 931 new connections were released without consumer meters in four circles (Guwahati Electrical Circle-II, Mangaldoi, Kokrajhar and North Lakhimpur) during 2001-2004;

- although, in compliance MOA, bank accounts were opened by the Chief Executive Officers (CEOs) for depositing differential revenue generated from implementation of the programme, the same were yet (July 2007) to be operated;

- monthly monitoring and review of achievements on technical, commercial and benchmarks by the CEOs of the circles alongwith the Advisor-cum-Consultant (AcC) as stipulated in Clause-6.2 (d) of MOA was not complied with;

- as per MOU and MOA, the Board should not have any unmetered consumers. The Board, however, had 41,844 unmetered consumers at the end of 2006-07. As per tariff (effective from September 1998), the unmetered consumers were billed for at the rate of Rs.12 per point in domestic category. Had these consumers been converted into metered one, these consumers would have to pay energy charges (including fuel-cum-purchase adjustment charges) and fixed charges on metered consumption and actual load respectively.

The Board incurred losses of Rs.28.60 lakh due to continuance of point system of billing

Audit scrutiny of energy bills in respect of two divisions (Jorhat Electrical Division-II and Howraghat Electrical Division) revealed that due to continuance of point-system billing (billing on the basis of number of electricity points in a house), the Board incurred losses of Rs.28.60 lakh (details in ***Annexure*-21**) during the period from January 2002 to May 2005;

In absence of conversion of unmetered consumers to metered one, the Board sustained a revenue loss of Rs.14.39 crore.

- Assam Electricity Regulatory Commission (AERC) directed (June 2005) the Board to convert all unmetered consumers to metered category by August 2005. The Board issued (June 2005) order for converting all unmetered consumers to metered category by August 2005 and to realise energy charges at the rate of Rs.250 per consumer (upto 10 points) per month till such conversion is effected. It was noticed that the Board neither complied with the instructions (June 2005) of AERC nor recovered Rs.14.39 crore (from June 2005 to March 2007) from the unmetered consumers.

Impact of the programme

Non-attainment of benchmarks

Benchmarks for performances were not achieved in any of the circles.

3.13.1 In order to assess performance of the CEOs of the circles, benchmarks with regard to (i) T&D losses, (ii) energy received and despatched by the circle, (iii) billing cycle time, (iv) feeder outages, (v) failure rate (*per cent*) of distribution transformers, (vi) consumer complaints disposal time were prescribed. Audit scrutiny revealed as under:

Reduction of T&D losses

3.13.2 As per MOA, the Board was to reduce the T&D losses to around 20 *per cent*. The actual T&D losses, however, ranged from 36.23 to 44.02 *per cent* during the five years from 2001-02 to 2005-06 as detailed below:

Year	Total power available for sale	Total power sold	T&D losses	*Percentage* of T&D losses	Loss in excess of 20 *per cent* of available power (MU)
	(In million units)				
2001-02	3,247.598	1,817.981	1,429.617	44.02	780.07
2002-03	3,218.375	1,960.812	1,257.563	39.07	613.74
2003-04	3,293.803	2,098.590	1,195.213	36.23	534.58
2004-05	3,302.186	2,036.590	1,265.596	38.33	605.29
2005-06[§*]	3,845.39	2,383.23	1,462.160	40.84	801.38
Total	**16,907.352**	**10,297.203**	**6,610.149**	**39.10**	**3,335.06**

(The data in respect of 2006-07 is yet to be compiled by the Board).

[*§] Figures for composite Board including Distribution Companies.

Failure to reduce the T&D losses has resulted in loss of potential revenue of Rs.1,266.69 crore (calculated at average realization rate of each year) during the period.

Periodical checking of meters

Checking of meters was far below the norms fixed by the Board

3.13.3 In order to reduce commercial loss, it was incumbent upon the Board to check the meters regularly by the Meter Testing and Investigation (MTI) wing of the Board. It was noticed that as per information furnished by the Board (***Annexure-22)*** that during 2000-01 to 2006-07, the shortfall in checking consumer meters ranged between 94.25 *per cent* to 96.11 *per cent.* Hence, audit was unable to verify the benefits of expenditure of Rs.8.54 crore on purchase and their installation of 1,04,602 consumer meters.

Vigilance operation

The Vigilance Cell was not well equipped with the required infrastructure

3.13.4 As per Clause 6.2 (g) of MOA, Vigilance squads were required to be strengthened for detection and prosecution of offences. Summary of achievements of these squads was required to be submitted to the State level Cell on monthly basis. Scrutiny revealed that Chief Vigilance Officer (CVO) of the Board did not have any mandated functions to perform. On instructions from the Chairman of the Board, CVO undertook specific vigilance enquiries against officers and employees of the Board and anti-power theft operation in specific areas. As informed (July 2006) to audit by the CVO, the Vigilance Cell was not equipped with the required infrastructure to undertake operations.

Statement showing number of theft cases registered/detected, theft cases convicted for the two years 2004-05 and 2005-06 is shown in the ***Annexure*-23**. It would be seen from the ***Annexure*** that altogether 3,696 theft cases have been registered, out of which only 123 cases were convicted leaving 3,573 cases pending at the end of 2005-06.

It was also noticed that:

- the Board did not fix any target for vigilance squad at any point of time;
- reports of achievement, whatsoever, were never placed before SLDRC/State Level Cell;
- the Board did not develop any Computerised Monitoring and Tracking System for detection and monitoring of pilferage/theft of energy.

Internal control

3.14 Internal control is a Management tool used to provide reasonable assurance that the Management objectives are being achieved in an efficient, effective and adequate manner. A good system of internal control should comprise, *inter-alia* proper allocation of functional responsibilities within the organisation, proper operating and accounting procedures to ensure accuracy and the reliability of accounting data, efficiency in operations and safeguarding of assets, competence of personnel commensurate with their responsibilities and duties and review of the work of one individual by another whereby possibility of fraud or error in the absence of collusion is minimised.

Audit scrutiny revealed that:

- Management Information System (MIS) installed and internal control procedures followed with respect to implementation of APDRP were not commensurate with the size and activities of the Board. The Management, for monitoring and taking corrective measures, whenever required, did not review the system installed regularly;
- the system of submission of regular and periodical data /progress report on the performance, though prescribed, was not actually in operation;
- the Board has one Vigilance Wing. The function of the wing, however, is restricted to enquiry of specific cases as are entrusted by the Chairman;
- the Management at the Head office had failed to fix responsibility at different levels of the organisation to ensure accountability and compliance by all concerned.

The State Level Distribution Reforms Committee constituted was required to meet once in two months to review implementation progress and compliances of MOU and MOA including performance against programme targets and benchmarks (*vide* Clause-6.1 (a) of MOA), which was found lacking as only four meetings were held in last four years, the last being in May 2007.

Conclusion

The Board did not fully implement the reform measures as stipulated in MOA and also failed to comply with the guidelines issued by the MOP for operating separate bank account for APDRP funds. There was delay in release of funds by the State Government. There were diversions of funds from APDRP to other works/schemes. It also failed to complete the projects within time schedule as stipulated in DPRs mainly due to lack of proper planning, monitoring and control; frequent modification in the scope, design of works, *etc.*; and lack of co-ordination between the contractors and the Board. The Board allowed undue financial benefit to the contractors and incurred extra expenditure on procurement of poles at higher rates. The main objective of reduction in T&D losses was far from being achieved.

Recommendations

The Board needs to:

- **ensure timely completion of the projects by proper planning, monitoring and control, in full benefits under APDRP are to be achieved;**

- **rationalise the activities in terms of MOU and MOA for reducing T&D losses for ensuring quality power to the consumers;**

- **ensure all consumers are provided with meters and all meters are regularly tested and faulty consumer meters replaced. This will help improve financial position;**

- **ensure immediate release of funds and avoid diversion of funds to areas not covered under APDRP;**

- **strictly enforce the terms of agreements with the contractors/suppliers so that there are no time or cost overruns.**

The matter was reported to the Board/Government in May 2007; their replies are awaited (September 2007).